

GAZETTEER OF INDIA



GUJARAT STATE

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KHEDA DISTRICT GAZETTEER

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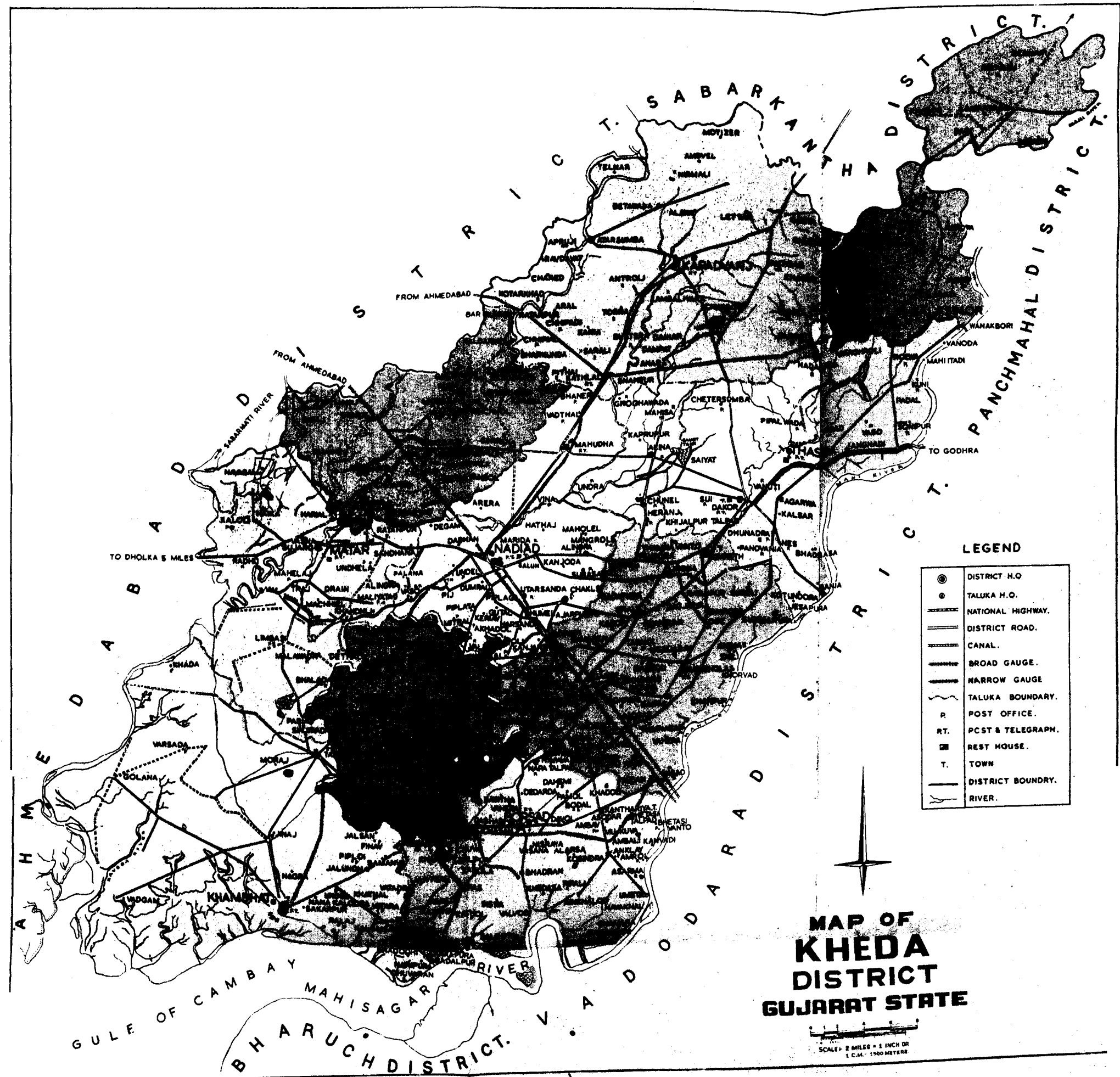
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Chief Editor

Gujarat District Gazetteers

Ahmadabad.

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GUJARAT STATE GAZETTEERS



Government of Gujarat

KHEDA DISTRICT

Dr. S. B. RAJYAGOR

M. A., M. Ed., Ph. D., D. E. S. (Leeds)

Chief Editor

AHMADABAD

1977

GAZETTEER OF INDIA
GUJARAT STATE GAZETTEERS
KHEDA DISTRICT

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PREFACE

The Kheda Gazetteer is the thirteenth volume in the series of the Gujarat District Gazetteers published so far. Mr. J. M. Campbell had during the British regime prepared the *Gazetteer of Kaira* which was published in 1879 as the *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panchmahals*. Subsequently three supplements to this volume were published in 1904, 1914 and 1926. There were petty princely States like Cambay and Balasinor and areas of former Baroda State and some Estates interspersed with the British areas of the district. Mr. Campbell prepared another Gazetteer which was published in 1880, as the *Gazetteer of the Bombay Presidency*, Vol. V, *Revakantha, Narukot, Cambay and Surat States*. Subsequently, three supplements to this volume were also compiled and published in 1904, 1914 and 1927. The information about Baroda State areas was covered in *Bombay Gazetteer*, Vol. VII, Baroda, 1883 and in *Baroda State Gazetteer* published in 1923.

The district acquires its name from the town of Kheda, the district headquarters. Kheda is a very ancient town and was known as Khetakpur in the past. In preparing this volume, I consulted almost every available source. Apart from Government publications and Reports, other books such as *Charotar Sarvasangraha* Part-I and II, *History of Cambay* by Ratnamanirao Jote, etc., were also helpful in getting valuable data and authentic information.

The district can boast of its hoary past as towns of Khambhat (Cambay) including Nagara, Kheda, Borsad, etc., have been known since ancient times. Borsad is a historical place and derives its name from a sage called Badarmuni, a disciple of Valmiki. During medieval times, Cambay was one of the richest cities and ports of India. Famous travellers Marco Polo and Ibn Battuta respectively visited Cambay in 1290 and 1345 A. D. These travellers have left rich authentic notes about the socio-economic and political conditions of the time. The Mughal Emperors Akbar and Jahangir visited Cambay and issued coins for commemorating the event. Even the Queen Elizabeth I of England addressed Akbar as "King of Cambay". Lurid light has been thrown on the past history of the district by the Department of Archaeology of M. S. University of Baroda, which carried out excavations at Nagara between 1963 and 1965. From the old mound of Nagara large-sized idols of Brahmaji, Suryanarayan (the Sun God) and Buddha were excavated. Pithai and Galteshwar are noteworthy for relics of idols, temples, etc. The idol of dancing Ganesh, a big bull and

(Bk) H-50--1 (Lino)

(ii)

Shivling of big size are found at Dehgam. The Galteshwar temple at Sarnal belongs to the Chaulukya period.

The district has certain distinguishing and prominent features. It has the famous Ranchhodrai temple at Dakor and Swaminarayan temple at Vadtal. According to a legend, the original idol of Ranchhadrai of Dwarka is now enshrined at Dakor. The temple was built in 1772. Vadtal is famous for being the principal seat of the Vishnavite sect called Swaminarayan. The temple was built in 1824 during the lifetime of Sahajanand Swami. Cambay (Khambhat) is also a religious place for Muslims, Jains and Hindus. There are 70 mosques including the famous Juma Masjid, built in 1325. There are more than 100 Hindu temples and innumerable Jain temples at Khambhat.

Politically, the district has been active ever since the first Satyagraha movement and the subsequent Satyagraha at Borsad. The town of Karamsad located in the district has given two prominent persons to the country, Shri Vithalbhai Patel and Sardar Vallabhbhai Patel. In the post-Independence era, Sardar Patel played a leading role in building up a unified India.

In the field of agriculture in 1971-72, the district had the highest yield of foodgrains which was 1,238 kg. per hectare. The district accounts for 21.4 per cent of the State's total in respect of irrigation facilities. The central part of the district known as the *Charotar* is famous for tobacco cultivation. On account of its agronomic background, a number of agricultural institutions has been established under the auspices of the Institute of Agriculture, Anand. Mention must be made of the Agricultural College and Dairy Science College at Anand. The district has achieved tremendous development in the sphere of co-operation of which the Amul Dairy is the living monument. The expansion of the banking institutions is noteworthy. At the end of 1970, there were 116 branches of eight nationalised banks in the district.

The district is noted for many cottage and small-scale industries. Agate ornaments, cotton cloth, carpets, soap and glass making and dyeing and printing are still to be found in the district. There are textile mills at Khambhat, Nadiad and Petlad. The co-operative sugar factory at Palej and Cement Works at Sevalia are among the large scale industries.

Recently the district has been placed on the mineral map of India by the discovery of petroleum and natural gas in 1958 near Khambhat. At Dhuvaran near Khambhat, the Central Thermal Power Station for Gujarat region has been built at a cost of Rs. 30.78 crores.

The foundation of education was laid in the district in the year 1826 A. D. by establishing two primary schools at Kheda and Nadiad

(iii)

In 1906-07, compulsory education was introduced in the areas of former Baroda State, viz., Petlad and Sojitra in this district. Consequently, a number of new schools were opened in the areas of Petlad, Sojitra, Bhadran and Dharmaj. Cambay and Balasinor States had also paid adequate attention towards education. In recent years considerable progress has been made in the fields of higher and technical education. Sardar Patel University at Vidyanagar has become a growing centre for educational activities in various fields. Credit for this goes to late Shri Bhailalbhai D. Patel, popularly known as "Bhaikaka".

The district has given many distinguished persons of eminence to the country. Nadiad's contribution in this respect is profound and remarkable. (Late) Shri Govardhanram Tripathi, author of *Saraswatichandra*, an epic novel in Gujarati literature, was from Nadiad. Among other well-known persons are; Sarvashri Manibhai Nabhubhai Dwivedi, Balashanker Kantharia, Indulal Yagnik, Bhailalbhai Patel. (Bhaikaka), H. M. Patel, Babubhai Jashbhai Patel and Shri Chunilal Asharam Bhagat popularly known as Pujya Shri Mota of Hari Om Ashram at Nadiad, who died recently. He was also a great spiritual thinker.

In the preparation of this Gazetteer, I have received valuable co-operation and assistance from various sources. I must also acknowledge the hard work put in by my officers and staff members who were closely associated in the preparation of this volume at every stage right from the collection of data to reading the final proofs. The Research Officers Sarvashri U. M. Chokshi, also in charge of office administration, M. R. Trivedi, Dr. A. P. Bhatt and R. R. Trivedi efficiently carried out the job of preparing final draft chapters of this Gazetteer. Under my guidance and instructions, Dr. A. P. Bhatt prepared the Medieval History of the district. The valuable assistance was also rendered by Research Assistants Sarvashri C. A. Thakker, C. C. Trivedi, D. H. Acharya, B. A. Patel, N. D. Bhatt, Y. D. Jadeja, S. S. Shah, and B. K. Soni and Junior Assistants Sarvashri P. B. Parikh, K. T. Trivedi, J. R. Shah, Kum. K. S. Suryavanshi, Smt. N. K. Kadakia, Sarvashri R. D. Gandhi, S. S. Bhonsle and G. N. Solanki. The manuscripts were neatly put into type by the team headed by Shri P. Bhaskaran, Stenographer, Shri B. J. Patel and other typists. The proof-reading work of the volume was mainly carried out with the co-operation of two Proof Readers Sarvashri A. S. Mansuri and K. H. Arab.

I must thank Shri Babubhai Jashbhai Patel, the Chief Minister of Gujarat State and Shri H. K. L. Kappor, I. A. S., the Chief Secretary for keen interest and guidance. I will be failing in my duty, if I do not express my thanks to Dr. P. N. Chopra, Editor, and officers and staff of the Central Gazetteers Unit, Ministry of Education and Social Welfare (Department of Culture), Government of India, New Delhi for thorough scrutiny and making valuable suggestions, which are incorporated in this volume.

Lastly, I must thank Shri G. J. Gonsalves, Director, Government Printing and Stationery Department, Ahmadabad and Shri S. S. Sardesai, Manager, Government Press, Vadodara and his staff for elegant printing and beautiful get-up of the Gazetteer volume.

Ahmadabad,
13th June, 1977.

S. B. RAJYAGOR,
Chief Editor.

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<i>Name</i>	<i>Contribution</i>
1. Shri Lavkumar Khachar	Wild Animals and Birds
2. Dr. H. G. Shastri, Director, B. J. Institute of Learning and Research, Ahmadabad.	Ancient History
3. Shri B. N. Gandhi, Professor, Sheth P. T. Arts and Science College, Godhra.	History of Freedom Movement
4. Shri B. M. Pandit, Ahmadabad.	People-Dialects of Kheda District
5. (Late) Dr. Amrit V. Pandya	Culture
6. Dr. J. P. Amin, Professor, Arts and Science College. Khambhat.	Places of Interest-Khambhat and Photographs of rare Idols.
7. Dr. R. N. Mehta, Professor of Archaeology, M. S. University, Arts Faculty Vadodara.	Places of Interest-Nagara.

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PART I

CHAPTER I

GENERAL

Introductory

ORIGIN

The district of Kheda takes its name from the town of Kheda which stands on a rising ground near the confluence of the Vatrak and the Shedhi rivers. English people called it Kaira.¹ In Sanskrit literature, Kheda was called Khetak. Moreover, it was also a main town for a large administrative area called Khetak Ahar or Vishyaya or Mandal akin to the present day district. It is conjectured that present Kheda district seems to have been inhabited historically since 1,500 to 2,000 years.²

It may also be observed that another name of the district in vogue, since time immemorial is 'Charotar'. In the centre of the district is the *Charotar* or goodly land, a tract of most fertile and well-tilled soil. Even dialect spoken by the people inhabiting the region is called *Charotari*. The word *Charotar* is derived from the Sanskrit word *Charu* (चारु) meaning beautiful. The land is fertile and green with vegetation and so it pleases the eye and is called *Charotar* tract.³ According to another tradition, the current name *Charotar* has been derived from *Chaturttara* (four) added with *Shata* (Hundred) left understood.

LOCATION

Situated in central Gujarat, Kheda district is the State's fifth smallest district. Measuring 7,194 sq. km. and accounting for 3.67 per cent of the State's total geographical area, it lies between 22°-7' and 23°-18' north latitudes and 72°-15' and 73°-37' east longitudes, and is bounded on the

1. The change in the nomenclature has been made, according to the instructions received under the Surveyor General's letter No. T-11908/958, dated 4th April, 1968. The State Government had appointed a small committee consisting of three members including the Director of Languages as Chairman for suggesting the correct names of the places of Gujarat. This committee has suggested the correct names of some of the places in Gujarat and hence the name 'Kaira' has been changed into 'Kheda'.

2. SHAH P. C. AND SHAH C. F. (EDITORS), *Charotar Sarvasangraha*, Nadiad, (1954), pp. 687-688.

3. *Ibid.*, pp. 855-856.

north by the Sabar Kantha district, on the south by the Mahi River and the Gulf of Cambay (Khambhat), on the east by the Panch Mahals district and the south-east by the Vadodara district and on the west by the Ahmadabad district.¹ In the south-west it extends into the Gulf of Cambay (Khambhat). The district is oblong in shape and the major part of it lies between the river Mahi to the south-east and the river Sabarmati to the north-west.

ADMINISTRATIVE HISTORY

The administrative history of the district dates from antiquity. Under the different Rajput dynasties (746-1290 A. D.) the lands of Kheda district barring Thasra and Kapadvanj were included in the settled and directly managed portions of the Anhilvad kingdom. Towards the end of the fourteenth century they passed under Muslim Kings of Ahmadabad. Subsequently along with the other crown lands were transferred to the Mughals in 1573 A. D. Between 1720 to 1750 A. D., the district experienced unceasing conflicts between the Maratha and Muslim viceroys and nobles. Except the Kheda Estate which was left in the hands of the Babi family, the district on the capture of Ahmadabad (1753 A. D.) was shared between the Peshwa and Gaekwad. It remained with them till it was made over to the British partly in 1803 and partly in 1817.

The territories acquired in 1803, together with Dholka, Dhandhuka, Ranpur and Gogha remained in charge of the Resident at Baroda from the date of their cession till May 1805. During this time an European Assistant and native officers administered, according to local usage, the police, and justice of the country. In 1805, a Collector was appointed, with jurisdiction over the ceded tracts, both those to the north of the Mahi and those to the west of the Gulf of Cambay (Khambhat). In the same year the town of Kheda was selected as a large military station. The increase in the British possessions consequent on the treaty of November 1817, necessitated fresh administrative arrangements. The territory north of the Mahi was, from January 1, 1818, divided into the two districts of Kheda and Ahmadabad. In 1830, Kapadvanj was included in Ahmadabad and Kheda became a sub-collectorate under the Collector of Ahmadabad. In 1833, Ahmadabad and Kheda were again separated. Thereafter more than once, villages had been transferred from one district to the other, and the original irregular groups and collections of villages had been gradually consolidated into seven talukas.²

From 1817, the Kheda district remained under the British rule and formed part of the Bombay Province. After Independence, the district included the territories of the former Indian States of Cambay, Balasinor, Punadra, Khadal, Ghodasar, the non-jurisdictional estates of Zar and Nirmali.

1. Census 1971, *Administrative Atlas*, (1972), p. 73.

2. *The Imperial Gazetteer of India*, Vol. XIV, Oxford, (1908), pp. 277-278.

Bhadran and Petlad talukas and 38 villages of Attarsuba taluka of the former Baroda State and six villages of Ahmadabad district. One village was transferred to Sabarkantha and two to Ahmadabad district. On bifurcation of bilingual Bombay State, it now forms part of Gujarat State from 1st May, 1960.

TERRITORIAL CHANGES

The territories of the district of Kheda remained unchanged till 1830 when for about 3 years, Kapadvanj was transferred to Ahmadabad, on Kheda having been made a sub-collectorate. But Kapadvanj was re-included in Kheda, when it regained its full status of a collectorate in 1838. The territories ceded in 1802 were town of Kheda, the present sub-divisions of Nadiad, Matar and Mahudha from the Gaekwad and some villages round Napad from Peshwa. In 1817 for additional subsidiary forces, Mahemadabad, Alina, Thasra, Antroli and half of Petlad and the country subordinate to it were ceded by the Gaekwad. Kapadvanj and Bhalej were exchanged for Vijapur in the northern Gujarat. Petlad was subsequently re-transferred to the Gaekwad. Thus the district of Kheda assumed its final proportions.

After Independence and more particularly after the integration of States on 1st May, 1949 and 1st August, 1949 some areas as mentioned earlier were added to this district.

The details about the towns and villages of various States and Estates merged in the district are given below.

Cambay State

Before the merger the Cambay State had 89 villages covering an area of 392 sq. miles. Out of these villages 83 villages were Khalsa and the following 6 villages were Inami, viz.,

- (1) Hasanpura, (2) Malasoni, (3) Sokhda, (4) Bhat Talavadi, (5) Paldi, and (6) Vasna.

Out of the 89 villages, 78 villages have remained in the new Khambhat taluka. The eleven villages which have been merged in different adjacent talukas are shown below :

1. Shahpur	...	...	merged in Petlad taluka.
2. Fangani	...	...	"
3. Uneli	...	...	merged in Matar taluka.
4. Khandhroti	...	...	"
5. Daloli	...	...	"
6. Inderwarna	...	...	"

- | | | | |
|----------------------------|-----|-----|--------------------------|
| 7. Vastana | ... | ... | merged in Matar taluka. |
| 8. Nadhanpur | ... | ... | " |
| 9. Mahemadabad (Gobrapara) | ... | ... | " |
| 10. Rampura | ... | ... | merged in Dholka taluka. |
| 11. Anandpara | ... | ... | " |

Balasinor State

Before the merger, Vadasinor was the only Muslim State of importance in the Old Rewa Kantha Agency. It was a jurisdictional State. It had 104 villages covering an area of 189 sq. miles. These 104 villages have been merged in the talukas as shown below :

- | | | | |
|------------------------|-----|-----|---|
| 1 Bhatvasna | ... | ... | merged in Thasra taluka of Kheda district. |
| 1 Khadol | ... | ... | merged in Kapadvanj taluka of the Kheda district. |
| 1 Saheb Khantnu Muvadu | ... | ... | merged in Malpur mahal of Sabar Kantha district. |

101 remaining villages constituted into Vadasinor taluka of Kheda district.

104

The three villages have been amalgamated with the different talukas because they were the enclaves of the Balasinor State in those talukas. Out of the above villages, 4 villages (*viz.*, Genpa, Tajpur, Butia and Khetawada) were deserted and had no alienated lands in them.

Punadara State

Before the merger, the Punadara State was a jurisdictional State and had 7 villages with 5 hamlets covering an area of 7 sq. miles. The village Telnal was co-shared with the Thakor of Mandwa. All these villages have been merged in the Kapadvanj taluka of the Kheda district.

Ghodasar State

15 villages covering an area of 16 sq. miles were merged in the Mahemadabad taluka of the Kheda district.

Umeta State

The Umeta State had 14 villages—5 non-jurisdictional and 9 jurisdictional. The five non-jurisdictional villages were on Talukdari tenure and were

in the Borsad taluka. The nine jurisdictional villages were included in the Mahikantha Agency, but from 1827, it formed one of the component parts of Revakantha Agency. Under the Scheme of Attachment, it was attached to the Baroda State and was under management due to the minority of the Thakor. In August 1947, the Thakor was given back his *gadi*. But soon after, the State merged into the Bombay State. All the 14 villages covered an area of 24 sq. miles and have been merged in the Borsad taluka.

Khadal State

The Khadal State with 14 villages and an area of 8 sq. miles and a population of 2,805 persons according to the Census of 1941 was merged in the Kapadvanj taluka of the Kheda district.

ADMINISTRATIVE UNITS AND THEIR AREA AND POPULATION

According to 1971 Census, district measures 7,194.0 sq. km. in area and has a population of 2,451,387 persons, representing 9.18 per cent of the total State population. For the purpose of smooth and efficient administration, the district is divided into two sub-divisions, *viz.*, (a) Nadiad sub-division comprising Nadiad, Matar, Mahemadabad, Kapadvanj, Vadasinor and Thasra talukas and (b) Petlad sub-division comprising Petlad, Khambhat, Anand and Borsad talukas. The area and population and the density per sq. km. in respect of the administrative units are tabulated below :

Administrative Unit			Population Per Sq. Km.	Percentage of total popula- tion of admi- nistrative unit to total district population
1			2	3
Kheda District	..	..	341	100.00
Mahemadabad Taluka	..	..	348	7.06
Nadiad Taluka	..	..	568	15.36
Anand „	..	..	590	16.28
Petlad „	..	..	541	10.47
Borsad „	..	..	494	12.28
Khambhat „	..	..	185	9.08
Matar „	..	..	229	5.39
Kapadvanj „	..	..	274	11.01
Vadasinor „	..	..	238	5.37
Thasra „	..	..	288	7.76

The distribution of the population by rural and urban areas and its density in the two areas according to 1971 Census is as follows :

Population			Percentage of rural/urban population to total district population		Density per Sq. Km.	
Rural	Urban	Total	Rural	Urban	Rural	Urban
1,902,357	489,030	2,451,387	80.05	19.95	286	1,490

Source : Census 1971, *Administrative Atlas*, Delhi, (1972), p. 75.

Topography

PHYSICAL FEATURES

Except for a small hilly area in the northern part of Kapadvanj and Vadasinor talukas and along the lower reaches of the Mahi river where the bank is cut by deep ravines, the district is an unbroken plain sloping gently from the north-east towards the south west. The Mahi and the Sabarmati are the principal of the nine rivers in the district. The Mahi flows out of the Mehad Talav situated in the Vindhyachal mountains and empties into the Gulf of Cambay (Khambhat). The Sabarmati rises from the Aravalli hills and enters the district at Khadiarapura village in Matar taluka and empties into the Gulf of Cambay (Khambhat). Unlike the Mahi, which is most useful for irrigation, the main purpose served by the Sabarmati is that of drainage. The Shedhi, the Vatrak, the Meshwo and the Khari meet the Sabarmati at various points on its left bank. The Varansi and the Mohar are shallow and non-perennial rivers. There are eight major irrigation tanks in the district having a total irrigation potential of 4,637 hectares.

The Charotar Plain

It is the richest agricultural zone of Gujarat and the district, lying between the rivers the Shedhi and the Mahi. It extends for about 80 km. along the railway from Petlad to Nadiad.¹ Although the Mahi river has eroded the region greatly, the waters and the rich alluvial deposits of the river make the region suited to the growing of a variety of cereals, tobacco, oilseeds and garden crops. The talukawise topography of the district is now described in detail.

1. DESHPANDE C. D., *Western India, a Regional Geography*, (1948), p. 200

Cambay (Khambhat)

The physical aspect of the taluka is flat and open, interspersed here and there, generally in the vicinity of the villages with groves of fine trees, such as mango, tamarind, banyan or *bar*, *nim* and *pipal*. From the position of the taluka between the Sabarmati and the Mahi both of which are the tidal rivers, the soil is soaked with salt and so the water becomes brackish at a little distance below the surface.¹

Anand

Anand taluka is situated in the eastern portion of the Kheda district. The whole taluka is a level plain full of trees.²

Nadiad

Nadiad taluka forms the centre of Kheda district. The whole taluka is a level plain full of trees.³

Thasra

The Central portion of Thasra taluka consists of a fine *goradu* plain presenting much the same appearance as other parts of the district. Towards the Mahi, the surface undulates and, as the river is approached, it is more and more cut up by *nallas*, so that cultivation becomes difficult if not impossible. The *mal* land is confined to the northern and western villages, where large stretches of uncultivated waste testify to difficulties of cultivation.⁴

Borsad

Borsad is the southern most taluka of the Kheda district. The whole taluka is a level plain full of trees.⁵

1. *Imperial Gazetteer of India, Provincial Series, Bombay Presidency*, Vol. II, Calcutta, (1909), pp. 469-470.
2. *Papers relating to the Second Revision Settlement of the Anand Taluka of the Kaira District*, Bombay, (1942), p. 2.
3. *Papers relating to the Second Revision Settlement of the Nadiad Taluka of the Kaira District*, Bombay, (1912), p. 2.
4. *Papers relating to the Revision Survey Settlement of the Thasra Taluka of the Kaira Collectorate*, Bombay, (1895), p. 2.
5. *Papers relating to the Second Revision Settlement of the Borsad Taluka of the Kaira District*, Bombay, (1942), pp. 1-2.

Kapadvanj

Kapadvanj taluka is situated in the north of the Kheda district. Except for some undulations in the north, the taluka is a level plain country with a slight slope towards the south.¹

Matar

The taluka of Matar is the most western of the talukas of the Kheda district. The whole extent of the taluka is fairly level, but there are two large areas of depression, one in the north and the other about the middle of it, which receive the drainage of the higher lying country both outside and inside the boundary and becomes very malarious during and after the rains. The taluka, though rich in special products of rice and in parts tobacco suffers from a very bad climate, owing to it being waterlogged in the north and south parts called as Daskosi and Bhal portions. The taluka is generally very fairly wooded, the principal trees being the babul and the mango.²

Mahamadabad

The Mahamadabad taluka is a gently undulating plain with a downward slope from north-east to south-west and a few sand hills on the north.³

Petlad

The appearance of the country is most beautiful. It is almost level, and abounds with magnificent trees, such as mangoes, Rayon, tamarind, Mahuda, etc., and fields enclosed with green hedges. All this presents a picturesque and pleasing appearance to the eye and indicates bounty of nature and testifies to the skill and labour of the agriculturists.⁴

Vadasinor

Except for a chain of rocky hills in the west, the country is open. There are two main rivers, the Mahi and the Shedhi.⁵

1. *Papers relating to the Second Revision Settlement of the Kapadvanj Taluka of the Kaira District*, Bombay, (1942), p. 2.
2. *Papers relating to the Revision Survey Settlement of the Matar Taluka of the Kaira Collectorate*, Bombay, (1895), pp. 2-3.
3. *Papers relating to the enquiry into the Current Revision Settlement of the Matar and Mehmedabad Talukas of the Kaira District*.
4. *Jamabandi Revision Settlement Report of the Petlad Taluka of the Baroda Division*, Baroda, (1921), p. 2.
5. CAMPBELL J. M., *The Gazetteer of the Bombay Presidency* Vol. VI, Rewa-Kantha, Narukot, Cambay and Surat States, Bombay, (1880) p. 137.

The Gulf of Cambay (Khambhat)

The Gulf coast region has a geographical setting in which sandy belts and a greater rainfall than other parts of the plain are prominent. The level surface of the region has minor variations due to the deposition of marine nature. Sandy stretches are influenced by marine deposition and by river action. The level bears an eroded and sandy appearance. Agricultural development is restricted owing to sandy and swampy soils. Along the coast, mangrove vegetation prevails to a greater degree. On less saline soils, loams containing an admixture of sand and alluvium, the cultivation of wheat finds scope.

It is difficult to give a hydrographical picture of the Gulf of Cambay (Khambhat). The coast of Gulf of Cambay (Khambhat) is very irregular in its outline. Projecting deeply inland it has offered sites as has been observed previously for the estuarine ports of Gujarat. The Gulf is enclosed on all sides by marshy coasts and dotted with bars and islands locally described as 'bets.'

The entire coast of the Gulf both on the Saurashtra side and on the side of mainland Gujarat has come out of water. During recent time it is widely believed that Gulf of Cambay (Khambhat) might have been connected with the Gulf of Kachchh by an arm of the sea projecting inland. The Nal Sarovar lying halfway between the Little Rann and the Gulf of Cambay (Khambhat) is reminiscent of that narrow arm of the sea. Recent evidence suggests that the Gulf of Cambay (Khambhat) occupies a fault line.¹

Springs and Springs Heads

Considering the physical aspects of the district, perennial springs of water in the district are few and small. This may be owing to generally, impervious nature of the soil preventing extreme deep percolation. In the district, there are hot water springs, located in three different groups near the village Lasundra. In the first group, there are 7 hot water springs. The temperature of this group ranges from 100° to 122° F. In the second group, there is only one hot water spring. Its temperature is 101° F. In the third group, there are 15 hot water springs. Its temperature varies from 87° F. to 114° F. In the hot water springs having relatively higher degree of temperatures, there is a heavy dose of sulphur. These springs are also saltish and are useful for healing skin ailments.²

RIVERS

There are 9 rivers in all in the district. Of these, two rivers, viz., the Mahi and the Sabarmati are perennial. The river Mahi popularly known

1. DIKSHIT K. R., *Geography of Gujarat*, New Delhi, (1970), p. 14.
2. RAJYAGOR S. B. (DR.), *Gujarat-Ek-Darsker*, Farida, (1969), pp. 51-52.

as "Mahisagar" and flows towards the east and south of the district while the river Sabarmati on the north-west of the district touches the district only for a few miles but is of great importance as into it, along the channels of the Shedhi, the Vatrak, the Meshwo, the Khari, etc., the whole local drainage flows. The other rivers, viz., the Shedhi, the Vatrak, the Meshwo and the Khari meet this river at its left bank. The other rivers of the district are the Luni, the Varansi, and the Mohar. These rivers are fed by rain-water and are shallow. They only flow during some months of the year and usually dry up after the month of March. These rivers are now described below :

The Mahi

"The Mahi, with a course of from 300 to 350 miles, a drainage area estimated at from 15,000 to 17,000 sq. miles and a discharge during maximum flood of about one and three quarter million cubic feet per second, is, after the Narbada and Tapti, the largest of Gujarat rivers. The main branch of the Mahi rises about 1850 feet above sea level in the Malwa State of Amjhera, in north latitude $22^{\circ} 32'$ and east longitude $75^{\circ} 5'$, almost due east of the town of Khambhat and distant from it in a straight line about 160 miles. The source of the river is in the Mehad lake, half way between the town of Amjhera and the village of Bhopavar, near the western extremity of the Vindhya mountains, where, taking a sharp bend almost at right angles to the line of their main range, they stretch northwards to meet the Aravali hills."¹ The river Mahi has been referred to in the olden days by Ptolemy as Mophis (Mahi).² The river Mahi has also been referred to by Arab travellers. Al-Beruni calls river Mahi as river Mahindri.³

The Mahi river is passing through the five talukas of the district, viz., Vadasinor, Thasra, Anand, Borsad and Khambhat.

In Vadasinor taluka the river traverses through Janod, Pilodra and Sakariya villages. Thereafter it enters the Thasra taluka and flows by Vadodara, Vallavpura, Kuni, Sangol, Sonipur, Rustampura, Sarnal, Gumadia, Umba, Bradrasa and Rania. It subsequently enters Anand taluka and passes by Sundalpur, Ahima, Shili, Khorwad, Pratappura, Khanpur, Kherda, Vahera, Rajupura and Vasad. After Anand taluka; the river passes through Borsad taluka where it touches Bhetasi, Ambali, Kanwadi, Amrol, Asarna, Umeta, Chamara, Bamangam, Gambhira, Devapura, Kothiyakhad.

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panch Mahals*, Bombay, (1879), p. 2.

2. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. I, *History of Gujarat*, Bombay, (1896), p. 539.

3. *Ibid.*, p. 510.

Moti Sherdi, Umlaid, Gajna, Salol, Goruva, and Kankapura. Lastly while passing through Cambay (Khambhat) taluka the river during its course touches Dhuvaran, Rajpur, Rolej, Vasna and Cambay (Khambhat). The river flows for 180 km., in the district. Though during the monsoon, the river fills its broad bed from bank to bank, where the sides are high, a depth of over forty feet (12.19 metres), in the fair season, within the limits of Kheda district, the Mahi river can be crossed at many places. Of these, the chief fords are at the mouth of the river between Cambay (Khambhat) and Kavi, on account of rush of water, always a dangerous crossing, though at the the lowest tide it can be passed on foot.

Thirteen miles (20.92 km.) above Cambay (Khambhat) is the Dehvan ford, available only at neap tides.¹ Five miles (8 km.) further at Gajna is another crossing serviceable except at the highest springs and free from any dangerous rush of tide. Ten miles (16 km.) beyond, at the Khanpur village, in the hot weather the river can be forded, and at other seasons carts pass easily on poles laid across two boats. Two miles (3.2 km.) beyond, close to the railway bridge, is the Umeta ford, the best of the Mahi crossings. The fierceness of the tidal wave makes the mouth of the Mahi dangerous for any but flat bottomed boats. And though it is said that, in former times, the village of Dehvan was a port of some consequence, the channel is not at present deep enough to admit vessels of any size. The high rugged banks of the Mahi prevent its waters being used for irrigation, and so deep is its bed that it drains rather than feeds the springs near its banks.

Four places on the Mahi, viz., Mingrad, Fazilpur, Angad and Yaspur are held specially sacred by the Kolis, and visited by pilgrims on the 15th of Chaitra (April). The Kolis, Baraiyas, Patanvadias, etc., think of the Mahi as their mother. They swear by her, and though they have little fear in breaking their oath, they do not swallow or drink the water of this river, if they are guilty of any crime. They are afraid of the supernatural power of the water of the Mahisagar. A guilty person will hesitate to swallow the water of the Mahi. This happens more particularly if the water is given to him at Vasna Kolna, where on the night of the Dasera Festival (October), the Kolis and other predatory tribes used to meet and organize their predatory forays. Though like other streams it is considered to be sacred, fear would seem to be the prevailing feeling

1. The following are the details of this crossing approached from the south. After descending the bank at Kareli for the first three miles, the road leads over a hard flat only covered at the highest tides. The principal stream is then crossed about a furlong wide, and at the highest of the neap tides not more than three feet deep. The road next passes over a broad sandy, and some what muddy island; and beyond the island, through a minor stream scarcely ankle deep ascends the steep bank at the village of Dehvan. In the fair season, except for six days before and after the new and full moon, when the overflow of the spring tides leaves it muddy, the river bed is hard, and any description of carriage can be taken across without trouble.—*Bom. Govt. Sec. XI*, 88.

in the worship of the Mahi. In olden days, the height of its banks and the fierceness of its floods, the deep gullies and ravines through which the traveller had to pass on his way to the river, and perhaps, above all, the bad name of the tribes on its northern bank, explain the proverb, 'When the Mahi is crossed, there is safety'.

Floods

The river was in spate in 1968. In July 1971, it had reached a high flood level of 14.79 metres at Vasad (Vadodara district) and 69.92 metres at Wanakbori. In 1973 also the river was in spate. The dam at Kadana will help bring the river under control.

The Sabarmati

The river Sabarmati rises in the south-western spurs of the Aravalli hills at the place near Vekaria. It traverses through Sabar Kantha, Ahmadabad and Kheda districts and traverses through the western boundary of the district. It enters the district through Khadiyarpura village of Matar taluka and finally discharges itself into Gulf of Cambay (Khambhat). In the district the river Vatrak in which the water of all the rivers except Mahi merges, also empties itself in Sabarmati near village Palla.

At some distance from village Khadiyarpura on the southern direction, the Khari river meets Sabarmati river at two places. Thereafter at the place where Vautha village lies on west bank and Palla on eastern bank, the river Vatrak carrying waters of all the rivers except the Mahi meets the river Sabarmati. From Palla the river proceeds in the direction of Gulf of Cambay (Khambhat) and forms a western boundary of the Khambhat taluka. Its entire length admeasures 55 miles (88 km.). Of this total length, some portion is in Ahmadabad district while the rest of the area belongs to Matar and Khambhat talukas. Near the Gulf of Cambay (Khambhat) at Kopali creek, it is 4½ miles (7 km.) in breadth. In the southern direction of Vadgam there is a Dandi creek. The distance between two creeks measures 4 miles (6.40 km.). In the north of Vadgam there is a creek called Tarakpurno-Navido. Still further in the north from the direction of Golana, there is a creek called Golanano-Navido which meets the river. The village Pachhegam is to the north of Golana. The tidal waters of the Gulf of Cambay (Khambhat) spread as far as Pachhegam which is 25 miles (40 km.) away from the Gulf.

Floods

After its entry in Kheda district the water in the catchment area of Sabarmati increases rapidly during heavy monsoon. When the river is in floods, it swells tremendously on the eastern side of Kheda district. On

the western side, *i. e.*, near to the boundary of the Ahmadabad district, the river does not swell so much. On account of floods the villages situated on the bank of the river in Matar taluka are severely affected. The fields are flooded during the time of monsoon and if the river is in spate crops are destroyed. During the floods, water of the river spreads in the plains of Bhal and this helps the *rabi* crops of wheat. During the monsoon of 1973, the Sabarmati river swelled on both the banks affecting almost all the villages of Matar and Khambhat talukas of the Kheda district.

Channel and Bor Rocks

A significant mention must be made of Cambay (Khambhat) Channel and Bor Rocks of Gulf of Cambay (Khambhat). It may be pointed out that in the vicinity of Khambhat in western direction on the bank of Sabarmati, the Dholera creek is situated on its mouth. This bank is substantially high on account of sand. The total area admeasures from 1 to 4 miles (1.60 to 6.40 km.) in southwest direction. On its opposite side the portion between the mouth of rivers Dhadhar and Mahi is also covered with sand and is substantially high. Thus, between the western and eastern banks there is a deep channel called Cambay (Khambhat) Channel through which all the ships pass. Between the Cambay (Khambhat) Channel and the creek of Dholera there lies a huge Bor Rocks formed on account of tides. On account of the existence of the Bor Rocks, the passage for ships near Khambhat has become difficult for navigation and is considerably rendered narrow. In this passage during the time of ebbs the water level is reduced to 10 feet. This is the position in the area of 6 to 7 miles (9.6 km. to 11 km.) near Cambay (Khambhat).

Alang Canal

In the northern direction of Golana at about 15 miles (24 km.) upwards and 3 miles (4.8 km.) away in southern direction of Palla confluences near Asamali a canal called Alang Canal is dug from Sabarmati river. This canal is 20 miles (32 km.) long and it submerges in Nareshwar lake near Khambhat town. The water of the canal in monsoon season only falls in the lake. In summer season the Nareshwar lake gets completely dried up. At present, Alang Canal starts from Asamali and ends at Kanewal. Canal is filled up with sand between Kanewal and Budhaj. However, from Budhaj to Khambhat the canal again works.

Dredging

From the foregoing account it would be observed that Sabarmati river during its course in Kheda district is silted up heavily at many places. The Gulf of Cambay (Khambhat) has been rendered futile for the purpose of navigation purely on account of silting of the river. It is, therefore, evident that to make the river navigable and useful, dredging is extremely necessary.

On account of constant dredging it is beyond doubt that the river will be made navigable.

The northern part between the Sabarmati and the Mahi called the Sabarmati-Mahi Doab is agriculturally very productive, industrially well developed and displays an excessive concentration of capital forming enterprise.

Much of this doab is drained by the river Sabarmati and its tributaries, especially the Meshwo and the Vatrak, all of which have enlarged the basin of the Sabarmati at the expense of the Mahi. The trunk rivers flowing northeast-southwest have followed a slope which is the result of north-south and east-west slope components. The tributaries originating in the hilly parts in the north have adopted sub-parallel courses, and drain not only the doab but have also diverted the waters of some right bank tributaries of the Mahi by the process of river abstraction. The Sabarmati and its tributaries flowing on an imperceptible slope in their lower courses have developed the habit of meandering and changing their courses frequently. The solid characteristics of the area, following the conditions of slope and the precipitation, present variations often modified by fluvial deposits. The light, brown sandy loam, the 'garat' in the north-east, imperceptibly changes into black soil in the lower coastal areas through an insensible gradation. One may find in the transitional zone medium black soil, which is locally called 'besar'. The alluvial deposits, the 'bhatha', are associated with river valleys and flood plains and are subject to yearly inundation and deposition of a fresh layer of alluvium.

Agriculture in the northern part of this doab, with less rainfall, is dominated by cotton, millets, wheat, and groundnut, while the southern part, largely included in Kheda district, produces bajra, groundnut and tobacco with sizable acreage of rice on the eastern margin of the region. While the 'bhatha' soils occurring in the flood plain of the Sabarmati are most suitable for the cultivation of wheat, black soil supports cotton, and the 'besar' is reserved for groundnut. Increasing duration and amount of rainfall in the southern part of this region have provided greater scope for rice and reduced the acreage under millets, introducing tobacco as the main cash crop. Still, however, a considerable acreage remains under cotton and groundnut. More than 95 per cent of the acreage under tobacco in the entire State lies in this region, specially in Kheda and part of Vadodara districts.¹

The Sabarmati river traverses through two talukas in the district, viz., Matar and Khambhat. In Matar taluka it touches following villages, viz., Khadiyarpura, Dharoda, Kaloli, Rasikpura, Varsang, Palla and Asamali.

1. DIXIT K. R., *Geography of Gujarat*, (1970), pp. 215-16.

In Khambhat taluka it passes by Khada, Nabhoi, Rinza, Pachhegam, Galiana, Golana, Mitali, Tarakpur and Vadgam.

The river covers a total length of 85 km., in the district. It merges in the Gulf of Cambay (Khambhat) near Vadgam.

The Khari

The Khari, rising in a cluster of hills about 16 km., to the north-east of Himatnagar in Sabar Kantha district passes through a few villages in the extreme west of Kheda district and falls into the river Sabarmati to the north-west of village Radhu in Matar taluka. The land here is very flat and during monsoon is subject to flooding. The river passes through Matar taluka of the district. Here since 150 years rice fields have been watered by banks thrown across the river. At first the embankments were of earth and were in need of constant repair. However, since 1850 permanent masonry dams with sluice gates have been built.

In Matar taluka it touches following villages, viz., Pinglaj, Gobhalaj, Navagam, Dharoda, Chalindra, Dhathal, Naika, Govindpura, Shetra, Kaloli, Chandna, Radhu, Rasikpura and Varsang. The river merges in Sabarmati river near village Wanta of Ahmadabad district.

The Vatrak

The river Vatrak with which the waters of the river Shedhi unite at Kheda, rises from the hills of Dungarpur in Rajasthan. It runs parallel to the river Mahi and enters the Kapadvanj taluka in north near Punadra. Outside western boundary of the Kheda district the river Mazam meets this river near Mandva. In the southern direction of Mahi lies Punadra and near it lies Attarsuba. A famous ancient shrine of Utkantheswar (Untadia) Mahadev lies there. The entire surrounding nearby is picturesque and well-known. On every Shivratri and Janmashtami days fairs are held there and during Sinhastha year on the 14th day of 2nd half of the month of Bhadravo, a banner is planted on the Mahadev temple.

The river flows through Kapadvanj, Mahemadabad and Matar talukas of the district. In Kapadvanj taluka it passes by Motizar, Abvel, Madadra, Nirmali, Telnar, Muvada, Punadra, Attarsumba, Apruji, Ravdavati, Chared, Badarpur, Kakarkhada, Kharal, Sarkhej, Chhipadi, Gadvel, Chhipali, Bharkunda and Bagdol. In Mahemadabad taluka, it touches following villages, viz., Haldarvas, Hathnoli, Sansoli, Jalampur, Ghodasar, Shatrunda, Akalacha, Rinchoi, Kuna, Modaj, Mankwa, Ghodali, Sojoli, Khatraj, Mahemadabad, Virol, Sarsa, Par Santaj, Dedarda, Samadra and Kheda.

Finally the river passes through following villages in Matar taluka, viz., Gobhalaj, Vadala, Harijala, Vavdi, Sokhda, Govindapura, Shetra, Chandna, Piparia, Matar, Radhu, Mahelaj, Traj, Varsang, Punaj, and Palla. The total length of river is 125 km. of which 105 km. are covered by it in the district.

The Meshwo

This river originates in Dungarpur district of Rajasthan State. It passes through Mahemadabad taluka and during its course touches following villages, viz., Jinjar, Raska, Rohisa, Amsaran, Kanij, Nenpur, Sansoli, Vasana, Malataj, Sankhej, Sadra, and Samadra. The river merges in the Vatrak river at Samadra village of Mahemadabad taluka of the district. A pickup weir at Raska village in Mahemadabad taluka has been constructed. The total length of the river is 193 km. of which 22 km., are covered by it in this district.

The Mohar

This river rises near Sathamba village of Bayad taluka of Sabar Kantha district. It traverses through two talukas of the district, viz., Kapadvanj and Nadiad. In Kapadvanj taluka, it touches following villages, viz., Kavath, Suki, Muvadi, Kashipura, Thavad, Vaghas, Vasna, Dantali, Alawa, Lalpur, Kalaji, Khanpur, Sultanpur, Kapadvanj, Navagam, Antroli, Mirapur, Dasalvada, Ambaliyara, Anara, Kathlal and Shahpur. Thereafter the river enters Nadiad taluka and passes by following villages, viz., Ghoghawada, Bhaner, Faloli, Vasna, Minawada, Dadusar, Ruppura, Mirjapur, Nani Khadol, Undra and Nandgam. The river merges in Shedhi river at Nandgam village of Nadiad taluka. It covers 65 km., in the district out of its total length of 105 km.

The Varansi

This river also originates in Sabar Kantha district. It traverses through Kapadvanj taluka in the district and during its course touches following villages, viz., Motizer, Abvel, Nirmali, Vāsna, Telnar, Alawa, Betawada, Kalaji, Thunchal, Ukardina, Sultanpur, Khanpur and Kapadvanj.

The river merges in the Mohar river near Kapadvanj. Of its total length of 37 km., it covers 22 km., in the district.

The Shedhi

The chief drainage line of the plain between the Mahi and the Sabarmati is the river Shedhi. Of all the rivers of Kheda district, Shedhi is extremely narrow. Its entire runway is narrow and full of mire. It originates

in the Dhamod and the Vardhari hills in Panch Mahals district. In this place many archaeological objects are found. In the ancient books river Shedhi is called Palashavancharini (पलाशवनचारिणी). One has to cross the river Shedhi while going to Dakor town from the Dakor station. In the west of Dakor town near Thamna on the bank of the river Shedhi in ancient time there was Khilajapur town. There are many ancient sites of this town. The remnants are known by the same name or the abridged name of 'Por'. The famous alchemist Siddha Nagarjuna who has been referred to in the Jain literature was a resident of Dhank near Somnath in Saurashtra. This Siddha Nagarjuna was well-known in 10th century A. D. He was a famous alchemist and was highly well-versed in the art of transmutation of baser metals into gold. Al-Beruni has mentioned that before him 100 years ago there was a famous alchemist called Nagarjuna. Rasaratnakar, Lok Shashtra, Yogashatak, Ascharya Yogmala all are his famous books.¹

In book entitled "*Prabhavakcharitra*" written by Prabhachandrasuri, it has been stated that the art of alchemy was achieved by Siddha Nagarjuna in the village Thamna on the bank of Shedhi.²

The river traverses through six talukas of the district in the order shown below, viz., Vadasinor, Thasara, Anand, Nadiad, Matar and Mahemdabad.

In Vadasinor taluka it touches the following villages, viz., Raiyoli, Khandivav, Limbdi, Jorapura, Meghaliya, Dakharia, Saliyavadi, Sakaria, Rajpur, Vadasinor and Hindia. In Thasra taluka it passes by Ruzva, Menpura, Padal, Rasulpur, Sandra, Palaiya, Jargal, Soniya, Dabhali, Vadad, Pipalvada, Kosam, Bhathari, Golaj, Vajewal, Aurangpura, Ekalveu, Pipol, Muliad, Vanoti, Dakor, Rakhiyal, Jakhed, Simlaj, Vinzol, Khijalpur (Vanta), Khijalpur (Talpad) and Masra villages. In Anand taluka it touches two villages only, viz., Thamna and Aridi. Thereafter the river passes through Nadiad taluka and touches the following villages: Sodapur, Haranj, Chunnel, Paldi, Sanali, Javol, Hathaj, Vina, Nandgam, Khuntaj, Mulaj, Dawapura, Bilodra, Arera, Manjipura, Hathnoli and Dehgam. Subsequently the river enters Matar taluka and passes by the villages of Haijarabad, Ratanpur and Sokhda. Lastly in Mahemadabad taluka it touches following villages, viz., Bavra, Khumarvad and Kheda.

The total length of the river in the district is 113 km. It merges in Vatrak river at Kheda.

Lastly mention must be made of river Luni, which is a small rivulet.

1. RAJYAGOR S. B. (DR.), *Gujaratni Kelavanino Itihas*, pp. 19-20.
2. SHUKLA SHIVSHANKAR P., *Gujaratni Lokmatoo*.

TANKS

From the old Gazetteer it appears that "the district contains no natural lakes, but according to statistics of 1871-72, is supplied with 4,079 ponds or reservoirs, covering a total area of 14,553 acres, or on an average of four acres to each reservoir. Of the total number, two only, the Gomti lake at Dakor and the village reservoir of Belara in Matar sub-division, are of any great size. As most of them are dry or very low in the hot season, they are of little use for perennial crops, but in October and November, after the rains are over, they are very serviceable for watering rice. Except in parts of Kapadvanj and Thasra sub-divisions, where land is impregnated with soda, the district is well supplied with wells, ponds and rivers of sweet water."

The details of the important tanks of the district² are as under :

The Vanghroli Tank

The Vanghroli tank is situated at a distance of 9 miles (14.48 km.) from Thasra station at the village site of the village Vanghroli. In the year 1902, this tank was built as a famine relief work at a cost of Rs. 2,87,293. The catchment area of this tank is 13 sq. miles (33.69 sq. km.). A dam of 6,970 feet (2,124.45 metres) of special selected earth is built for this tank. Three main canals and 4 subsidiary branches are drawn from this tank. The waste weir of the tank is divided into two branches. One part is 350 feet (106.68 metres) long and the other part consists of a long wall of 300 feet (91.44 metres). The tank can contain at its full capacity 199.48 million cubic feet of water.

The Savli Tank

The Savli tank is situated on the borders of villages Chikhlod, Savli and Vishwanathpura of Kapadvanj taluka. The construction of the tank was started in 1902 as a measure of famine relief. Subsequently in 1910, the work which was stopped was completed. The amount of Rs. 2,32,251 was sanctioned. The catchment area of the tank is 11 sq. miles (28.49 sq. km.) and flow of water is 167.85 million cubic feet. The dam of the tank is 755 feet (236.22 metres) long. For the discharge of additional water, a waste weir has been constructed.

The Tranja-Nagara Tanks

These tanks are situated within the borders of villages bearing the same names and at a distance of 1½ miles (2.40 km.) from each other.

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panch Mahals*, Bombay.
2. SHAH P. C. AND SHAH C. F. (EDITORS), *Charotar Sarvasangrah*, Vol. I, pp. 62 to 73.

The construction of these tanks was also started in 1902 as a relief measure during the famine. The catchment area of Tranja tank is 185 acres and that of Nagara is 1½ sq. miles. The dams of the tanks are zigzag in construction. The length of dam of Tranja tank is 1501 feet (457.50 metres) and that of Nagara is 7,500 feet (2,286 metres). Waste weirs have been constructed on both the tanks. The capacity to contain water of Tranja tank is 70.79 million cubic feet while that of Nagara tank is 97.14 million cubic feet.

The Saiyant Tank

The Saiyant tank is situated within the borders of Saiyant and Bordi villages. The construction work of this tank was started in 1902 and was completed in 1912. The catchment area of the tank is 12.5 sq. miles (32.36 sq. km.). Its capacity to contain water is 135 millions cubic feet. The dam of the tank which is built of a special earth is 8,600 feet (2,621.28 metres) long. The waste weir is constructed for the discharge of the additional water.

The Rani Porda Tank

The tank situated in Thasra taluka is within the boundaries of Rani-Porda and Ozarala villages. A dam admeasuring 5,360 feet (1,633.72 metres) has been constructed on this tank.

The Kaneval Tank

This tank is constructed near the village Valli of the Khambhat taluka. The details about its catchment area, capacity to contain water, etc., are given below :

(1) Catchment area	.. ..	1,304 acres.
(2) Capacity to contain water	.. ..	166.87 million cubic feet.
(3) Total land area of the tank	.. ..	3,000 acres.

In addition to these tanks there are also other big tanks such as Dugari tank in Khambhat taluka and Chanvaga, Fate, Sher and Lomba tanks in Mahemadabad taluka.

Ground Water Conditions in Kheda District

Most of the areas in the Kheda district are underlain by Quarternary Formations comprising fine to coarse-grained sands, sandy clays, silts and clays.

In the Kheda district, depth of water levels in dug-wells varies from 3.20 to 23.83 metres and total depth of wells from 10 metres to 35 metres below ground level. The yield from dug-wells varies from 109 to 260 kilolitres water per day.

The yield from dug-cum-bored wells ranges from 162 kilolitres to 432 kilolitres per day.

The depth of tube-wells in the Kheda district ranges from 150 to 300 metres. They yield about 90 kilolitres of water per hour on an average with about 10 metres of drawdown.

In Kheda district, the flowing tube-wells are located at Kheda and Mahudha at altitudes about 40 metres. The Kheda tube-well tapped deep aquifer at about 300 metres, while the borehole at Mahudha is 255 metres deep. A tube-well at Nadiad 357 metres deep is also under flowing conditions. The free flow from the Mahudha and Nadiad tube-wells is about 11.60 kilolitres per hour.

GEOLOGY¹

The Geological succession of the rock formations occurring in Kheda district is given below :

<i>Stratigraphic position</i>	<i>Rock formations</i>
Recent and Sub-Recent Supra-Trappean (Palaeocene)	Alluvium Laterite, calcareous sandstone marl and clay with bands of limestone.
Uppermost Cretaceous	Basalt flows, etc. of Deccan Trap Suite.
Cretaceous (Infratrappean) (= "Lameta")	Impure limestones with intercalations of chert and jasper.
Precambrian { Intrusive into Aravalli Aravalli	Granite { Quartzite, Phyllite and Mica Schist Composite gneisses.

Precambrians

The oldest formations in the area are Precambrian metasediments comprising phyllites, mica-schists and quartzites. The quartzites occur as intercalated bands in schists and form chains of narrow parallel ridges trending NE-SW. Mica schists and phyllites form the low undulating grounds. These formations are exposed in the north-eastern end of the district, in the area around Virpur (23° 12' : 73° 44') in Vadasinor taluka.

1. Geological Survey of India, Gujarat Circle, Ahmedabad.

Granite

Granites are exposed in the area around Pandwa (23° 03' : 73° 24') and its extensions south-eastwards to the Mahi and further beyond. They are also found along the Mahi river upto east of Sewalia (22° 50' : 73° 21'). Additional outcrops of granite are found at Vadasinor (22° 26' : 73° 20') and in the area upto 5 to 8 km. N. E. to north of the town. Composite gneisses are associated with granites. In the area 3 km. north and N. E. of Pandwa the granites show intrusive relationship to the metasediments.

Infratrappeans

Infratrappean sediments (=Lameta) are found at 10 km. W. to W. N. W. of Virpur (Birpur) (23° 12' : 73° 44') and in the Vadasinor and surrounding areas from 7 km. south of the town extending north-wards upto 3 km. S.W. of Jodhpur (23° 10' : 73° 24'). In the northern part, i. e., west of Virpur the sediments occur overlying the schists and quartzites and in Vadasinor area overlying granites, with an unconformity representing a large time gap.

The rocks are varying siliceous and calcareous. The outcrops are generally irregular in shape and flat-topped. Most of the outcrops in Vadasinor area are massive limestones, often with pebbly and concretionary bands, cherty or jasperoidal intercalations have also been noticed. These limestones are quarried at a place about 6.4 km. N. W. of Vadasinor town by the Associated Cement Company.

Deccan Trap

Numerous outcrops of Deccan Trap Basalts, some of them extensive have been found in Kapadvanj, Vadasinor and Thasara talukas. The Traps occur (1) in an area of 30 km. long and 16 km. wide extending from 2 km. N.E. of Kapadvanj (23° 10' : 73° 05') to 3 km. N.N.W. of Jodhpur (23° 10' : 73° 24') and (2) along the Mahi river from east of Sewalia (22° 50' : 73° 21') upto 6 km. east of Od (22° 37' : 73° 08'). The Traps overlie the Infratrappean beds. The basalts are medium grained to microcrystalline in texture being at places also porphyritic. Amygdaloidal types are also met with.

Supra-trappean (Palaeocene)

A narrow strip of sedimentary sequence bordering the western margin of the Deccan Trap, for a length of about 33 km. and a maximum width of 2 km. between Kapadvanj (23° 01' : 73° 05') in the north and Dakor (22° 45' : 73° 09') in the south has been referred to as "Infratrappean".

in the old published literature on the geology of this area. From the recent studies carried out in connection with examination of bauxite deposits around Kapadvanj and also drilling data obtained from boreholes drilled for groundwater near Kapadvanj this sedimentary sequence comprising sandstone, grits, calcareous shales, limestones and swelling clays etc., is found to be overlying the Deccan Traps (Sahasrabudhe, 1961-62). These sediments constitute the low ridges between Kapadvanj and Dakor. They have generally a horizontal repose, though at places they show very gentle dips. Limestone resting over sandstone are white to grey in colour, hard and compact in texture, and they have a typical concretionary appearance.

Laterite occurs as small isolated humps near Khanpur, Taiyabpur, Kapadvanj, Mirapur, Dhanakpur, Salod, Kajipur and Dakor. This laterite is a porous, pitted clayey rock with red, yellow, brown, fawn, grey and mottled colours. These laterites generally exhibit concretionary structures, but the more siliceous varieties are comparatively harder and more brittle, breaking with a sub-conchoidal fracture. The lateritic horizon is three to four metres thick and it gradually grades into clayey zones below. Several sections near Taiyabpur and Kapadvanj show partially lateritised limestones with grey to pink patches of calcareous remnants. Outcrops here display a bedded appearance striking W.N.W.-E.S.E. with southerly dips.

Sub-recent and Recent

A major part of the Kheda district is covered by alluvium. This alluvium is derived from the various rocks described above. It is, therefore, but natural that the alluvium is also varied in character and composition. The alluvium consists of sand, silt, clay and grits; the coarser material grading into the finer both horizontally and vertically. The clays and grits are more abundant than the sands and grits.

MINERAL RESOURCES

Bauxite, limestone and petroleum are the major minerals of economic importance in the Kheda district.

Bauxite—Narrow isolated patches of laterite containing horizons of bauxite are met with over a length of about 13 km. from Kapadvanj in the north to Dakor in the south. Its occurrences are found north east of Taiyabpur, south of Kapadvanj, Dhanakpur, south of Savli, west of Sikandara Poiria, east of Sait and north west of Dakor. Of these, the important deposits are situated near Kapadvanj.

The ore occurs in irregular patches and pockets and it is fawn grey to pale pink in colour and massive. The thickness of the bauxite horizon

ranges from 0.50 to 3.0 metres. The estimated reserves of bauxite in the Kapadvanj area total to about 0.13 million tonnes (Sahasrabudhe, 1961-62). The range of chemical composition of bauxite is Al_2O_3 48.10 per cent to 64.12 per cent, SiO_2 3.37 to 6.20 per cent, CaO 2.82 to 7.71 per cent and TiO_2 4.52 to 5.06 per cent.

The production of bauxite from Kheda district during 1972 was 8,250 tonnes. The bauxite of Kapadvanj area mainly goes to A.C.C. for their cement manufacturing plant near Sevalia.

Building Material—Basalts of the Deccan Trap are a source of building concrete, road metal and railway ballast.

Clay—The Clay occurrences near Sonipur town ($22^{\circ} 49' : 73^{\circ} 22'$) were examined by Geological Survey of India (Deshpande, 1948). The felspar in the gneisses is occasionally altered to clay. This clay is considerably gritty and non-plastic.

Limestone—Limestone equivalent in age to the "Lametas" occurs as thin capping over granite near Vadasinor town. The deposits are situated at about 18 km. from the Sevalia railway station which is on the Anand-Godhra metre gauge. These limestones are generally siliceous. The limestone bearing area is about 25 km. long and 3 km. wide, the deposit persisting to a depth of 1.5 to 4.00 metres. The chemical composition of the limestone shows variation in CaO 48.01 to 55.10 per cent, MgO 0.21 to 1.33 per cent, SiO_2 1.9 to 14.8 per cent. The deposit is being worked by the Associated Cement Company Pvt. Ltd., for the manufacture of cement. Due to excess of silica in this limestone there has been necessity to treat the limestone for upgrading, and also blend with better quality limestone from elsewhere for a proper composition of the feed. About 3,33,500 tonnes of limestone was mined in the district during 1972.

PETROLEUM AND NATURAL GAS

Petroleum and natural gas are obtained mostly from the Tertiary sediments. Systematic exploration for petroleum and natural gas by the Geological Survey of India was started in 1948 with geophysical surveys which broadly delineated the sedimentary basin of Khambhat and also indicated a concealed anticlinal structure at Lunej, N.N.W. of the town of Khambhat. After the setting up of the Oil and Natural Gas Commission in 1956, exploration in the promising areas was intensified; detailed reflection surveys followed the clues given by the earlier reconnaissance work or by the gravity magnetic data. Further development drilling at Khambhat (Lunej) showed that this was a gas field.

1. For further details please refer to Chapter V—Industries.

Development of Oil and Natural Gas in Kheda District

Petroleum and natural gas are obtained mostly from the Tertiary sediments. The central Gujarat alluvial plain has a great thickness of sedimentary rock deposits which contain oil and gas. The formation of rocks started 80 million years back and their growth is continuing particularly in the Gulf of Cambay (Khambhat). Geological and Geophysical surveys in the Khambhat basin indicated the presence of interesting structures of anticlines. First systematic exploration for petroleum and natural gas by Geological Survey of India was started in 1948 with Geophysical Survey which indicated a concealed anti-clinical structure at Lunej N.N.W. of the town of Khambhat. After the setting up of Oil and Natural Gas Commission in 1956 further exploration was undertaken and the first point at Lunej near Khambhat was drilled in 1958. Most of the Khambhat plain is double plugging anti-clines. It denotes elongated dome shaped structure which is favourable for entrapment of oil. The geological structure of Khambhat basin is most suitable for oil and natural gas contents. The Oil and Natural Gas Commission has discovered about 30 structures of various types and sizes after 1957. Most of these have been drilled and a number of them are already producing oil and natural gas. Similarly oil was found at Navagam which is 24 km. south of Ahmadabad. It revealed the existence of silt-stone with permeable layers which yielded both oil and gas. The effective pay thickness exceeds 40 metres. Extensive drilling work is in progress under the Navagam project to locate new structures of oil in Matar, Kheda, Petlad and Limbasi. Deep as well as shallow wells were drilled to locate new oil fields. Further details of Khambhat and Navagam projects are as under.

Cambay (Khambhat) Project—The oil-strike near village Lunej about 12 km. west of Khambhat and 80 km., from Vadodara, was the first attempt for oil and natural gas in the Western India in September, 1958. The success is the key for oil exploration efforts in this area. Kathana discovered in 1965, is another oil-bearing structure of this project. It is situated at a distance of about 25 km., east of Khambhat. 62 wells, including 16 at Kathana, had been drilled in Khambhat Project till 1970-71. Of these 19 are producing gas and three are oil producers. The remaining wells are either dry or under testing. Gas production began at Khambhat in December, 1964 with 1.44 lakh cubic metres per day. The area has raised its capacity to produce more than 5 lakh cubic metres of gas per day. It supplies gas to the Dhuvaran Power Station through a 35 cm. pipeline from distance of 24.8 km. Khambhat Gas is known as 'Sweet Gas' owing to its 70 per cent methane content.¹ The Khambhat Project has managed to produce 'condensate' a bye product of gas containing a mixture of low octane gasoline, kerosene, diesel, etc. The present rate of production of condensate is 10 cubic metres per day for use

1. DESHPANDE B. G., *Reaching for Oil in India*. Presidential Address of the Geology and Geography Section, 58th I. S. C. A. Bangalore, 1971, p. 18.

of the Gujarat Refinery and some other private industries. Kathana started crude oil production in July, 1968 with ten tonnes per day and has since been raised to the 15 tonnes per day for quick supply to the Gujarat Refinery by road tankers.

Navagam Project—As a part of Ahmadabad project, drilling was started in the year 1963. It consists of two fields, viz., Navagam and Dholka. The Navagam structure is located about 30 km. south of Ahmadabad on a metalled road connecting Ahmadabad and Naika. The Navagam structure was delineated as an anticline with north-south trend. Its first well in Dholka structure was spudded in May, 1966 and completed in October, 1966. Till the end of August, 1970, 81 wells with a total of 1,51,810 metres were drilled in Navagam and Dholka fields.¹ Out of 81 wells drilled so far, 51 wells are oil-producing, 15 wells are dry and 15 wells are under repairs. The trial production in the Navagam was commenced on 29 March, 1967 at the rate of 50 tonnes per day and it increased to 400 tonnes per day in 1969-70 and 500 tonnes per day in 1971-72. The crude oil from Navagam was brought to the Gujarat Refinery through tankers. Now Kalol-Navagam-Koyali trunk pipeline has started operating. Gas production from Navagam field ranging from 50,000 to 60,000 cubic metres per day is being supplied to a textile mills at Ahmedabad. Oil production is also likely to be raised to 1,000 tonnes per day.

EARTHQUAKES

The old Gazetteer states, "In 1860 and 1864 earthquakes shocks but too slight to cause loss of life or property, were felt."² In the district two important earthquakes took place, viz., (1) at Kheda dated 13th August, 1821 and (2) at Kapadwanj on 20th July, 1935. The details about these earthquakes are given below³ :

Sl. No.	Period of Earthquakes	Description
1	2	3
1	13th August, 1821 3 p.m.	Kheda. The earthquake lasted for about a minute. Its direction is said to be east-west.
2	20th July, 1935	Kapadwanj. The earthquake was felt at 07 hours and 39 minutes.

1. ONGC. Annual Report 1971, p. 21.

2. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panch Mahals*, Bombay, (1879), p. 169.

3. The Director of Geology and Mining, Government of Gujarat, Ahmadabad.

Flora

FORESTS

The district has no big forest areas except some forests in Vadasinor and Kapadvanj talukas where teak, babul, neem, mahuda and mango trees are found. In former Balasinor State there was a Forest Department which consisted of a Forest Inspector, 3 Round Guards and 12 Beat Guards. The total revenue derived was Rs. 16,456-6 As.-6 P. in 1937-38.¹

Forests afford a good check for preventing soil erosion by arresting the abrasive force of water and wind. The salutary results of the conservation of the land included in forest are important. It will be observed from the statistics given below that from the view point of forest resources, district is poorly served. The type of forest in the district is "Dry, Deciduous and Thorny". The Statement I-1 given below shows forest areas of the Kheda district from 1961-62 to 1970-71.

STATEMENT I-1

Forest Areas in Kheda District, 1961-62 to 1970-71

(AREA IN SQUARE KM.)

Year 1	Reserved Forests 2	Protected Forests 3	Unclassed Forests 4	Private Forests 5	Total 6
1961-62	13.72	..	88.84	..	102.56
1962-63	59.87	..	102.45	..	162.32
1963-64	59.86	..	101.67	..	161.53
1964-65	59.86	..	173.93	..	233.79
1965-66	66.35	..	174.28	..	240.63
1966-67	67.60	..	208.64	..	276.24
1967-68	91.26	..	186.04	..	277.30
1968-69	84.33	..	199.91	8.50	292.74
1969-70	69.01	..	112.89	8.50	190.40
1970-71	68.99	..	92.35	8.50	169.84

Source :

Chief Conservator of Forests, Gujarat State, Vadodara.

The land is sandy, isolated and rocky. In some parts, which are not within the easy reach of human interference, the tree growth has survived. The remaining parts are more or less treeless, and barren. The trees are scattered and stunted. The maltreatment, indiscriminate grazing and cutting and unscientific management in the past are the main reasons for the unsatisfactory growth of trees in these areas.

1. Report on the Administration of the Balasinor State for the year 1937-38, p. 15.

Nature and Growth of Species

In Vadasinor area teak is commonly mixed with other species while in Attarsuba area teak is totally absent. However, in Attarsuba area, Khair exists with other species at the rate of 0.05 to 1 tree per acre with maximum girth of 20".

Forest Produce

The *timru* leaves and rubble metal are the principal forest produce. The annual revenue of both the produce are as follows :

- (1) *Timru* leaves Rs. 35,000.
- (2) Rubble metal Rs. 15,000.

The main tree species found in these forests are :

Local Name	Botanical Name
Teak	<i>Tectona grandis</i>
Timru	<i>Diosphyros melanoxylon</i>
Sadad	<i>Terminalia tomentosa</i>
Mahuda	<i>Madhuka indica</i>
Bor	<i>Zizyphus mauritiana</i>
Amla	<i>Embllica officinalis</i>
Khair	<i>Acacia catechu</i>
Baheda	<i>Terminalia belerica</i>
Asotri	<i>Bauhinia racemosa</i>
Shivan	<i>Gmelina arborea</i>
Babul	<i>Acacia arabica</i>
Kalam	<i>Mitragyna parviflora</i>
Khakhra	<i>Butea monosperma</i>
Karanj	<i>Holoptelea integrifolia</i>
Limbdo	<i>Azadirachta indicag</i>
Sarero	<i>Streblus asper</i>
Scrubs :	
Kado	<i>Holarrhena antidysenterica</i>
Aval	<i>Cassia auriculata</i>
Palpal	<i>Acacia senegal</i>
Goradio	
Gorad	
Velantro	<i>Dichrostachys cinerea</i>
Kerdo	<i>Capparis decidua</i>
Timru	<i>Diospyros montana</i>
Talbaval	<i>Acacia farnesiana</i>
Jheribaval	
Ratobaval	
	<i>Acacia jacquemontii</i>

Administration and Management of Wildlife

The administration and management of wild life in the district of Kheda rests entirely with the Forest Department. The Chief Conservator of Forests of the State is also the Wildlife Preservation Officer, while the Deputy Conservators of Forests and Range Forest Officers function as *ex-officio* Wildlife Wardens and Assistant Wildlife Wardens respectively within their jurisdiction. The hunting at present in the district is controlled and regulated under the Gujarat Wild Animals and Wild Birds Protection Act, 1963. The Act prohibits unsupporting methods of hunting and provides for the destruction of dangerous animals which have become a menace to human life or property. Wildlife is classified into small game, big game and special big game, for each of which a separate kind of game licence has been prescribed. Game licences, which are valid for the entire State, can be obtained from the Wildlife Preservation Officer or from Wildlife Wardens on payment of requisite fees.

Under the Act *Nilgai* is declared as vermin for this district. The shooting of other animals and birds is prohibited.

Certain Forest, Police and Revenue officials in the district have been appointed as Game Wardens and certain non-officials have also been appointed as Honorary Game Wardens for the protection of wildlife in the district.

21 species are protected under the rules throughout the year. They are : the Peacock, the Deer, the Crocodile, the Tiger, the Sambhar, the Cheetal, the Flamingo, the Ducks, etc. There is no game sanctuary in this district.

Fauna

WILD ANIMALS

The Kheda district like all other districts of Gujarat has seen a rapid decline in number of wild animals. This state of affairs is due to indiscriminate killing by shooting and snaring of animals and destruction of natural vegetation by overgrazing. The old Gazetteer makes mention of a few wild animals. These animals were the tiger, the panther, the wolf, the hyaena, the jackal, the wild boar, the blue bull, the antelope, and the Indian gazelle.¹ Of these animals, the tiger is almost extinct. Even the blue bull is no longer found in large number. A short account of the better known animals is given below.

1. For further details please refer to the *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panch Mahals*, (1879), p. 18.

Order Insectivora with three Families

FAMILIES TUPAIDAE, ERINACEIDAE AND SORICIDAE

This order contains small mammals which feed mainly on insects foraged for at night. Their small sizes and nocturnal habits make them unfamiliar to most people. The Indian Tree Shrew *Anathana ellioti* is a mouse-like mammal found among large trees and its occurrence in the area, though likely, has to be confirmed. The Pale Hedgehog *Paraechinus micropus* is a prickly animal quite common along hedgerows and in gardens while the Grey Musk Shrew *Suncus murinus* is common even in cities entering houses and running along the walls after dusk uttering high pitched squeaks. Its mouse-like form is mistaken for that of a mouse and this otherwise valuable animal is destroyed as a pest. Each of these species represent the three families of the order in relative sequence.

Order Chiroptera with two Families

FAMILY PTEROPIDAE AND VESPERTILIONIDAE

The only mammals which have mastered the powers of true flight are the Flying Fox *Pteropus giganteus* and the various species of smaller bats of the genus *Pipistrellus*. The flying fox representing the first family feeds on fruits and figs while members of the second, capture night-flying insects detected and caught by a unique sonar system. Bats of various species will be found flitting about after dusk around buildings, old ruins and beside large trees. Their sharp squeaks are to be heard throughout the night.

Order Primates with one Family

FAMILY CERCOPITHIDAE

It is to this order that Man belongs. Our district possesses one wild Primate, the longtailed Common Langur *Presbestis entellus*. Small parties are a familiar sight along avenues where they live and move about with ease among the boughs. They feed on tender shoots, leaves and fruits and frequent temple precincts for grain, etc. offered by the devout worshippers. Langurs also enter urban areas.

Order Pholidota with one Family

FAMILY MANIDAE

The Pangolin or Scaly Ante ater *Manis crassicauda* is a strange elongated animal with short sturdy limbs, a long tail and a long snout. The forelimbs are armed with long, sharp claws to rip open ant hills and termitaries. A

nocturnal life and burrowing habits make the occurrence of the Pangolin difficult to determine, though best chances of coming across it are among the eroded gullies of the larger rivers and particularly so in the eastern parts of the district.

Order Lagomorpha with one Family

FAMILY LAPORIDAE

The domestic rabbit in its various colour phases is a representative of this family. In the wild we may look for the very similar Desert Hare *Lepus dayanus* found among shrubberies and broken country.

Order Rodentia with three Families

FAMILIES SCIURIDAE, MURIDAE AND HYSTERIDAE

The first family is represented by the familiar Five striped Squirrel *Funambulus pennanti*, a day-active animals found feeding at the base of trees into which they climb to evade danger. These small mammals are free in their association with human beings. The second family contains the only too familiar and plentiful rats of the genus *Rattus*, and very similar, though larger bandicoots of the genus *Bandicota* and the small mice of the genus *Musa*. All three are prolific breeders. Several species of mice occur in the countryside and the mouse-like Indian Gerbille *Tatera indica* differentiated by its furry tail is an animal burrowing in soft earth or hedgerows and drier fallow fields. The Indian Porcupine *Hystrix indica* belongs to the last family. It is fairly large and has long, hard, pointed quills which are a considerable deterrent to predators since the animal uses them with devastating effect. The porcupine is a large nocturnal animal and spends the day in deep borrows coming out after sundown to feed on shoots, fruits, tubers, etc. Its numbers have decreased considerably and in many areas it may now be extirpated where formerly it was common.

Order Carnivora with five families

FAMILY FELIDAE

The domestic cat is a typical representative of this flesh-eating family. In the wild, we have the slightly larger and more leggy Jungle Cat *Felis chaus* an animal of hedgerows and tangled growth around fields and in eroded gullies. The Tiger *Panthera tigris*, one of the large cats and our "National Animal", might have occurred in bygone days along the eroded river banks but today the only large cat which might, from time to time turn up in our area is the smaller and more intelligent Leopard *P. pardus*. This big cat is adept at climbing trees and at hiding.

FAMILY HYAENIDAE

The Striped Hyaena *Hyaena hyaena* is the only representative of this family. It resembles a large, compactly built dog with longer fore legs. Its shorter hind limbs give the animal a curiously shambling gait. Essentially a scavenger, the hyaena is nocturnal and visits remains of carcasses, crushing the largest bones with its powerful jaws. The gullies along the Mahi provide it with ideal living conditions.

FAMILY VIVERIDAE

The Common Mongoose *Herpestes edwardsi* is fairly common throughout the district and may be commonly met in day time hunting for prey among headgerows. It is a small animal with short legs, a sharp nose, small ears and a long, bushy tail. Mongoose kill large number of snakes and are thus welcome around human habitation though they also destroy birds and their eggs. Similar in shape, though more nocturnal is the Small Indian Civet *Viverricula indica* and the larger, longer haired Common Palm Civet *Paradoxurus hermaphroditus* both of which are expert tree climbers and at times enter the most densely populated areas at night. They are invaluable animals since their main preys are rats and mice. Civets have anal glands which emit strong-smelling secretions.

FAMILY CANIDAE

The dog with all its great variety is a type species of the CANIDAE. Its closest relative and possible progenitor the wolf *Canis lupus* is now perhaps extinct from our area, though the next close relative the Jackal *C. aureus* is still plentiful. The much smaller and bushy tailed Indian Fox *Vulpes bengalensis* is less seen and is more a inhabitant of open cultivation where it feeds on small mammals and birds and spends the day in burrows.

FAMILY MUSTALIDAE

A mongoose-like animal with short, dense fur found besides running water and often swimming and diving in it would most likely be the Smooth Indian Otter *Lutrogale perspicillata* a water animal feeding largely on fish, crabs and other small water animals.

ORDER ARTIODACTYLA WITH TWO FAMILIES

The family BOVIDAE may still have relatives in wild such as a few Nilgai *Boselphus tragocamelus* a large horse-like antelope in which the bull when fully adult is a deep blue-black with short horns, and Blackbuck *Antelope cervicapra*, a few scattered herds of which are still likely to be met with in the western parts of Kheda district. Similarly all deer of the Family

CERVIDAE are extinct in the area though the Indian Wild Boar *Sus scrofa* of the family SUIDAE may still be found in the more cut up ravine jungles of the Mahi and its tributaries.

BIRDS

The Kheda district of Gujarat can claim to be among the most fertile and extensively tilled areas of Gujarat. The district has a high avifaunal richness, both in numbers and diversity. This is mainly due to the presence of many trees around fields, and bordering roads. Some of these trees are indeed ancient and large enough to hold small pockets of animal life their own. In addition to the wealthy and fertile areas around Kheda, Anand, Vaso, etc. there are other areas bordering Sabar Kantha and Panch Mahals districts. These areas are wilder, less intensively cultivated and yet largely covered by scrub, secondary jungle and the lands more undulating and dissected by watercourses. In the western part of the district, the fertile alluvial plain gets more and more saline and imperceptibly the trees grow less luxuriant and are finally replaced by thorny species. Moreover, for bird life there are vast saline flats bounded by the tidal estuaries of the Sabarmati to the north and the Mahi to the south. Both these rivers in fact form the northern and southern borders of the district and their much eroded embankments, deeply scoured and filled with thorny shrubberies, tangled thorny thickets and tall, coarse grass provide a third and significant habitat for animal life. A number of other rivers such as the Vatrak, the Meshwo and Shedhi offer innumerable opportunities for bird life to thrive.

The resident bird life of the district is most varied in many respects. Thus, except for oceanic birds, species of extreme deserts and those of wet, tropical forests, all the species found in the State are likely to be recorded in the district. The total number of birds may easily add upto more than three hundred species.

The Kheda district has 17 Orders divided into a number of families. A tally of the species may well make the district one of the most highly avifaunistically rich areas in Gujarat State and India. The major species are described below.

Order Podicipitiformes with one Family

FAMILY PODICIPITIDAE, THE GREBES

The grebes are small to medium-sized, purely aquatic birds which feed largely on water plants, larvae of aquatic insects, freshwater shrimps and fish-fry. Much of the food is procured by diving. Grebes are adroit at swimming under-water through which they propel themselves by partially webbed feet, the webs being lobes appearing as frills to the toes. On the

surface they are small ducks with rounded hind parts. To get air-borne they patter over the water for a good distance. Grebes as a family construct a floating nest of water weeds and the resident and common Little Grebe *Podiceps ruficollis* takes the fullest advantage of the many roadside ditches and village tanks for breeding during the height of the rainy season. Two other species, both considerably larger may sporadically put in an appearance during the cold months, these are the Great Crested Grebe *P. cristatus* and the Blacknecked Grebe *P. caspicus*.

Order Pelecaniformes with two Families

FAMILY PELECANIDAE, THE PELICANS

Superficially, the two wintering species of pelicans, the Rosy or White Pelican *Pelecanus onocrotalus* and the Spotbilled Pelican *P. philippensis* are not readily identified. They are large and conspicuous water birds found in flocks, often very large, on extensive fresh water wheels and estuaries. They are either floating gracefully and high on the water or standing or sitting in groups. Their bills are conspicuously large and straight with an extensible skin pouch on the lower mandible. Their short sturdy legs are fully webbed. Pelicans are masters of soaring flight and fly great distances in search of suitable waters.

FAMILY PHALACROCORACIDAE, THE CORMORANTS AND SNAKE-BIRDS

The three species of cormorants, viz., the Cormorant *Phalacrocorax carbo* the Little Cormorant *P. niger* and the Shag *P. fuscicollis* are all black in colour and are found swimming low in both fresh and estuarine waters, every now and then diving to come after some seconds not infrequently with a silvery fish in the bill, or perched on some stone or driftwood above the water with wings spread out to dry in the sun. Cormorants are highly gregarious and may often be met in large flocks. They congregate during the rains to nest on trees standing in water on which the birds place bulky stick platforms to receive the eggs. *P. carbo* is the largest and often shows white on the throat and flanks. *P. niger* is the smallest and haunts even roadside ditches, while *P. fuscicollis* is the least common. The Snake-bird *Anhinga rufa* is also found in similar habitats and swims underwater after fish. Has a slender body with a long, serpentine neck ending in a dagger-like bill which spears its prey. Cormorants and Snake birds have webbed feet and the latter swim so low in the water that at times only the neck is seen all the while like a serpent looking out of the water. Their flight is laborious while taking off but once aloft for all purposes birds fly high and far and breeding birds often scatter over great expanses to bring back fish for their hungry young ones, Snake-birds, like cormorants, are resident and nest during the south-west monsoon with other colonially nesting water-birds on inundated trees.

Order Ciconiiformes with four Families

FAMILY ARDEIDAE, THE HERONS AND THEIR ALLIES

Medium to medium-large, long legged, long necked, wading birds found beside fresh water, reedbeds and marshes, and tidal mud-fringed lagoons, are the herons, egrets and bitterns. These birds are adapted to capture fish, frogs and aquatic insects-larvae by a swift jab of the sharp, dagger-like bill. In flight the legs trail behind, while the long neck is pulled back. Bitterns are protectively coloured and secretive and inhabiting reedbeds. They belong to the genus *Ixobrychus* with resident as well as migratory forms and the genus *Botaurus* with migratory forms. The Little Green Heron *Butorides striatus* is resident, and haunts tangled shrubberies and trees overhanging water. The Pond Heron *Ardeola grayii* is another highly cryptic species found perched besides pools and inundated paddy fields. It is generally noticed when flushed and takes to flight revealing white wings. The tall and leggy Grey Heron *Ardea cinerea*, the slightly smaller Purple Heron *A. purpurea* and the Large Egret *Egretta alba*, all wade out into water and stalk fish and frogs alike the slightly Smaller Egret *E. intermedia* and the still smaller and elegant Little Egret *E. garzetta*. The Reef Heron *E. gularis* is easily confused with the last species though its slaty grey form is quite distinctive. Reef Herons are not likely to be seen far inland and inhabit tidal verges and estuarian waters. The gregarious and common Cattle Egret *Bubulcus ibis* is an insect eater and found following grazing cattle or the plough. Egrets and Herons are colonial nesters, building stick nests in crowns of trees standing in water. The herons may at times nest among tall reeds. The Night Heron *Nycticorax nycticorax* is a squat, crepuscular bird spending the hours of day light in densely foliated trees, flying out at dusk to hunt for fish and frogs.

FAMILY CICONIDAE, THE STORKS

Storks are large birds with long legs, necks and prominent bills. They all fly well, gliding and soaring to great heights on broad wings with necks stretched out in front and legs trailing behind. They feed on fish and frogs captured by wading out in fresh or saline water. The Painted Stork *Ibis leucocephalus*, the White-necked Stork *Ciconia episcopus* are both common and resident. The Open billed Stork *Anastomus oscitans*, a bird with a singular bill, and the tall, heraldic, black and white Black-necked *Xenorhynchus asiaticus* are also resident though the former is wandering a great deal and often seen in greater number than usual, while the latter is a solitary bird of large expanses of reeds and wet grass. The White Stork *Ciconia ciconia* is a white bird with black wings, red bill and legs. It is a not too common winter visitor. Resident Storks nest during the south-west monsoon, building large platforms of sticks usually colonially on trees standing in water or on tall trees often in the middle of populated areas.

FAMILY THRESKIORNITHIDAE THE IBISES AND SPOONBILLS

Ibises and spoonbills are large birds, slightly smaller than storks out with the same manner of flight in which the neck is stretched out and legs trailing behind. Ibises have downcurved bills for probing in ooze at bottom of the pools and bordering mud. The Spoonbills *Platalea leucorodia* are white with characteristic spoon-shaped bills which are swept from side to side as the birds walk rapidly through the water. Some birds which deserve mention are (1) the White Ibis *Threskiorsis melanocephala*, (2) the Black Glossy Ibis *Plegadis falcinellus* and (3) resident Black Ibis *Pseudibis papillosa*. The resident ibis and spoonbills join other colonially nesting water birds on trees standing in flooded areas during the rainy season. Black Ibis nests isolated on tall trees in populated locations.

FAMILY PHOENICOPTERIDAE, THE FLAMINGOS

Flamingos are slender, extremely graceful birds with varying degrees of rose pink tinting their white plumage. Their feet are webbed like ducks and their peculiar bills are so constructed as to act as sieves for organic matter from mud at the bottom of shallow lakes and tidal lagoons. Particularly large congregations may assemble along the estuaries of the Sabarmati and Mahi rivers during the cool months. The Lesser Flamingo *Phoeniconais minor* is partial to saline water while the larger and less pink Flamingo *Phoenicopterus roseus* may visit inland reservoirs and large jheels.

Order Anseriformes with one Family

FAMILY ANATIDAE, THE DUCKS AND THEIR ALLIES

Ducks are swimming birds of medium to medium large size with short sturdy legs and fully webbed feet and dorso-ventrally flattened bills. The Lesser Whistling Teal *Dendrocygna javanica* is a rich chestnut coloured duck with a slow flight. All the ducks of this area winter visitor arriving in considerable number on jheels, reservoirs, estuarian waters and even out in the Gulf of Cambay (Khambhat). The migratory ducks may be divided into the surface feeding ducks of the genus *Anas* of which there are several species, the commonest being the Common Teal *A. crecca*, the elegant Pintail Duck *A. acuta* and the more sluggish Shoveller *A. clypeata*; the diving ducks or pochards of the genus *Aythya* and genus *Netta* and the large shelduck represented by the Brahminy Duck *Tadorna ferruginea*. The latter spends much time cutting grass on edges of water. All species of ducks except for the Shoveller are heavily persecuted by *shikaris* and commercial netters since their flesh is much sought after. The residential species breed during the south-west monsoon. Nests may be among reeds or wet grass or in nests of egrets or crows up in trees as in the case of whistling teal or in hollows in tree trunks as in the case of the nukta.

Order Falconiformes with two Families

FAMILY ACCIPITRIDAE, THE HAWKS, EAGLES AND VULTURES

Like the rest of India, this district is visited during winter and inhabited by resident forms of a very large number of raptors as members of this family are collectively called. The Pariah Kite *Milvus migrans* is the most familiar representative of the family. Its flight over the most crowded bazars and swift dexterous swoops to pick up some food from the fingers of an unwary child, or a dead rodent in a city gutter are familiar to all. Resident kites build stick nests in tall trees and breed during the cold season. Among the other resident raptors are the attractive Brahminy Kite *Haliaeetus indus* a cinnamon coloured bird with a white head and breast. This kite is found more near water. The Bonelli's Hawk-Eagle *Nisaetus fasciatus* is a form of smaller eagle which is partial to large trees and is a swift hunter of pigeons, young peafowl, etc. Several similar eagles visit us during winter. The Shikra *Accipiter badius* is a resident member of the roundwinged bird-hawks which captures prey by surprise and dash; while the Tawny Eagle *Aquila rapax* and the fine Pallas's Fishing Eagle *Haliaeetus leucoryphus* are two large eagles which are fairly common residents, the former keeping more to drier open country and the latter near rivers and jheels. During winter several allied species of large eagles are common in all types of habitats. The Crested Hawk-Eagle *Spizetus cirrhatus*, the Crested Serpent Eagle *Spilornis cheela* and the Honey Buzzard *Pernis ptilorhynchos* are likely to be seen in well wooded country. The White-eyed Buzzard Eagle *Butastur teesa* is another common and resident bird. Several species of kite-like harriers of the genus *Circus* with low, gliding flight and buzzards of the genus *Butteo* with a high soaring flight are winter visitors. The vultures are large birds with bare heads and like the large eagles spend much of the time soaring at great heights looking out for carrion on which they entirely feed. The commonest are the tree-nesting Whitebacked Vultures *Gyps bengalensis* and the cliff-nesting Longbilled Vultures, *G. indicus*. The Griffon Vulture *G. fulvus* and the distinctive Black Vulture *Torgos calvus* with bright red head and legs are less common. The smaller, white, Scavenger Vulture *Neophron percnopterus* is familiarly seen on garbage dumps. The Osprey or Fish Hawk *Pandion haliaetus* is a water-side bird recognised by its black and white head markings. It quarters, large expanses of water for fish.

FAMILY FALCONIDAE, THE FALCONS

Whereas the large and noble-looking eagles often belie popular concept regarding their fierce dispositions, the smaller falcons are all entirely killers, swift and bold whether they stoop at breath-taking speed on duck as do the wintering Peregrine Falcon *Falco peregrinus*, or on luckless pigeons as do our resident Lanner Falcon *F. biarmicus*, or on a lark or unwary sparrow as does the lovely Redheaded Merlin *F. chicquera*. The Hobby *F. subbuteo*

is a hunter at dusk of bats and the very common Kestrel *F. tinnunculus* which characteristically hovers before dropping onto a basking lizard or large grasshopper.

Order Galliformes with one Family

FAMILY PHASIANIDAE, THE PEAFOWL, PARTRIDGE AND QUAIL

The familiar Peafowl *Pavo cristatus* are now largely semi-domesticated and freely nest among tangled shrubberies in the city, in hedges and on haystacks. The Grey Partridge *Francolinus pondicerianus* is a bird of headgerows and tangled shrubberies while the Painted Partridge *F. pictus* inhabits grasslands and standing crops. The Common Quail *Coturnix coturnix* is a winter bird seen among grass while the Jungle Bush Quail *Perdica asiatica* is a bird found in tangled bushes. The Rain Quail *C. coromandelica* breeds during the rains when their repetitious calls are heard everywhere in fields and grasslands. Quails and partridges are plump, round bodied birds which spend their time on the ground feeding on seeds, shoots, insects, grubs, etc. They all lay large unmarked white eggs. The young ones are active and run and feed themselves within hours of hatching. Peafowls and partridges roost at night on branches of trees while quails sleep on the ground.

Order Gruiformes with four Families

FAMILY TURNICIDAE, THE BUSTARD QUAILS

The bustard quails are small, cursorial birds superficially resembling quails in all respects. Their small forms and skulking habit all make them difficult to watch. The care of the eggs and chicks is left to the domesticated cock. The hen is polyandrous. She claims her territory by a loud droning noise.

FAMILY GRUIDAE, THE CRANES

The familiar Sarus Crane *Grus antigone* is a typical representative of this family. Cranes are all large birds, superficially resembling storks but with more gracefully proportioned forms and short dagger-like bills. Though the resident Sarus is less gregarious and lives in pairs, the wintry Common Crane *G. grus* and Demoiselle Crane *Antropoides virgo* are both highly gregarious, the flocks numbering in thousands when they assemble to rest beside some large reservoir or on tidal mud flats. In Kheda both the wintry species are less seen than farther north though the Sarus is a very common bird breeding unmolested among reeds of rail or roadside ditches and wet pastures during the height of the south-west monsoon. The nest, like the nests of all cranes, is a huge mound of grass and reeds. Usually one egg and

occasionally two are laid. Parents are devoted to each other and love their offsprings.

FAMILY RALLIDAE, THE COOTS, RAILS AND OTHER ALLIED BIRDS

Coots, rails and other allied birds are medium to medium-small with skulking habits, and greatly partial to reedbeds, wet grass and shrubs near water. Some species are migratory. All residential forms are greatly increased in number during winter. The well-watered tracts of this district attract a large number of these birds. Many more species than those listed here are likely to be recorded in future. The Whitebreasted Waterhen *Amuroni phoenicurus* is the commonest and strictly speaking a resident bird so also is the case with the smaller and less plentiful Brown Crake *A. akool*. The Moorhen *Gallinula chloropus* is resident on more open waters. Coots feed by diving on aquatic plants, often in fairly deep water. The Purple Moorhen *Porphyrio poliocephalus* is as big as a domestic hen, and is recognised easily on account of its shining purplish blue plumage, red legs and red bill. It spends much of its time in climbing on tall reeds. Of the same size, though dark, slaty grey in general appearance is the Water Cock *Gallicrex cinerea* a resident and local species. Many smaller species, very difficult to detect are found among waterside vegetation. They need great patience and expertise for recognition in the field.

FAMILY OTIDIDAE, THE BUSTARDS

These are large cursorial birds not much found in Kheda district though there are great possibilities of the Lesser Floriken *Sypheotides indica* being not uncommon and regular monsoon breeding visitor among drier grasslands and fields. The Houbara *Chlamydotis undulata* is a rare winter visitor to the saline bays bordering the Gulf of Cambay (Khamghat).

Order Charadriiformes with nine Families

This is a very large Order with a polyglot composition. All members, however, nest on the ground laying marked eggs in a variety of locations though close to water as a rule. They can all run well and are equally adept on the wing. Most of the species are highly gregarious even while nesting. Several of the families have one or two species as for example the haematopodidae represented by the black and white Oystercatcher *Haematopus ostragalus* a winter visitor to the Gulf of Cambay (Khamghat) sea coast, the Dromadidae represented by the highly gregarious Grab Plover *Dromas ardeola* another winter visitor to the sea coasts, the Rostratulidae has the singular Painted Snipe *Rostratula benghalensis* a snipe-like bird of skulking crepuscular habits found in pairs of small loose flocks in freshwater marshes. The polandrous females, as in the button quails is larger, more brightly coloured, aggressive and courts the male which cares for the eggs and chicks. The Jacanidae

has two freshwater species both with very extenuated toes for walking on floating vegetation. The Pheasant-tailed Jacana *Hydrophasianus chirurgus* is a very common bird of the area notable during late summer and the rains by its long sickle-shaped tail, chocolate-brown body and golden yellow nape and hindneck separated by a black band from the contrasting white face. Jacanas build nests of floating weeds. The Bronze-winged Jacana *Metopidius indicus* is a dark bird much rarer in our area, but with similar habits. The Recurvirostridae is represented by the very common waterside bird. The Stone Curlew *Burhinus oedipnemos* is a bird of open fields, rough pastureland and is commonly heard calling at dusk. The closely related, though larger, Great Stone Curlew *Esacus magnirostris* is partial to crops beside reservoirs, large rivers and the sea. Both these birds belong to the family Burhinidae. The Glareolidae contains the pratincoles, birds with long, pointed wings and swallow-like forked tails and the ground-living coursers with long legs for running. The former have evolved swift, sustained flight for capturing aerial insects while the latter feed on ground insects. The pratincoles are found beside large rivers and reservoirs as well as the coastal flats whereas the coursers are partial to fallow lands, stony pastures and saline flats. The Small Indian Pratincole *Glareola lactea* nests in colonies on sandy banks of large rivers in summer while the larger and darker Collared Pratincole *Glareola pratincola* also nests beside small wheels of the sea coast on hard mud. The Indian Courser *Cursorius coromandelicus* is a resident while the Cream coloured Courser *C. cursor* is a winter visitor mainly to the drier and more open areas in the western parts of the district.

FAMILY CHARADRIDAE, THE PLOVERS AND OTHER WADERS

This family is very prolific in species and it consists of number of varieties. Mostly, these birds are found beside water running about over the wet mud, probing in marshy vegetation, or wading into the shallows either to reach the wet mud below or to pick up insects, etc. on the water's surface. Many of them are highly gregarious and form the immense flocks of birds. One sees, them flying over the saline flats exposed by receding tides along the estuaries of the Mahi and the Sabarmati rivers. Most of them are winter visitors. Space prohibits mention of individual species though the Redwattled Lapwing *Vanellus indicus* or the "Did-you-do-it" a common resident plover found in pairs everywhere and the smaller Little Ringed Plover *Charadrius dubius* another common, resident waterside bird merit mention. The various species of Sandpipers *Tringa* sp., the diminutive Stints *Calidris* sp., the large, birds with ibis-like bills, the Curlew *Numenius arquata* and the smaller Whimbrel *N. Phaeopus*, the quarrelsome and long billed Blacktailed Godwit, *Limosa limosa* and the large flocks of Ruff and Reeve *Philomachus pugnax* all provide interesting bird watching near water both fresh and estuarine, while wet grass near any roadside ditch may shelter one or more, evasive and cryptically coloured Fantail Snipe *Capella gallinago* or the smaller Jack Snipe

C. minima, both with long, straight bills used for probing into wet mud. Snipes are cold season visitors from northern climes.

FAMILY LARIDAE, THE GULLS AND TERNS

Both over fresh or saline water grey or silvery birds, may be noted gracefully flying around. These would most assuredly be either gulls of the genus *Larus* all winter visitors, often in large numbers or terns of the Genus *Sterna*. Of these the Indian River Tern *Sterna aurantia*, the Blackbellied Tern *S. acuticauda* and the Little Tern *S. albigrons* are resident and breed in mixed colonies on sandbars of large rivers or beside reservoirs. The Whiskered Tern *Chlidonias hybrida* a very common bird has yet to be confirmed as a breeding bird in our area. It nests on floating marshy vegetation unlike all other members of the family. Both gulls and terns have webbed feet, a feature quite distinct from the other families of this Order. A most singular bird possibly nesting among other terns on sandbars of the Mahi is the Indian Skimmer *Rynchops albigollis* which flies over the water with its longer lower mandible cutting its surface to snap up small fish, insect larvae as and when encountered.

Order Columbiformes with two Families

FAMILY PTEROCLIDIDAE, THE SANDGROUSE

Sandgrouse are plump, short-legged ground birds found in pairs flocks of varying sizes. The sexes are differently coloured though both are highly camouflaged on open ground. They fly considerable distance every morning for drinking water. Essentially this family is one inhabiting open, desert and semi-desert areas. The Painted Sandgrouse *Pterocles indicus* is a bird of broken, lightly wooded country and is likely to be found among the eroded gullies along the rivers while the Indian Sandgrouse *P. exustus* inhabits open pastures and fallow lands.

FAMILY COLUMBIDAE, THE PIGEONS AND DOVES

This family is typified by the Blue Rock Pigeon *Columba livia* the common pigeon which enters houses, and inhabits all buildings, or well shafts. Equally familiar is the Indian Ring Dove *Streptopelia decaocto* and the smaller Little Brown Dove *S. senegalensis*. Both these doves are common around houses and freely enter them to nest. Less associated with man though quite familiar in farmland particularly around acacia groves is the Red Turtle Dove *S. tranquebarica* the male of which has a brick-red back and wings. The Spotted Dove *S. chinensis* resembles the Little Brown Dove but has a chequered pattern of black and white on the sides of the neck. It is a bird of better watered areas. The large avenue trees of banyan, etc. are

favoured haunts of the Green Pigeon *Treron phoenicoptera* which lives in small flocks and subsists entirely on berries, figs and buds and is completely arboreal whereas others are largely ground feeders. Doves and pigeons build flimsy nests of twigs on ledges, in crevices of cliffs and walls or in a fork of a branch and lay two white unmarked eggs. The young ones are fed by half digested food. Both sexes care for the eggs and chicks.

Order Psittaciformes with one Family

FAMILY PSITTACIDAE, THE PARAKEETS

The Rose-ringed Parakeet *Psittacula krameri* is a common and very familiar bird freely associating with man and profiting by his agriculture and horticulture. The larger though very similarly coloured Large Indian Parakeet *P. eupatria* is less common though noisy flocks may be seen among old avenue trees. Similar is the case with the smaller and beautiful Blossom-headed Parakeet *P. cyanocephala*. They freely collect in flocks and at dusk a large number of them converge out into large groves to rest for the entire night.

Order Cuculiformes with one Family

FAMILY CUCULIDAE, THE CUCKOOS

The Koel *Eudynamys scolopacea* is a common representative of this family most of whose members specialise in laying eggs in other birds nests. The Koel parasitises on crows, the Pied Crested Cuckoos *Clamator jacobinus*, which arrive during the S. W. monsoon for breeding from East Africa parasitises on babblers and the resident Common Hawk-Cuckoos *Cuculus varius* winter visitor. The ground-loving Coucal *Centropus sinensis* with chestnut wings contrasting with its black body, the skulking Sirkeer Cuckoo *Taccocua leschenaultii* of tall grass and tangled ravine jungle and similar though rather rare small Green billed Malkoha *Rhyodyte viridirostris* build their own nests and care for their young ones. Cuckoos largely subsist on insects and the Coucal feeds on nestlings, small reptiles, etc.

Order Strigiformes with one Family

FAMILY STRIGIDAE, THE OWLS

The nocturnal birds of prey are as follows, viz., the Great Horned Owl *Bubo bubo*, the Dusky Horned Owl *B. coromandus*, the Brown Fish Owl *B. zeylonensis*, the Collared Scops Owl *O. bakkamoena*, the Spotted Owl *Athene brama*, the Mottled Wood Owl *Strix ocellata*, and the Shorteared Owl *Asio flammeus*.

Order Caprimulgiformes with one Family

FAMILY CAPRIMULGIDAE, THE NIGHTJARS

Following nightjars are found in the district, viz., the Common Indian Nightjar *Caprimulgus asiaticus*, the European Nightjar *C. europus*, the Franklin's Nightjar *C. affinis* and the Indian Nightjar *C. indicus*.

Order Apodiformes with one Family

FAMILY APODIDAE, THE SWIFTS

A very specialised family of small birds with long bow-shaped wings are swifts. These birds spend their entire time hawking aerial insect prey. Their feet are totally unsuitable for walking and birds cling to vertical walls nesting under caves of cliffs. The House Swift *Apus affinis* is common bird found around large buildings, fort gates, etc. The larger white bellied Alpine Swift *Apus melba* passes over on feeding forays while the brown, slender, fork tailed Palm Swift *Cypsiurus parvus* is found around toddy palms attaching its nest on the under surface of the fronds. The Crested Swift *Hemiprocne longipennis* is essentially a forest bird but might occur among the larger avenue trees while the Swift *Apus apus* and the Large White-rumped Swift *A. pacificus* are cold season vagrants of about the size of Alpine Swifts.

Order Coraciiformes with five Families

FAMILY ALCEDINIDAE, THE KINGFISHERS

A fish eating family with dumpy bodies, short legs unsuitable for walking and long, straight bills, the kingfishers are birds of waterside places. The Lesser Pied Kingfisher *Ceryle rudis* is a white bird with black barrings on its upperparts and a black beak. It inhabits clear running rivers, lakes and marshy-areas over which it hovers, often quite high up before plunging into the water to capture a fish. The Storkbilled Kingfisher *Pelargopsis capensis* is a brown bird with blue wings and tail and a red beak and is found perched besides freshwater pools and jheels. The slightly smaller Whitebreasted Kingfisher *Halcyon smyrnensis* has chocolate brown head and body, bright blue wings, tail and a deep red bill. The wings reveal large white spots in flight. This species is often found away from water. The sparrow-sized Common Kingfisher is a veritable gem shining shades of blue above and chestnut below, and inhabits freshwater edges as well as tidal pools.

FAMILY MEROPIDAE, THE BEE-EATERS

Bee-eaters are green birds with long, slightly downcurved bills which capture insect prey by making aerial sallie from vantage points, often from

telegraph and electrical wires. They all have thrilling calls and are seen in loose flocks. The Green Bee-eater *Merops orientalis* is the most familiar bird of gardens, and farmland. The large Bluetailed Bee-eater *M. philippinus* is locally found nesting in our area (Kheda district) while the very similar Bluecheeked Bee-eater *M. superciliosus* is a winter visitor.

FAMILIES CORACIDAE, THE ROLLERS, UPUPIDAE, THE HOOPES AND BUCEROTIDAE, THE HORNBILLS

These three families are each represented with us by one resident species, viz., the Indian Roller *Coracias benghalensis*, the Hoopoe *Upupa epops* and the Common Grey Hornbill *Tokus birostris*.

Order Piciformes with two Families

Barbets of the family CAPITONIDAE are dumpy tropical birds with stout bills. They are inhabitants of large trees and have direct flight with a whirring of their comparatively short wings. The two species of our area are the Green Barbet *Megalaima zeylanica* and the smaller Crimsonbreasted Barbet *M. haenacephala* with crimson and yellow colour on the face.

The PICIDAE or the woodpeckers are specially adapted for life on tree trunks to which they cling. They have a chisel-shaped bill with which they hammer into heart wood not only for prey but also to carve out a long narrow hole down which the nest-chamber is located. The Lesser Goldenbacked Woodpecker *Dinopium benghalense* is quite frequent along large avenue trees, the very much smaller Yellow-fronted Pied Woodpecker *Dendrocopos maharattensis* is common on large trees as well as in smaller tangled scrub growth along the ravines and babool groves. The very similar though still smaller Pigmy Woodpecker *D. nanus* is possibly more plentiful in the district. In winter the Wryneck *Jynx torquilla* is a fairly common bird in all types of tree growth.

Order Passeriformes

Order Passeriformes is a large Order with twenty three families listed for the district. It includes what are known as the perching or song birds. In size the largest are the crows while the smallest is as big as a man's thumb. All Passers are terrestrial birds though many may be found beside water and on land.

FAMILIES PITTIDAE AND ALAUDIDAE

The Indian *Pitta brachyura* is the sole representative of the first family. It is a dumpy bird with a very short, almost non-visible tail, found in shady spots hopping about and rummaging among the rotten leaves.

The following Larks are found in the district viz. The Singing Bush Lark *Mirafra javanica*, the Redwinged Bush Lark *M. erythroptera*, the Crested Lark *Galerida cristata*, the Skye's Crested Lark *G. deva*, the Eastern Skylark *Auda gulgula*, the Malabar Crested Lark *G. malabarica*, the Sand Lark *Calandrella rayal*, the Short-toed Lark *C. cinerea*, Eastern Calandra Lark *Melanocorypha bimaculata*, Ashycrowned Finch Lark *Eremopterix grisea*, and Rufous-tailed Finch Lark *Ammomanes phoenicurus*.

FAMILY HIRUNDINIDAE, THE SWALLOWS

These small birds tirelessly fly low over irrigated crops, wet grass or around large buildings after insects too small to be seen by the human eye. The elegant Wire-tailed Swallow *Hirundo smithii* favours culverts over water, and is recognised by its brilliant blue upperparts, pure white lower parts, a bright chestnut coloured crown, and a short square tail with two wires projecting from the outer tail feathers. The Cliff Swallow *H. fluvicola*, less bright blue above and sullied white below is a communal nester constructing retort shaped nests closely together under bridges, or ledges of masonry work overhanging water. A particularly large colony occupies the Vatrak bridge near Kheda. It is inhabited by thousands of these swallows. The larger Striated Swallow *H. daurica* has a deeply forked tail and a reddish rump. It favours old ruins for nesting. The Swallow *H. rustica* lacking the reddish rump, but also having a forked tail is a very common winter visitor. The Dusky Crag Martin *H. concolor* a small dark, smoky brown swallow is found around large buildings in pairs and the very similar, though slightly larger and much lighter in colour, Crag Martin *H. rupestris* is a winter visitor to similar locations in small numbers. Along all the large rivers flocks of these light brown swallows with white underparts can be seen flying with other swallows.

FAMILY LANIDAE, THE SHRIKES

The Grey Shrike *Lanius excubitor* is a common resident particularly of the more drier and open areas and is a typical member of the family conspicuous by its white and silvery-grey body with black wings and tail and a broad black band a characteristic of all shrikes-through the eye. The Rufousbacked Shrike *L. schach* has a rufous wash on the back and rump as well as on the flanks, and is partial to tall grass, and hedgerows. The much smaller Baybacked Shrike *L. vittatus* is the prettiest of the shrikes and apart from its small size is recognised by white patches or "mirrors" in the wings conspicuous in light. It is mainly a non-breeding visitor and may be found in fields along avenues and hedges. A few pairs might be found breeding. The Redbacked Shrike *L. collurio*, very similar to *L. vittatus* except for the wing mirrors, is a fairly common autumn passage migrant, while the very non descript, small Brown Shrike *L. cristatus* is a winter visitor along hedges, and in open pastures.

FAMILIES ORIOLIDAE, THE ORIOLES AND DICRURIDAE, THE DRONGOS

The Goldne Oriole *Oriolus oriolus* is possibly the only species of Oriolidae in this area. The male is a bright yellow with black wings and tail and a black line from the red bill through the eyes. During summer the male has a lovely liquid call. The female is olive-green above and streaked, yellowish white below.

The following Drongos are found in the district, viz., the Black Drongo *Dicrurus adsimilis*, the Whitebellied Drongo *D. caeruleus*, and the Grey Drongo *D. leucophaeus*.

FAMILIES STURNIDAE, THE STARLINGS AND CORVIDAE, THE CROWS

Both these families have one very common representative each, the former the Common Myna *Acridotheres tristis*, and the latter the House Crow *Corvus splendens*. In addition, we have the Bank Myna *A. ginginianus* slightly smaller than the common species and bluish grey plumage and the white wing patches sullied and the bare skin round eyes and the legs orange-red instead of yellow. The cinnamon coloured Brahminy Myna *Sturnus pagodarum* has a black crest and is found in pairs feeding on the ground under roadside trees. The Greyheaded Myna *S. malabarica* lives in small flocks and is less common. It is more arboreal. The Rosy Pastor *S. roseus* is a pale, rose pink with chocolate-black head, wings and tail. The head has a full crest. Pastors are winter visitors arriving in large flocks which are common everywhere, visiting large trees in the heart of cities. Mynas and pastors assemble in immense flocks to roost in favoured groves of large trees.

FAMILIES CAMPEPHAGIDAE, THE MINIVETS, IRENIDAE, THE FAIRY BIRDS AND PYCNONOTIDAE, THE BULBULS

The first of these three families contains the Large Cuckoo-Shrike *Coracina novaehollandiae* a grey, pigeon-sized bird found in large trees, singly or in pairs, the much smaller and gregarious Blackheaded Cuckoo-Shrike *C. melanoptera*, a darker grey bird in which the male has a black head, also a bird of large groves and scrub jungle, and the small, non-descript Common Wood Shrike *Tephrodornis pondicerianus*. They are seen in trees of fields and in drier scrub jungle. The flocks of Small Minivets *Pericrocotus cinnamomeus* are a joy to watch as they flit about among trees. The second family contains the Common Iora *Aegithinia tiphia* the male of which during the hot season has bright yellow lower parts and black crown, back, wings and tail. The Goldmantled Leaf Bird *Chloropsis cochinchinensis* is bright green with black on the throat and blue on the rump. The last family contains the bulbuls of which Redvented Bulbul *Pycnonotus cafer* is a common and familiar bird in all types of country.

The White cheeked Bulbul *P. leucogenys* with white patches to the sides of its black head and sulphur-yellow vent patch is common among *Salvadora* trees of the saline estuarine areas. The Whitebrowed Bulbul *P. lutelous* is a bird of dense vegetation growing among the eroded ravines of the Mahi and is located by its loud, clear calls.

FAMILY MUSCICAPIDAE

This is a very large Family which is subdivided into four subfamilies, the Babblers, the Flycatchers, the Warblers and the Chats and Thrushes.

The following Babblers are noticed in the district, viz., the Jungle Babbler *Turdoides striatus*, the Large Grey Babbler *T. malcomi*, the Common Babbler *T. caudatus*, the Yellowed Babbler *Chrysomma sinensis* and the Rufousbellied Babbler *Dumetia hyperythra*.

The subfamily MUSCICAPINAE contains the flycatchers, small, wide awake birds with quick motion, which sit on a branch in an erect posture, flying every now and then to capture minute winged insects.

The following Flycatchers are found in the district viz. The Paradise Flycatcher *Terpsiphone paradisi*, the Whitebrowed Fantail Flycatcher *Rhipidura aureola*, the Whitespotted Fantail Flycatcher *R. albogularis*, the Blacknaped Flycatcher *Monarcha azurea*, the Verditer Flycatcher *Muscicapa thalassina*, the Tickell's Blue Flycatcher *M. tickelliae*, the Greyheaded Flycatcher *Culicicapa ceylonensis*, and the Redbreasted Flycatcher *M. parva*.

The subfamily SYLVINAE contains a variety of very confusing little brown birds which only experience can help identify. The most well-known member of this subfamily is the Tailor Bird *Orthotomus sutorius*. The subfamily TURDINAE contains 'Chats, Robins, and Thrushes'. The Indian Robin *Saxicoloides fulicata* and the Dhayal Thrush *Copsychus saularis* are common residents. The Blackbird *Turdus merula* is a local migrant. It may be joined at times by the Orangeheaded Ground Thrush *Zoothera citrina*. The Blue Rock Thrush *Monticola solitarius* and Blueheaded Rock Thrush *M. cinchlorhynchus* may be found in winter.

The Stone Chat *Saxicola torquata* and the Pied Bush Chat *S. caprata* are very common. The Bluethroat *Erithacus svecicus* is a very common winter visitant.

FAMILIES PARIDAE AND SITTIDAE

The Grey Tit *Parus major* is a small grey bird with a black head and a black stripe down the white breast and abdomen with white ear

patches found in pairs or family parties hunting assiduously among leaves and flower sprays. The Spotted Grey Creeper *Salpornis spilonatus* is a mouselike bird clinging to and climbing up tree trunks and around large boughs. The Tit is a member of the first family and the creeper of the second. Both birds nest in natural cavities in tree trunks.

FAMILY MOTACILLIDAE, THE WAGTAILS AND PIPITS

Wagtails are elegant birds found actively running about near fresh water or in wet irrigated fields. They actively feed on minute insects. Their flight is in long undulations.

Following Wagtails and Pipits are found in the district, viz., the Large Pied Wagtail *Motacilla maderaspatensis*, the White Wagtail *M. alba*, the Yellowheaded Wagtail *M. citreola*, the Yellow Wagtail *M. flava* and the Grey Wagtail *M. caspica*.

The Paddyfield Pipit *Anthus novaseelandiae*, the Tree Pipit *A. trivialis*, and the Brown rock Pipit *A. similis* are also found in the district.

FAMILIES DICAEDIDAE, THE FLOWERPECKERS. NECTARIDAE, THE SUNBIRDS AND ZOSTEROPIDAE, THE WHITE-EYES

The first family is represented by two very minute, non-descript birds the Thickbilled Flowerpecker *Dicaeum agile* and the Tickell's Flowerpecker *D. erythrorhynchus* both largely overlooked on account of their diminutive size and preference to large trees. The Purple Sunbird *Nectarinia asiatica* is an active bird found in all types of countries feeding on flowering shrubs and trees and freely entering gardens. The male in breeding plumage, during the middle of winter and the hot season, is a glistening purplish black. Flowerpeckers and sunbirds construct pendant, purse-shaped nests of fibres and is plastered on the outside by bark, cobwebs, etc. The entrance is on one side. The diminutive and sociable White-eye *Zosterops palpebrosa* is an attractive bird, yellow-green above with yellow on the breast and vent and with a prominent white eye-ring. It is found in fairly large flocks in the canopy of large trees though also frequently descends into lower shrubs and freely enters gardens.

FAMILY PLOCEIDAE, FRINGILLIDAE AND EMBERIZIDAE

These three families are closely related and birds have characteristically thick, conical bills for crushing hard seeds. The first family is represented in this area by the House Sparrow *Passer domesticus* and paler Yellow-throated Sparrow *Petronia xanthocollis* in which the male has a sulphur-yellow patch on the throat. The Baya *P. philippinus* is the most familiar on account of its pendant bottle-shaped nests of woven grass blades and inhabits cultivation and grasslands. The Blackthroated Weaver Bird

P. benghalensis attaches its nest to tall reeds. The males of both weavers develop varying degrees of yellow on the head and breast during the height of the rains when they breed. The Common Silverbill *Lonchura malabarica* is a diminutive relative of the sparrow with a very conical bill, brown upperparts and white lowerparts and is found in small, confiding parties gleaning grass seeds on the ground. The Red Munia *Estrilda amandava* is a close relative in which the male dons a deep crimson breeding plumage. Red Munias are partial to tall reedbeds and wet grass. The Spotted Munia *Lonchura punctulata* is a dark cinnamon-brown above with black scalings on the lower parts. The second family is represented by the migratory Common Rosefinch *Carpodacus erythrinus* in which the male is in a dull rose pink colour while the female is dark brown. The last family provides us with several species of finches of the genus *Emberiza* of which the most plentiful are the Blackheaded Bunting *E. melanocephala* and the Redheaded Bunting *E. bruniceps* both of which have bright yellow lowerparts and are found in fairly large flocks during winter in standing crops. The other finches are sparrowlike and difficult to indentify. Mention must be made of the Crested Bunting *Melophus lathami* a distinctive bird with an upright crest and the male coloured black with chestnut wings. This is a resident species with very local distribution in grassy ravines along the Mahi. Its exact status needs confirmation.

SNAKES¹

About the snakes the former *Gazetteer* of Kheda states, "The two chief poisonous snakes are the cobra, *Naja tripudians* and the Phusra, *Echis Carinata*."² Recently in an article entitled "Snakes in Anand Area, Shri H. K. Patel and Shri R. C. Patel have pointed out that poisonous snakes are more than the non-poisonous ones. The population of poisonous snakes is to the extent of 53.5 per cent as compared to 46.5 per cent of the non-poisonous snakes. Amongst the poisonous snakes, Cobras alone constitute 42 per cent of the snake population and top the list. Next in order of abundance are Kraits and Vipers which constitute 6.1 per cent and 5.3 per cent respectively. Dhamans, the friends of farmers, top the list amongst the snake population as a whole and constitute 44.7 per cent of the total snake population. Earth snakes, quite harmless, constitute only 1.8 per cent of the total.

A comprehensive list of the snakes and their characteristics has been prepared by Prof. M. S. Dubale. A brief account of the recorded snakes of the district is given below.

1. DUBALE M. S. (PROF.), Head of the Department of Zoology, Gujarat University, Ahmadabad.
2. CAMPBELL J. M., *The Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panch Mahals*, Bombay, (1879), p. 20.
3. PATEL H. K. AND PATEL R. C., *Snakes in Anand Area-An Article in the B. A. Agricultural Magazine*, Vol. IX., No. 2., (1956).

(1) NON-POISONOUS SNAKES

The Rat Snake (Ptyas mucosus)

The common name of this snake is "Dhaman". Its length is considerably great. The snake is dusty brown to yellow in colour. It eats frogs, rats, small mammals, birds, etc. The tail gives support in tying the animal. It is mostly found in godowns. The snake secretes a secretion from anal gland and emits foul odour when disturbed. On some occasion it gives a kite like noise. It is an oviparous and non-poisonous snake.

The Wolf Snake (Oligodon venustus)

This snake possesses brownish grey colour having blackish spots on the body. Eyes are moderate in size and well developed teeth are present. The snake feeds on small rodents, birds, lizards and even insects. The snake is generally found in the gardens. It is a harmless and oviparous snake.

The Checkered Keel back (Natrix piscator)

The colour of the snake is olive green having alternate black and white spots giving the impression of a chessboard. Scales are in 19 rows, keeled ventrals rounded and sub-caudals paired. It is a very common snake found near water, which it visits for frogs and fish. It bites very viciously. The snake is non-poisonous and oviparous.

Buff-striped Keel back (Natrix stolata)

This harmless snake is olive green in colour, with irregular bands on the dorsal side and two buff coloured longitudinal strips running all along the body. It is very docile and can be handled with ease. It hibernates during winter. Its food consists of insects.

Green Keel back (Macropisthodon plumbicolour)

This green snake looks like Pit Viper and is generally found in the hilly regions among the green vegetation. It eats amphibians and also small birds. It is very gentle in nature but when badly provoked it expands the neck and even the body, like a Cobra, and raises its head with the neck and tries to strike in desperation. It is oviparous and non-poisonous.

The Indian Tree Snake (Chrysopelea ornata)

The common name of this snake is the flying snake. It has pale green colour with black strips on the body. Ventrals are greenish. However,

laterals are slightly keeled and with a black spot. The scales on the body are smooth and caudals are paired.

It feeds on lizards, mammals and small snakes. The peculiarity about this snake is its capacity to move very fast. It can spring and move as if it is flying. On account of this it is called 'flying snake'.

II POISONOUS SNAKES

The Common Krait (Bungarus caeruleus)

This snake is steel-blue in colour, having white transverse strips on the body. These strips vary in snakes according to the region. Generally the snake lives in the bricks or cracks in walls and is nocturnal in habit. It is a poisonous snake. The venom is neurotoxic. The patient feels sleepy within 24 hours and does not survive if the antivenom dose is not given in time.

Cobra (Naja naja)

The common name of this snake is "Nag". The head of the snake is not distinct from the neck. It can be identified as it has smooth scales which are 25 to 27 on the neck. Poisonous fangs are followed by 1-3 teeth. Some head scales make an identifiable mark for the snake.

It is normally seen in the early mornings and in the evenings. This snake lives in the crevices of the house walls. It is generally worshipped also. On Nagpanchami day, it is taken from house to house and offered milk.

Russell's Viper (Vipera russelli)

It is a brown, poisonous and long snake. The head is triangular and the head scales are very small, umbricate and keeled. In fact all dorsal scales are keeled except in the outer rows. This snake is found in rocky and bushy regions where the colouration of the skin is in keeping with the surroundings. It remains coiled when at rest. The chief food of this snake comprises small mammals like rats and mice. Sometimes lizards and birds are also eaten. It is oviparous and poisonous even in its young age. It hurls itself at the victim and the big fangs which are 10 mm. length are pressed into wound.

FISH

In the former *Gazetteer of Bombay Presidency* detailed information about fish is given. It is stated, "the rivers of the district, the Mahi, the

Vatrak, the Shedhi, the Meshvo, and the Mohar, are well-stocked with fish. The Gazetteer gives a list of twenty-two fish found in fresh water, and nine in the river Mahi within tidal limits.

- | | |
|-----------------------------|---|
| (1) The Kudnara, | (13) The Zingo, Sondia Roi, Alu or Kolimbu, |
| (2) The Debra and Darai, | (14) The Ghalu or Moru, |
| (3) The Marel or Dorch, | (15) The Bhagna, or Kasoda, |
| (4) The Padia, | (16) The Marki, |
| (5) The Nagra, | (17) The Raya, |
| (6) The Rau, | (18) The Gohari |
| (7) The Baus or Bavus, | (19) The Chal, |
| (8) The Boi, | (20) The Zarva, |
| (9) The Singkro or Katio, | (21) The Moela or Bhat, |
| (10) The Sarmai, | (22) The Chingi, Shingi or Kadva. |
| (11) The Belja or Katrothi, | |
| (12) The Bano or eel, | |

Salt water fish are found only in Mahi river below the tidal limit. Cold water fish are as follows :

(1) The Fausta, (2) The Zinga, (3) The Zinga Chola, (4) The Bamvlo, (5) The Biu and (6) The Kantia. Some rainy season fish have also been mentioned by the Gazetteer. They are (1) The Palva, (2) The Dodi and (3) Magra.

The persons eating fish in the district are Muslims, Kolis and three professional fishing tribes, viz., Bhois, Machhis and Kharvas.

The district at present mostly covers inland fisheries except at centres, viz., Cambay (Khmbhat) and Dehwan where fishing is carried on in the creek with obsolete implements. Fresh water fishery resources though they are rich have not been developed in the district due to religious sentiments. Irrigation tanks, where some fishing activity is carried on are under Public Works Department and Panchayats.

Fishing Centres : Following are the fishing centres in the Kheda district :

Fishing village	Taluka
(1) Mahalej	Matar
(2) Mahemadabad	Mahemadabad
(3) Kheda	Mahemadabad

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panch Mahals*, Bombay, (1879), pp. 20 to 24.

<i>Fishing village</i>	<i>Taluka</i>
(4) Nadiad	Nadiad
(5) Badalpur	Borsad
(6) Dehwan	Borsad
(7) Khambhat	Khambhat
(8) Pandar	(---do---)
(9) Golana	(do)

The fishermen's population of the district is estimated in the neighbourhood of 1,578 persons.

The following varieties of fish are available in the district at present.

Sl. No. 1	Scientific name 2	English name 3	Local name 4
1	<i>Catla Catla</i>	Catla	<i>Bawas, Catla</i>
2	<i>Labeo rohita</i>	Rohu	<i>Rohu</i>
3	<i>Cirrhina mrigala</i>	Mrigal	<i>Nagari</i>
4	<i>Mugil dussumieri</i>	Mullet	<i>Chhodi</i>
5	<i>Harporon nehereus</i>	Bombay Duck	<i>Bamla</i>
6	<i>Penaeus indicus</i>	Prawn	<i>Jinga</i>

The total production of fisheries in the district was 1,54,098 kgs. in the year 1971-72.

CLIMATE

The climate of this district is characterised by a hot summer and general dryness except in the south-west monsoon season. The year may be divided into four seasons. The cold season from December to February is followed by the hot season from March to May. The period from June to September is the south-west monsoon season. October and November constitute the post-monsoon or retreating monsoon season.

Rainfall

Records of rainfall in the district are available for 18 stations for periods ranging from 29 to 83 years. The details of the rainfall at these

1. The Deputy Director General of Observatories (Climatology and Geophysics), Poona.

stations and for the district as a whole are given in Statements I-2 and I-3. The average annual rainfall in the district is 815.1 mm (32.09"). The rainfall in the district in general decreases from the south-east towards the north-west and varies from 946.0 mm. (37.24") at Bhadran to 692.1 mm. (27.24") at Khambhat. About 96 per cent of the annual rainfall in the district is received during the south west monsoon months June to September. July being the rainiest month. 90 per cent to 95 per cent of the annual rainfall in the district occurs in the monsoon season, and most of it is generally associated with movement west or north-westwards towards Gujarat of the depression from the north Bay of Bengal. The variation in the annual rainfall from year to year is large. During the 50 year period, 1901 to 1950, the highest annual rainfall amounting to 233 per cent of the normal occurred in 1927. The lowest annual rainfall which was only 25 per cent of the normal occurred in 1918. During this 50 year period the annual rainfall in the district was less than 80 per cent of the normal in 14 years, two and three consecutive years of such low rainfall occurring once each. Considering the rainfall at the individual stations, it is seen that 2 to 3 consecutive years of such low rainfall occurred more than thrice at seven out of the 18 stations. Two consecutive years of annual rainfall less than 80 per cent of the normal occurred 4 times at Bhadran, 5 times at Matar and Kheda and 6 times at Borsad during these 50 years. Even 4 consecutive years of such low rainfall occurred once at Nadiad. It will be seen from Statement I-3 that the annual rainfall in the district was between 600 and 1200 mm. (23.62" and 47.24") in 36 years out of 50.

On an average there are 37 rainy days (*i. e.* days with rainfall of 2.5 mm.—10 cents or more) in a year in the district. This number varies from 34 at Khambhat, and *Tranza Nagram* Tank to 39 at Wanghroli Tank, Bhadran and Mahamadabad.

The heaviest rainfall in 24 hours recorded at any station in the district was 540.0 mm. (21.26") at Dakor on 28th July, 1927.

Temperature

There is no meteorological observatory in the district. The description which follows is mainly based on the records of the observatories in the neighbouring districts where similar climatic conditions prevail. The period from March to May is one of continuous increase in temperatures. May is generally the hottest month, the mean daily maximum temperature being about 41° C (105.8° F.) and the mean daily minimum about 26° C (78.8° F.). The weather is intensely hot in summer and on some days the day temperatures occasionally may reach 46° C (114.8° F.) or over. With onset of monsoon in the district by about mid-June there is appreciable drop in the day temperatures but nights are as warm as during

summer nights. With the withdrawal of the monsoon from the district by about the end of September, there is a slight increase in the day temperatures and secondary maximum in day temperature is reached during October. However, the nights become progressively cooler. From November, both day and night temperatures begin to decrease rapidly. January is generally the coldest month with the mean daily maximum temperature at about 29° C (84.2° F) and the mean daily minimum at about 14° C (57.2° F). Cold waves sometimes affect the district in association with the passage of western disturbances across north India. On such occasions, the minimum temperature sometimes drops down to two or three degrees above the freezing point of water.

Humidity

During the south-west monsoon season the humidity is generally high. In the rest of the year the air is comparatively dry. The driest part of the year is the summer season when the relative humidities in the afternoons are less than 25 per cent.

Cloudiness

During the south-west monsoon the skies are generally heavily clouded or overcast. In the rest of the year the skies are mostly clear or lightly clouded.

Winds

Winds are generally light with some strengthening in force during the summer and the south-west monsoon seasons. During the south-west monsoon season winds blow mostly from the west or south-west. Towards the end of the south-west monsoon season north-westerlies appear and in the next four months winds are mostly from directions between north-west and east. In February and March winds in the mornings are from directions between north-west and north-east, while in the afternoons they are from directions between south-west and north-west. In April and May winds are mainly from directions between south-west and north-west.

Special Weather Phenomena :

In association with some of the cyclonic storms from the Arabian Sea which move towards the district or its neighbourhood during the post monsoon season and to a lesser extent in the latter part of summer, the district experiences gusty winds and widespread rain. Thunderstorms occur in the latter half of summer and in the monsoon season.

STATEMENTS

STATEMENT

Normals and Extremes

Station 1	No. of years of data 2	Jan- uary 3	Febr- uary 4	Mar- ch 5	April 6	May 7	June 8	July 9	Aug- ust 10	Sept- ember 11
Mahemadabad	50 (a) (b)	1.5 0.2	3.1 0.3	1.3 0.2	3.3 0.2	10.4 0.5	105.9 4.8	372.6 14.0	226.1 11.5	136.7 5.7
Matar	50 (a) (b)	1.0 0.1	1.5 0.2	1.5 0.2	1.8 0.1	5.6 0.4	88.1 4.1	223.6 12.8	179.3 10.1	112.0 5.3
Nadiad	50 (a) (b)	0.8 0.2	1.8 0.2	1.8 0.2	2.3 0.2	4.3 0.4	89.9 4.2	342.7 14.0	208.0 11.1	121.2 5.5
Mahudha	50 (a) (b)	1.8 0.3	2.5 0.2	1.8 0.2	2.5 0.2	7.4 0.5	95.0 4.6	328.4 13.8	209.0 10.8	122.7 5.3
Kapadvanj	50 (a) (b)	1.8 0.2	1.5 0.2	1.8 0.1	1.8 0.3	7.4 0.5	89.9 4.2	335.3 13.6	219.2 11.0	120.7 5.3
Thasra	50 (a) (b)	1.0 0.2	1.5 0.1	2.0 0.1	2.3 0.2	4.8 0.4	96.3 4.5	318.8 13.4	215.4 10.5	122.9 5.6
Dakor	50 (a) (b)	1.3 0.2	1.5 0.2	2.5 0.2	1.8 0.2	6.6 0.4	94.5 4.4	360.7 14.1	212.6 11.4	131.3 5.9
Anand	50 (a) (b)	1.5 0.1	1.8 0.2	1.8 0.1	2.5 0.2	4.8 0.3	104.4 4.8	379.5 14.3	216.9 10.8	145.0 6.1
Borsad	50 (a) (b)	1.5 0.2	1.3 0.1	2.3 0.2	2.8 0.1	4.8 0.4	112.8 4.7	362.5 13.7	216.1 11.2	155.5 6.1
Tranza Nagra Tank	19 (a) (b)	1.3 0.1	5.1 0.3	0.3 0.1	2.0 0.3	2.3 0.1	95.8 3.8	333.8 13.8	184.4 9.2	129.0 5.3
Pinglaj	19 (a) (b)	2.8 0.3	2.0 0.3	1.0 0.2	3.3 0.1	4.8 0.2	82.5 4.3	335.8 13.7	181.4 9.3	125.7 5.2
Savali Tank	19 (a) (b)	2.3 0.4	2.3 0.3	1.5 0.2	3.6 0.3	3.6 0.3	84.6 3.8	328.9 13.9	201.2 10.7	146.3 5.2
Sayet Tank	19 (a) (b)	1.8 0.3	1.3 0.2	2.8 0.2	4.6 0.4	4.6 0.4	92.2 4.2	335.8 14.9	188.7 10.1	152.7 5.4
Wanghroli Tank	19 (a) (b)	1.8 0.3	2.5 0.3	3.3 0.2	3.8 0.2	7.1 0.5	104.7 4.5	363.7 14.9	222.0 10.6	166.6 6.1
Vadasinor	50 (a) (b)	1.5 0.2	1.8 0.2	1.8 0.2	3.3 0.2	6.6 0.5	102.9 4.6	362.2 13.5	249.7 11.3	156.2 5.9
Khambhat	50 (a) (b)	1.5 0.1	1.8 0.2	1.8 0.2	3.3 0.2	4.6 0.4	89.7 4.1	276.6 12.0	166.4 9.3	125.0 5.7
Bhadran	24 (a) (b)	1.5 0.2	1.0 0.1	4.1 0.2	6.6 0.3	1.5 0.1	106.7 4.8	399.3 15.0	241.3 10.5	155.5 5.7
Kheda	50 (a) (b)	1.8 0.2	2.0 0.3	1.5 0.2	2.5 0.2	8.9 0.6	89.9 4.2	336.8 13.3	189.7 10.5	120.4 5.2
Kheda District	(a) (b)	1.6 0.2	2.0 0.2	1.9 0.2	3.0 0.2	5.6 0.4	95.9 4.4	344.3 13.8	207.1 10.5	135.9 5.6

(a) Normal rainfall in mm. (b) Average number of rainy days (days with rain of 5 mm or more).

I-2

of Rainfall

Oct- ober 12	Nov- ember 13	Dec- ember 14	Annual 15	Highest annual rainfall as percen- tage of normal and year** 16	Lowest annual rainfall as percen- tage of normal and year** 17	Heaviest rainfall in 24 hours*			
						Amount (mm.) 18	Date 19		
16.0 1.0	3.3 0.3	1.3 0.1	881.5 38.8	247 (1927)	11 (1918)	445.0	1941	July	13
10.2 0.8	2.8 0.3	0.5 0.1	727.9 34.5	262 (1927)	17 (1918)	318.8	1941	July	5
16.0 1.0	2.5 0.3	0.8 0.1	792.1 37.4	226 (1927)	24 (1918)	279.9	1907	July	28
14.7 0.9	3.6 0.2	2.0 0.1	791.4 37.1	246 (1927)	19 (1918)	284.5	1927	July	27
12.5 0.8	3.3 0.3	1.3 0.1	796.5 36.6	198 (1927)	28 (1918)	326.9	1927	July	26
12.9 0.9	3.1 0.3	0.3 0.0	781.3 36.2	232 (1927)	32 (1918)	372.9	1927	July	27
15.0 1.0	2.5 0.3	0.5 0.1	830.8 38.4	303 (1927)	34 (1911)	540.0	1927	July	28
17.3 1.1	3.8 0.3	0.3 0.1	879.6 38.4	232 (1927)	23 (1918)	299.7	1927	July	25
19.8 1.1	5.1 0.3	0.8 0.1	885.3 38.2	227 (1927)	20 (1918)	387.9	1945	September	24
7.6 0.4	2.8 0.4	0.0 0.0	764.4 33.8	184 (1933)	45 (1940)	240.3	1941	July	5
4.8 0.4	3.8 0.5	0.0 0.0	747.9 34.5	171 (1941)	39 (1948)	408.9	1941	July	13
6.9 0.5	6.6 0.5	0.8 0.1	788.6 36.2	165 (1950)	53 (1948)	198.4	1945	September	25
8.9 0.7	6.3 0.4	0.5 0.1	800.2 37.3	156 (1950)	38 (1948)	276.6	1952	July	26
8.6 0.8	5.1 0.5	0.3 0.1	889.5 39.0	186 (1933)	53 (1936)	273.6	1933	August	1
14.0 0.9	4.3 0.4	1.3 0.1	905.6 38.0	215 (1950)	20 (1918)	331.5	1927	July	28
14.5 1.0	6.1 0.4	0.8 0.1	692.1 33.7	246 (1927)	37 (1948)	354.3	1945	September	24
19.1 0.1	8.4 0.8	1.0 0.2	946.0 39.0	151 (1933)	41 (1948)	450.6	1945	September	23
12.5 0.8	2.5 0.3	1.0 0.1	769.5 35.9	227 (1927)	24 (1918)	399.5	1941	July	13
12.9 0.8	4.2 0.4	0.7 1.0	815.1 36.8	233 (1927)	25 (1918)	..	..	..	..

*Based on all available data up to 1961.

**Years given in brackets.

STATEMENT I-3

Frequency of Annual Rainfall in the District
(Data : 1901-1950)

Range in mm.	No. of years	Range in mm.	No. of years
201-400	6	1201-1400	0
401-600	6	1401-1600	1
601-800	11	1601-1800	0
801-1000	16	1801-2000	1
1001-1200	9	.. ..	..

CHAPTER II

HISTORY

PRE-HISTORY

In the course of his tours in the Mahi Valley, Robert Bruce Foote, the pioneer of the Indian Pre-historic studies, found out a few microlithic sites on the left bank of the Mahi river.¹ But it was Dr. H. D. Sankalia, who collected some microliths in the Anand taluka at Vasad on the right bank of the Mahi river.² The finds were cores and scrapers of chalcedony, quartz, chert and agate. Later on (late) Dr. B. Subba Rao made further archaeological explorations in the Mahi Valley and at Pali 9 miles upstream from Sarnal in the Thasra taluka,³ he discovered a number of paleoliths including hand axes, cleavers and choppers. He also discovered some more microlithic sites on the west bank of the Mahi river in Anand and Thasra talukas of this district.⁴ These were scrapers, cores, flakes and lunates. This survey has confirmed the existence of the Early Man in the Mahi Valley about 2,00,000 years ago as in the Sabarmati Valley in North Gujarat, and his late successor, who made diminutive tools called 'microliths'.⁵ The paleoliths belonged to the Early Stone Age and the microliths to the Late Stone Age. The silts lying between the lower gravel and the top loess did not yield any tools. The occurrence of the intervening stage designated as the 'Middle Stone Age' was discovered by Soundara Rajan in the vicinity of Kapadvanj in this district in 1958.⁶ Two dities of this age were noted on the Mohor river, one at Mahadevia in its upper reaches and the other at Mohammadpura in its lower reaches. The main typological elements of this stone industry are flakes, blades, scrapers, points and cores. The cores are mostly of agate and chert, the points are of agate and the scrapers are of chert and agate. A microlithic site was also noted at Mogar near Anand.⁷ Dr. V. M. Trivedi has claimed to have discovered some microlithic sites in Central Gujarat,⁸ but they are all confined to the Ahmadabad district.

1. FOOTE, R. B., *Indian Pre-historic and Proto-historic Antiquities Catalogue Raisonne*, (Madras, 1916), pp. 197 and 199.
2. SANKALIA H. D., *Investigations in to Pre-historic Archaeology of Gujarat*, pp. 60, 212 ff.
3. SUBBA RAO B., "Archaeological Explorations in the Mahi Valley", *Journal of the M. S. University of Baroda*, Vol. I, No. 1, (Baroda, 1952), p. 46.
4. *Ibid.*, pp. 40, 59 ff.
5. *Ibid.*, p. 33.
6. SOUNDARA RAJAN, K. V., *Middle Stone Age Sites from Kaira District in Gujarat*, *Journal of the Oriental Institute, Baroda*, Vol., X., (Baroda, 1960), p. 166 ff.
7. Information kindly supplied by the Archaeological Department. Gujarat State.
8. TRIVEDI V. M., "Old Mounds in Central Gujarat," *Kumar*, Issue 605, (1974), p. 167.

PROTO-HISTORY

Mr. K. M. Momin, Curator of the Department of Archaeology, M. S. University of Baroda, who undertook exploration in the Khambhat taluka in 1972, discovered ten sites of Harappan culture of proto-historic times.¹ The sites have yielded more than 300 potsherds representing fragments of rims of storage jars, dishes, dishes on stands, cups with handles, small and large water jars or pitchers, saddle-querns-mullers, basins, jars, goblets, etc. They all belong to the peculiar Harappan type of ceramics. Many of them are plain, while some are painted. The Harappan civilization is dated *circa* 2400-1600 B. C.

EARLY HISTORY

In the Puranas, the Mahi Valley is introduced as the Maheya region enumerated among the regions on the Western border (*Aparanta*).² Mahi and Vatrak, the two rivers which mark the natural boundaries of this district, are mentioned in the Puranas. The confluence of Mahi with the sea represented a sacred region of pilgrimage.³ Here Vatrak is referred to as *Vartraghni*. The river absolved Indra of the sin for killing demon Vritra, because he took a dip at the sacred confluence of *Vartraghni* with Sabhramati (Sabarmati).⁴ But the Puranic references in their present form appear to be of a later period.

Authentic data for the early period of historical times are supplied by the archaeological excavations conducted at Nagara (near Khambhat) in 1963-65 by the Department of Archaeology and Ancient History, M. S. University of Baroda. The excavations revealed that the earliest habitation of this site could be traced to the Iron Age people who used iron implements, tools of bone, black and red pottery, plain red ware, etc. They cultivated rice. The first phase of this village could be ascribed to *circa* 5th-6th centuries B. C. Here they built a dam, probably for storing water in the reservoir.⁵

The village began to expand rapidly and established contacts with the Gangetic Valley after 4th century B. C.⁶ The occurrence of Northern Black Polished Ware is ascribed to about 4th-3rd century B. C.⁷

1. Information kindly supplied by the Archaeological Department, Gujarat State. The ten sites are Budhej, Dehada, Gudel, Indranaj, Jafarabad, Kanavada, Khakasar, Padra, Rel and Vadgam all situated in the Khambhat taluka.

2. JOSHI UMASHANKAR, *Puranoman Gujarat*, (1946), pp. 7, 160.

3. *Ibid.*, pp. 156 ff.

4. *Ibid.*, p. 182.

5-6 MEHTA R. N., *Excavation at Nagara*, (1970), pp. 8 f.

7. *Ibid.*, p. 18.

Towards the early centuries of the Christian Era, this village emerged as a large town on account of commercial activities. Brick-buildings were erected, and the general prosperity of the town could be attributed to the use of imported objects by its people from the Roman empire as well as from Central Asia. The excellent objects of chank and ivory and numerous channel hearths, used probably for cooking, allude to an active prosperous town.¹ The ceramic remains belong to the Red Polished Ware, found in association with Kshatrap coins. The combined evidence of pottery and coins is further confirmed by some potsherds and seals bearing inscriptions in characters ranging from the 1st century to the 5th century A. D.²

The Jain tradition ascribes the foundation of Stambhanake (Thamna near Umreth) to Siddha Nagarjuna, who flourished in the early centuries of the Christian Era. He installed the image of Parshvanatha on the bank of the Shedhi river.³ The river is introduced as Setikā in the *Padma Purāna*.⁴

A hoard of hundred Kshatrap coins of silver was found at Virol near Petlad. The coins were issued by king Rudradaman I (*circa* 143-158 A. D.), Rudrasimha I (*circa* 189-196 A. D.) and Rudrasena I (*circa* 203-220 A. D.).⁵

Sojitra (near Petlad) is referred to as Sazantion by Ptolemy in his *Geography* (*circa* 130 A. D.).⁶ He alludes to Mahi as Mophis.⁷ A stone head from Sojitra, now in the Museum at Vallabh Vidyanagar, is assigned to *circa* 200-300 A. D.⁸

A hoard of about 200 silver coins of Kumargupta I (*circa* 414-455 A. D.) was found at Anand in 1951.⁹ They were mistaken to be of Peacock type,¹⁰ but they are in fact of the Garuda type, which was common in Gujarat.

The discovery of Kshatrap and Gupta coins in this district testifies to the reign of the western Kshatrapas (*circa* 89-400 A. D.) and the Gupta sovereigns (*circa* 400-470 A. D.) respectively.

1. MEHTA R. N., *Excavation at Nagara*, (1970), p. 9.

2. *Ibid.*, pp. 18 f.

3. *Prabhavakacharita*, (1940), p. 165; *Puratana-Prabandha Samgraha*, (1936), p. 91.

4. *Uttara Khanda*, 136, 3.

5. PANDYA AMRIT, 'Kshatrap Coins from Virol', *Proceedings of the Gujarati Sahitya Parishad*, 20th Session, (1959), pp. 262 f.

6-7. McCRINDLE, *Indian Antiquary*, Vol. XIII, pp. 62 f.

8. PANDYA A. V., *Vallabh Vidyanagar Research Bulletin*, No. 2, (1958), Plate IV-A.

9. *Annual Report of the Bombay Secretariat Record Office and its sub-offices*, 1952-53, p. 17.

10. MAJMUDAR M. R., *Chronology of Gujarat*, (1960), p. 128.

Local bardic traditions refer to the establishment of Solanki principalities at Bakrol in V. S. 297 (240-41 A. D.) and Petlad in V. S. 510 (453-54 A. D.),¹ but they seem to be unwarrantable.

Maitraka Period (Circa 470-788 A. D.)

Specific references to Kheda (Kaira) district and to places therein occur in a number of copper-plate grants issued by the Maitraka Kings of Valabhi, who ruled over a large part of mainland Gujarat for a pretty long period of about three centuries (Circa 470-788 A. D.).

In 529 A. D., King Dhruvasena I issued a grant of land to two Brahmins residing at Nagaraka.² The land was situated in the vicinity of the village Bhadrénika, which is mentioned in the next grant along with the village Nattka-putra. It had been tempting to identify Bhadrénika with Bhadran or better with Bhadrana in Borsad taluka, but this Bhadrénika was situated in Hastavapra *Ahurani* in Saurashtra. Nagaraka is represented by Nagara near Khambhat. It was an outstanding place on the confluence of the Mahi river with the Gulf of Cambay (Khambhat), which was then known as the Gulf of Bharuch. Khambhat came into existence after the end of the Maitraka period when the Gulf receded in consequence of the accumulation of the silt choking up the mouths of rivers Mahi and Sabarmati. In view of the land-route, Nagaraka may appear too far from the place in Hastavapra district in Eastern Saurashtra, but the distance would be very short through the direct marine route in the Gulf.

When king Guhasena granted four villages to the Great Monastery of Dudda at Valabhi in 564 A. D.,³ two of the four villages were situated in Khetaka *Āhāra*,⁴ i. e., Kheda district. The two villages were Naddiya (modern Nandej) and Chossari (modern Chosar), both situated near Barejadi.

The Alina Plates of king Dharasena II, dated 589 A. D., record the grant of a village from Khetaka-*Āhāra*-Visaya,⁵ i. e., the Khetaka *Āhāra* in the Khetaka Visaya. The recipient of the grant was a Brahmin who emigrated from *Ānārtapura* (present Vadnagar) and resided at Khetaka (Kheda). The village given in grant was *Aśilāpallikā* in *Baṇḍarijīdri* Pathaka. *Aśilāpallikā* is represented by modern Aslali⁶ 6.9 km. north-west of Barejadi, which represents *Baṇḍarijīdri*, the headquarters of the Pathaka.⁷ Alina, the find spot of this and other grants, is situated in the Nadiad taluka.

1. *Charotar Sarvasangraha*, (1954), p. I, p. 947.

2. (A) Palitana Plate, *Epigraphia Indica*, Vol. XVII, p. 108.

(B) Aiyaoij Plate, *Epigraphia Indica*, Vol. XIX, p. 125.

3. Vala copper-plate of Guhasena, *Epigraphia Indica*, Vol. XIII, pp. 338.

4. The editor read *Detakahare*, which is obviously to be corrected into *Khetakare*.

5. *Indian Antiquary*, Vol. VII, pp. 70 f.

6. *Ibid.*, p. 37.

7. PARIKH, R. C., *Kavyanusasana*, Introduction, p. 68.

In 631 A. D. king Dhruvasena II granted a rice-field from the precincts of Hastika-pallikā in Konaka Pathaka in Khetaka *Āhāra* Vishaya.¹ The Brahmin donee, an emigrant from Girinagara (Junagadh) was a resident of Khetaka. Konaka, the headquarters of the Pathaka, is identified with Kona in the Mahemadabad taluka.² Hastikapallikā is represented by Hathnoli near Nadiad.³ The rice-field, designated *Sārasa-Kedāra*, measured four *Vrihi-pitaka* according to the Khetaka standard. It indicates that Kaira (Kheda) district followed a special standard of measuring a basket (*pitaka*) of paddy (*vrihi*). The name of the rice-field suggests the presence of the '*Sāras*' (Indian crane) bird. The field lay in the vicinity of a step-well and two ponds, one of the latter being named after Bhartri and *Īśvara*, i. e., Parvati and Shiva, implying the existence of their temple in its vicinity.

The Alina Plates, dated 648 A. D., record the grant of a village by Chakravartin Dharasena IV⁴ to Brahmin named *Nārāyaṇamitra*, who emigrated from *Ānārtapura* (Vadnagar) and resided at Kasara, represented by modern Kasor in the Petlad taluka.⁵ He received the village *Desurakshitijja* *Simhapallika* Pathaka, in Khetaka *Āhāra*. *Desurakshitijja* is identified with Desar near Thasra, and *Simhapallika*, the headquarters of the Pathaka, with Sihoda near Desar.⁶ This Brahmin received a grant of another village (situated in *Śivabhāgapura* Vishaya) from king Kharagraha II in 656 A. D., when the latter was residing at Khetaka.⁷

He also issued a grant of land to a Brahmin resident of Khetaka in 648 A. D.⁸ One piece of land given in grant lay in the precincts of *Vaddasomālikā* in Kolomba Sub-division in Khetaka *Āhāra*. It was a rice-field bounded by the limit of *Sihamuhijja*-grama on the east and that of *Viśva-palligrāma* on the south. *Vaddasomālikā* is identified with Vanthuali. *Sihamuhijja* with Simhaj and *Vishapalli* with Vansol, all in the Mahemadabad taluka, Kolomba has not been identified yet.

Another piece of land was situated in the precincts of *Duhuduhu-grāma* in Nagaraka Pathak. It was bounded by the limit of *Jāinṇapalli-grāma* on the south and that of *Guddapalli-grāma* on the west. A third piece of land

1. *Journal of the Bombay Branch of the Royal Asiatic Society*, New Series, Vol. I, p. 69.

2. ALTEKAR A. S., *A History of Important Ancient Towns and Cities in Gujarat and Kathiawad*, p. 20.

3. SHASTRI H. G., *Maitraka-kalin Gujarat*, Appendix V, p. 40, *Hastika-pallika* should better be read *Hastinapallika*.

4. *Indian Antiquary* Vol. VII, pp. 73 f.

5-6. SHASTRI H. G., *Maitraka-kalin Gujarat*, Appendix V, p. 41.

7. *Indian Antiquary*, Vol. VII, pp. 76 f.

8. *Indian Antiquary*, Vol. XV, pp. 335 f.

lay in the precincts of Duhuduhikā-padraka. Duhuduhu is identified with Deheda near Nagara, and Guḍḍapallī with Gudel near it.¹ Jāinnapallī is probably represented by modern Lunej, 'l' and 'j' being interchanged through metathesis. Duhuduhika may be a hamlet near Duhuduhu.

In 653 A. D., king Dhruvasena II granted a village in Śivabhāgura Vishaya to a Brahmin resident of Mahichhah,² i. e., Mahishāka represented by Mahisa in the Nadiad taluka.³

A grant⁴ issued by king Dhruvasena III to the Dudda monastery at Valabhi comprised the village Rākśasaka in Kasaharada sub-division in Khetaka Āhāra.⁵ Kasaharada is represented by Kasindra⁶ in the adjoining Daskori taluka of the Ahmadabad district. Rākśasaka is possibly identifiable with Rakhial in the Ahmadabad City taluka.

King Śilāditya III issued a grant of land to a Brahmin resident of Khetaka, who was an emigrant of Girinagara.⁷ The land included a rice-field situated in the precincts of Deyaplligram in Nagaraka pathaka in Khetaka Āhāra. The grant is dated year 346 of the Valabhi Era, corresponding to 665 A. D. The particulars about its boundaries contain references to the adjoining villages Rohiniyarja, Kavithhavika, Gandaka and Tapasapallika.⁸ Deyapalli is identified with Dali, Rohiniyarja with Ruhanaj, Kavithhavika with Kothavi and Gandaka with Gada, all the villages lying near Petlad and Tarapur.⁹ Tapasapallika has not been identified so far.

The Alina plates, dated 766 A. D., which are the last known plates of the Maitraka kingdom, record a grant issued by king Śilāditya VII to a Brahmin residing at Anandapura. The grant comprised the village Mahilābali in Uppalaheta Pathaka in Khetaka Āhāra¹⁰ Uppalaheta, the headquarters of the Pathaka, is identified with Uplet near Thasra. It is tempting to identify Mahilabali with Mahelav near Petlad, but it is more

1. SHASTRI H. G., *Maitraka-kalin Gujarat*, Appendix V, p. 41.
2. *Epigraphia Indica*, Vol. I, pp. 85 f.
3. SHASTRI H. G., *Maitraka-kalin Gujarat*, Appendix V, p. 42.
4. *Journal of the Bombay Branch of the Royal Asiatic Society*, New Series, Vol. I, p. 35.
5. The word cursorily read *Vanautakentara* is resorted as *Kheta-kahare* (H. G. SHASTRI, *Maitraka-kalin Gujarat*, Appendix IV, p. 28).
6. ALTEKAR A. S., *A History of Important Ancient Towns and Cities in Gujarat and Kathiawad*, p. 18.
7. *Journal of the Bengal Asiatic Society*, Vol. VII, p. 968. The year was originally read 365, but latter corrected into 346.
8. The grant was edited at a very early stage of Indian Epigraphy and many readings have to be corrected (H. G. SHASTRI, *Maitraka-kalin Gujarat*, Appendix J, pp. 23 f.)
9. SHASTRI H. G., *Maitraka-kalin Gujarat*, Appendix V, p. 42 f.
10. *Corpus Inscriptionum Indicarum*, Vol. III, pp. 171 ff.

than 35 km., away from it. It is probable that the correct reading of the place-name may be Mahishabali. In that case it may be identified with Mahishaka, represented by Mahisa, which is just near Alina, the find spot of the plates.¹ It is not very far from Uplet.

Thus reference to places in this district occur in as many as eleven epigraphic records of the Maitraka kingdom. They indicate that the region round about Kheda formed a part of the Maitraka kingdom and was for administrative purposes known as Khetaka Āhāra in Khetaka Vishaya, which was divided into several Pathakas. Its major portion extended from the Sabarmati river in the west to the Mahi river in the east. In the south it was bounded by the Gulf of Cambay (Khambhat), which was then known as the Gulf of Bharuch. In the north, it extended upto Daskroi taluka of Ahmadabad district and the Mahemadabad taluka of this district. It is not known whether Khetaka Vishaya was included any other Āhāras. If it did, the other Āhāras obviously lay to the north of Khetaka Āhāra.

When the Chinese monk Yuan Chwang visited Gujarat in about 640 A. D., in the course of his travel of India, he paid a visit to Kheta² and described the region as follows :

"This country is 3,000 li³ or so in circuit, the capital about 20 li. The population is dense. The establishments are wealthy. There is no king among them; the country is an appanage of Malava, and the climate, products of the soil, and manners of the people are very similar in both countries.⁴ There are some ten Sanghramas (monasteries) with about 1,000 priests (monks), who study alike the Great and the Little Vehicle.⁵ There are also several tens of Deva temples with very many unbelievers.⁶

From the measure of the circuit, the Kheta country seems to have extended north of the Kaira (Kheda) district. Here this region is represented as an appanage of Malwa, but Malwa was under the Maitraka kings of

1. SHASTRI H. G., *Maitraka-kalin Gujarat*, Appendix V, p. 45.
2. Julien read Kie-cha and identified it with Kutch. Beal and Watters follow this view. But as Cunningham remarks the correct reading of the Chinese form would be Ke-ta and it applies to Kheta. The particulars given by the traveller better apply to the Kaira region.
3. 600 or 500 miles, i. e., 960 or 800 Kilometre.
4. As regards Malava (Malwa), he notes : The soil is rich and fertile, and produces abundant harvests. Shrubs and trees are numerous and flourishing. Flowers and fruits are met with in great quantities. The disposition of the men is virtuous and docile, and they are in general of remarkable intelligence. Their language is elegant and clear, and their learning is wide and profound." (Trans. by Beal, *Buddhist Records of the Western World*, p. 260).
5. Mahayana and Hinayana.
6. i. e., non-Buddhists. Trans. by Beal, *Buddhist Records of the Western World*, p. 266.

Valabhi. Hence it implies that this region formed a part of the Maitraka kingdom. The Buddhist monasteries exist no more, nor can any old extent Hindu temples be assigned to this period.

Local tradition represents Umreth as founded by Jaha Patel in V. S. 555 (498-99 A. D.).¹ Bardic traditions refer to the establishment of Solanki principalities at Napa in V. S. 586 (529-30 A. D.), Kuna Harera in V. S. (629-30 A. D.) and Mehlol in V. S. 702 (645-46 A. D.).² It is not possible to ascertain the historical validity of these traditions. It is reported that an old inscription dated V. S. 602 (545-46 A. D.) is found on the image of Ganapati at Thamna. Another is found on a Ganapati image at Khijalpur which is dated V. S. 689 (631-32 A. D.). The third found on the Uma-Maheshvar image is dated V. S. 822 (765-66 A. D.).³ But none of the inscriptions is published yet.

The Post-Maitraka Period (Circa 788-950 A. D.)

Soon after the fall of Valabhi in October, 788 A. D.,⁴ the Rashtrakutta king Karka II extended his kingdom of Lāta northward and shifted his capital to Khetaka. Māhāsāmanta Chandraditya of Harshapura (Harsol in the Sabarkantha district) acknowledged the supremacy of Parama Rājādhirāja Karka. The grant issued by this feudatory king is dated November, 788 A. D.⁵

Earlier Dantidurga, the Rashtrakutta king of the Deccan, had led a victorious expedition upto the Mahi rivtr.⁶ Till then the Rashtrakutta power was practically confined south of that river. The credit of extending the Rashtrakutta power over this district goes to Karka II. But his power was shortly uprooted by king Govinda III of the main line in the Deccan, who entrusted the entire territory in Gujarat to his younger brother Indra. This territory was known as *Lāta-maṇḍala*. This *Lāṭā* branch was established in circa 800 A. D., with Khetaka as its capital.

Indra was succeeded by his elder son Suvarnavarsha Karka. He guarded the power of the boy-king Amoghavarsha, son and successor of Govinda III, in the Deccan. Karka issued a grant of a village in Mahishaka-42 in 824 A. D.⁷ Mahishaka was made the headquarter of an administrative division consisting of 42 villages.

1. *Chavotat Sarvasangraha*, Part I, (1954), p. 990.

2. *Ibid.*, p. 946. In view of the context V. S. 986 seems to be a misprint for V. S. 686.

3. *Ibid.*, p. 1019. V. S. 629 is obviously a misprint for V. S. 689.

4. SHASTRI H. G., *Maitraka-kalin Gujarat*, Part I, p. 333.

5. Hilol Plates of Mahasamanta Chandraditya, *Epigraphia Indica*, Vol. XXXIV, pp. 213 ff.

6. *Indian Antiquary*, Vol. XI, p. III. Indra, father of Dantidurga, had fought a battle at Khetaka and carried off a Chalukya Princess, whom he married, but that Khetaka was situated in the Deccan.

7. *Epigraphia Indica*, Vol. XXII, pp. 77 ff.

Dhāravarsha Dhruva I, son and successor of Suvarnavarsha Karka issued a grant of land to a Brahmin residing at Badarasiddhi, (present Borsad).¹ The grant is dated Sāka year 757, i. e., 835 A. D. The village given in grant was situated in Kashahrada-deshā. It probably indicates the northern boundary of his kingdom.

Dhruva I was succeeded by his son Akālarvarsha, who has left no epigraphic records. Dhruva II, the eldest son of Akālarvarsha, vanquished the formidable forces of the Pratihara king Mihira Bhoja. His grants are dated 867 to 884 A. D. He was succeeded by Krishnaraja, son of his younger brother Dantivarman, who had issued a grant of land in 867 A. D., during the reign of Dhruva II. All these kings of Gujarat branch reigned at Khetaka (Kheda).

Shortly after 868 A. D., the power of the Gujarat branch was uprooted by the Pratiharas of Kanauj. But a feudatory named Dhavalappa recovered the Gujarat territory on behalf of his Rashtrakutta lord in the Deccan, and Gujarat now passed under the direct authority of the main lineage of the Rashtrakutta kings of the Deccan. Akkuka, second son of Dhavalappa, issued a grant of a village in 910 A. D.² The village was situated in the Division of Kapadvanj-84, (comprising a group of 84 villages with Kapadvanj as its headquarters). The grant was signed by Akkuka and endorsed by Chandragupta, the Daṇḍanāyaka of Māhāsāmanta Prachanda. They acknowledged the sovereignty of the Rashtrakutta king, Akalavarsha Krishnaraja II of the Deccan.

In 915 A. D., the king Krishnaraja II was succeeded by Indra III, his grand son, because Jayattunga, his son, had pre-deceased him. Indra III was succeeded by Amoghavarsha II. King Govinda IV, the younger brother and successor to Amoghavarsha II, made an endowment of 800 villages on the occasion of his coronation. It was celebrated with the pious act of *tulāpurusha* (weighing himself against gold coins). One of the villages given in grant to Brāhamanas, lay near Kavi now in (Bharuch district), which was located in *Khetaka Maṇḍala* in *Lāṭa Deśa*. The grant is recorded in his Cambay Plates dated Saka year 852 (930 A. D.), which is the last known epigraphic Rashtrakutta record pertaining to Gujarat. However, the Rashtrakutta power over *Khetaka-maṇḍala* continued atleast upto 949 A. D., when Paramara Siyaka II, donated a village in Sabarkantha district with the approval of his Rashtrakutta lord Akalavarsha III, who held sway over Khetaka-maṇḍala.³ But shortly thereafter the Rashtrakuttas lost their power to the later Chaulukyas.

1. *Indian Antiquary*, Vol. XIV, pp. 196 ff.

2. *Epigraphia Indica*, Vol. I, pp. 52 ff.

3. Harsol Plates of Siyaka II, *Epigraphia Indica*, Vol. XIX, pp. 236 ff.

Bardic tradition attributes the establishment of Solanki principalities at Shili and Sojitra in V. S. 916 (859-60 A. D.),¹ but it is not attested by historical evidence.

Chaulukya Period (Circa 950-1300 A. D.)

The petty Chaulukya Kingdom established by Mularaja I at Anhilwad Patan in the Mahesana district in 942 A. D., developed into a mighty extensive kingdom in course of time. The early kings of the Chaulukya dynasty ruled over north Gujarat, Kachchh and south Rajasthan, while Lāta passed under the sway of Chaulukya Barappa, a feudatory of the Chaulukya king Tailapa of the Deccan. The early Chaulukya kings of Anhilwad had long conflict with the Chaulukyas of Lāta. King Karna I of Anhilwad succeeded in establishing his authority over south Gujarat at least for some period in about 1074 A. D. But nothing definite is known about the political position of *Khetaka-maṇḍal* from circa 950 to 1100 A. D.

Baj Khedaval Brahmanas, according to their tradition, settled at nine places in this district in V. S. 999 (942-43 A. D.).²

According to the Jain tradition, an old image of Parshvanath was re-installed at Stambhanaka (Thamna) by Abhayadevasūri in V. S. 1131 (1074-75 A. D.).³

The ruins of ancient Por or Khijalpur near Umreth yielded ancient remains of human habitation. The extant structures and images amply testify to the antiquity of the place. The old temple of Chaturbhujaraya, form of lord Vishnu (V. S. 1159 i. e., 1095-96 A. D.) and the Dhan step-well were renovated by Shah Tejpal, one of the two renowned Jagat Sheth brothers of Khijalpur.⁴

Siddharaja Jayasimha (1094-1143 A. D.), the famous son of Karna I, is known to have ruled over Khambhat as mentioned in the colophon of a manuscript of *Ādinatha Charitra*, dated 1104 A. D.⁵ On a complaint made by a local Muslim (Khatib) about the demolition of a mosque at Khambhat, the king is said to have visited the place incognito, ascertained the validity of the complaint, and punished the Hindu and Parsi offenders.⁶ As Khambhat lies on the southern border of this district, it seems clear

1. *Charotar Sarvasangraha*, Part I, (1954), p. 947.

2. One of these places was Nadiad. *Charotar Sarvasangraha*, Part I, (1954), p. 948.

3. *Prabhavaka Charita*, (1940), p. 95; *Prabandha-Chintamani* (1933), p. 120; *Charotar Sarvasangraha*, Part I, (1954), p. 1020.

4. *Charotar Sarvasangraha*, Part I, (1954), pp. 1015 ff.

5. *Descriptive Catalogue of Manuscripts in the Jain Bhandars at Jeisalmir*, p. 45.

6. MAJUMDAR A. K., *Chaulukyas of Gujarat*, p. 381.

that the entire Kheda district was definitely under the Chaulukya power by this time. In V. S. 1152 (1095-1096 A. D.), Minaldevi, the mother of, Jayasimha, is said to have built a step-well at Nadiad and Bhadrakali step-well at Umreth.¹ The king is said to have built the temples of Muleshvara, Ashtabhairava and Babhruvāhana at Umreth in V. S. 1158 (1101-02 A. D.).² In V. S. 1154-55 (1097-99 A. D.), Jayasimha is said to have visited Napa and made an agreement with its local chief Lakhdhirji, whereunder the latter ceded 44 villages including Bhetasi to the Chaulukya king in lieu of exemption from the pasture tax levied on his principality.³ ...

The colophon of the Manuscript of *Prithvichandracharita* copied at Khambhat in V. S. 1212 (1156 A. D.), refers to Kumarapala's rule over *Lāta Maṇḍala*.⁴ The copper plate inscription dated V. S. 1231 (1171 A. D.) corroborates the continuation of the Chaulukya supremacy over *Lāta-maṇḍala* during the reign of Ajayapala (1173-1176).⁵

In V. S. 1212 (1155-56 A. D.), Bodana is said to have shifted the image of Ranchhodji from Dwarka to Dakor. The foot-prints on the way from Umreth to Dakor are said to commemorate the event.⁶

Local tradition ascribes the foundation of Vaso (near Petlad) to Vachchha Patel and allude that the event took place in V. S. 1224 (1167-68 A. D.).⁷

During the long reign of the weak King Bhima II Rānaka Lavanaprasāda of the Vaghela family and his son Rānaka Viradhavala of Dholka played an important role in the maintenance of the Chaulukya power. Khambhat was under the Chahamanas chief Sankha, who ruled over *Lāta maṇḍala* and struggled with the Yādava King Singhana of the Deccan. Viradhavala made a surprise raid over the port (Khambhat) and occupied it in about 1220 A. D. He appointed his minister Vastupāla to administer the important town. Sankha invaded Cambay (Khambhat) but was vanquished by Vastupāla.⁸ The minister erected splendid Jain temples at several places including Stambhatirth (Cambay) and Stambhanaka (Thamna) in this district.⁹ The manuscript of *Dharmabhyudaya Mahākāvya* copied by the minister in V. S. 1240 (1233-34 A. D.), is preserved in the Shantinath

1. *Charotar Sarvasangraha*, Part I, (1954), pp. 948 to 1000.

2. *Ibid.*, p. 1000.

3. *Ibid.*, p. 974.

4. *Jaina-Puslaka-Prasasti-Samgraha*, p. 69.

5. *Indian Antiquary*, Vol. XVIII, pp. 80 ff.

6. *Charotar Sarvasangraha*, Part I, (1954), p. 1000.

7. *Ibid.*, p. 983.

8. MAJUMDAR A. K., *Chaulukyas of Gujarat*, (1956), pp. 149 ff.

9. Girnar Inscriptions dated V. S. 1288 (*Revised List of Antiquarian Remains in the Bombay Presidency*, pp. 328 ff).

Palm-leaf Bhandar at Khambhat.¹ It is one of the richest collections of old palm-leaf MSS in Gujarat.

Rānaka Visaladeva, son and successor of Vīrdhavalā, attained supreme sovereignty over Gujarat in 1244 A. D., when the dynasty of Mūlaraja I came to an end. Visaladeva was succeeded by his nephew Arjunadeva (1262-1275 A. D.). During the reign of his son, Sarangadeva (1275-1296 A. D.), certain devout followers of Jainism provided for the maintenance of the temple of Chintamani Parshvanatha at Khambhat in V. S. 1352 (1295-96 A. D.). Karna II, who succeeded Sarangadeva in 1246 A. D., lost Gujarat to the Khalji sultanate of Delhi during 1299-1304 A. D.²

In *Kāvyasikshā* (13th Century) by Vinayachandra are enumerated several groups of villages in Gujarat. One of them is a group of one-hundred and four (*Chaturuttara Sata*) villages, with Petalapadra (Petlad) as its headquarters.³ It makes it quite clear that the current name *Charotara* is derived from *Chāturuttara* (four added to) with *shata* (hundred) left understood, and not from *Chāru-tara* (more lovely) as is commonly understood. The assumption is corroborated by *Lekhapaddhati* (not later than 15th Century) which actually refers to *Chaturuttara* (with *shata* left understood) in relation to Petalapadra (Petlad).⁴ Nāra was similarly the headquarters of a group of fifty-six villages. Bhalej was the headquarters of a group of forty-two villages and Mātar was the headquarters of a group of twenty-four villages.⁵

According to *Lekhapaddhati* the Kheda district was known as *Khetaka-ādihāra-maṇḍala* which consisted of two administrative divisions, each of 104 and 84 villages⁶ respectively. The former had Petlad as its headquarters, while the latter had its headquarters probably at Dabhoi as mentioned in *Kāvyasikshā*. Accordingly, the *Khetaka maṇḍala* of the ancient period extended from Vatrak to Narmada, while the limits of the present Kheda district are limited upto Mahi in the south, the major part of the region to its south forming the Baroda (Vadodara) district.

MEDIEVAL PERIOD

The Medieval period in Kheda district commenced with the conquest of the province of Gujarat in 1299 A. D., by the Delhi Sultan Ala-ud-din Khalji (1295-1315 A. D.). It ended with the final defeat of the Mughal viceroy Momin Khan II by the Marathas.

1. *Catalogue of palm-leaf Manuscripts in the Shantinatha Jain Bhandara, Cambay* (1966), p. 382.

2. MAJUMDAR A. K., *Chaulukyas of Gujarat*, pp. 187 ff.

3. VINAYACHANDRASURI'S *Kavyasiksha* (ed. by H. G. SHASTRI, 1964), p. 53.

4. *Lekhapaddhati*, p. 17.

5. *Kavyasiksha*, p. 53.

6. *Lekhapaddhati*, p. 17.

The whole period of the Muslim ascendancy, stretching over slightly more than four and half centuries, may appropriately be divided into three parts namely (1) the rule of early sovereigns of Delhi lasting from 1299 to 1407 A. D., (2) the rule of Ahmadabad Sultans from 1407 to 1573 A. D., and (3) rule of Mughal Emperors from 1573 to 1758 A. D. Before dealing with these three periods individually, it would be pertinent to say that before the commencement of the medieval period the first arrivals were the Arabs, the sea-farers of the medieval age who had their colonies in Khambhat since early period.

Turkish Rule

The Turkish rule commenced with the conquest of Gujarat led by Ulugh Khan in 1299 A. D. Ulugh Khan was joined by Nusrat Khan. The combined armies captured Patan, the capital of Raja Karna, the last of the Chaulukyas (Vaghelas). The conquest by the Turks is generally taken as the beginning of a new period. The old chain was broken, the former continuity was lost and an alien authority differing fundamentally from the old rulers enforced itself as the sovereign power.

Town of Khambhat Plundered

After the sack of Somnath, Nusrat Khan plundered the rich and ancient sea port of Khambhat of this district. The inhabitants of this beautiful city, noted by Ibn Battuta for its excellent architecture, were mostly foreign merchants, most of them Arabs. Their religious affiliation, however, did not prevent Nusrat Khan from applying the screw to them and relieving them of great wealth. The most precious single item of this loot was, however, a eunuch slave, seized from an Arab merchant.¹ His name was Malik Kafur. He was purchased by his master at Bagdad for thousand dinars. This slave was presented by Nusrat Khan to the Sultan Ala-ud-din. The Turkish rule, was confined to cities and did not touch the villages.

Wassaf's Account of the Sack of Khambhat

Zia-ud-din Barni in his famous history, the *Tarikh-i-Firuz Shahi* gives some description of the plunder of Khambhat by Nusrat Khan's army, but a detailed account is given in Wassaf's *Taziyat-ul-Ansar* where Khambhat is described as the prominent city of India in population and wealth. The citizens, it is said, were taken unawares and there was a terrible panic. The Muslims began to kill and slaughter on the right and left unmercifully and blood flowed in torrents. The plunder included a huge amount of gold and silver as also of pearls, diamonds, rubies and emeralds, besides silk and cotton cloth. A great number of handsome and elegant maidens amounting to 20,000 is said to have been taken captive.² This figure may, perhaps be regarded as an exaggeration.

1. MISRA S. C., *Rise of Muslim Power in Gujarat*, (1963,) pp. 63-64.

2. ELLIOT AND DOWSON, *History of India*, III, 43.

Governors from Delhi

Alp Khan—The first Governor of Gujarat was Alp Khan who took up his new assignment in 1306 A. D. To him must go the credit of adopting conciliatory policy. Two inscriptions, one from Cambay (Khambhat) and the other from Petlad testify to this policy. Both these towns are in the Kheda district. Petlad inscription is earlier and bears the year 1313 A. D. It formed part of a mosque which no longer exists. There is another inscription found near the tomb of Arjunbaba at Petlad. According to this inscription, a deed was approved during the time of Sultan Gyassudin. The deed pertained to a grant of 20 *vighas* of land and a well. The inscription bears the date as year 1323 A. D.¹ The Arabic inscription in Cambay (Khambhat) belongs to the tomb of Ikhtiyar-ud-daula. He is described as Bahar Bak. This shows the importance of the port of Khambhat where a special port officer was appointed. This inscription is dated 6th September, 1316 A. D. Other inscription² of Khambhat testify to the rich and influential community of Arab merchants in that city, a section which was conciliated and reassured by Alp Khan.

The conciliatory policy of Alp Khan is reflected in his attitude towards the Jains, the prosperous trading community. Jain records note his patronage of one of the most famous of savants, Samra Sah whom he allowed to renovate the temple at Shatrunjaya.

During his regime, a Jain person called Jesal under the able guidance of Jinchanarasuri established a Poshadh Shala at Khambhat in 1310 A. D. and also erected a temple of Ajitnath. This Jesal also helped people during the time of famine. His influence with the Sultan helped the Hindu population of countries like Telegana, and Pandya. His Guru Jinprabhasuri was also respected as Guru by the Sultan Ghias-ud-din Tughluq.

Others Governors

The departure of Alp Khan created a sense of alarm. Rebellion had broken out. Sultan sent Ain-ul-Mulk as Governor, who was eventually able to restore order. The Sultan next conferred the Government of Gujarat on Malik Dinar. He was given the title of Zafar Khan who was followed by Hisam-ud-din as Governor of Gujarat. He was, however, sent back to the Delhi and was followed by Malik Wahid-ud-din Qureshi. During the tenure of this Sultan, the district enjoyed peace. He was awarded the title of Taj-ul-Mulk. Malik Wahid-ud-din rebelled and usurped the throne of Delhi by putting Sultan to death in 1320 A. D. He ruled for about four months under the title of Nasir-ud-din. He was followed as Sultan by Ghias-ud-din Tughluq who has been referred to in Petlad inscription.

1. SHAH P. C. AND SHAH C. F., *Charotar Sarvasangraha*, Vol. I, (1954), p. 878

2. Indian Archaeology, (1959-60), Persian and Arabic Inscriptions.

Sultan Muhammad bin Tughluq

In 1325 A. D. this Sultan came to the throne of Delhi. During his reign Malik Maqbul held the post of Governor under the title of Maqbul Malik Khan-i-Jahan, naib wazir.

During the time of this Sultan, Ibn Battuta, called the traveller of Islam, visited Khambhat port in 1342 A. D. His visit is of interest to us as his account provides information about the port of Khambhat. He has also referred to the Gulf of Cambay (Khambhat), Kavi, Gandhar and Piram Islands and also pirates who infested them. The port of Khambhat which had attained international fame is described in the following manner.

“Thereafter we travelled to the town of Kimbaya (Cambay), which is situated on an arm of the sea resembling a river. I myself saw the ships lying on the mud at ebb-tide and floating on the water at high tide. This city is one of the finest therein regard to excellence of its construction and the architecture of its mosques. The reason is that the majority of its inhabitants are foreign merchants, who are always building fine mansions and magnificent mosques and vie with one another in doing so.”

The commander of Khambhat, a person who was in good books of Sultan of Delhi, was one Muqbil-ut-Tilangi and he had as his lieutenant a young Shaikh from Isfahan who acted as his *alter ego* in all affairs. Ibn Battuta and his party were invited to a feast by the Governor at his palace.

Ibn Battuta gives a list of the most wealthy and influential merchants of the city of Khambhat, each of whom had a grand residence with a private mosque attached to it. The first name mentioned is that of one Sharif Assamari, the door of whose mansion resembled the gate of a city. Another was Qazeruni, who was known as ‘the prince of merchants’ and had a large residence with its own masjid. A number of other persons have also been mentioned. A third was Nazam-ud-din Al-Gilani who was extremely rich and nominated as the Governor of Khambhat by Sultan.¹

Another event for which the district came into prominence was the rebellion of Qazi Jalal, a prominent Afghan noble and other Afghan insurgents and Taghi called Malik Tughan, a cobbler by birth and originally a slave. The serious insurrection in Gujarat which drew Sultan to this land began early in 1344 A. D. The town of Khambhat played a prominent part in the revolt. The rebels had occupied Khambhat. To crush the revolt, the Sultan came in Gujarat in 1347 A. D. and spent three rainy seasons. His successor Firuz Shah too came into Gujarat. During his time the hold of central authority had gradually weakened.

1. Gibb's *Ibn Battuta*, pp. 227-28.

Muzaffar Shah (Zafar Khan II)

Zafar Khan, entitled Muzaffar Shah, the title with which he assumed kingship in 1407 A. D., claimed to be or at least his historians make him out to have been a Rajput of Tank clan. He was sent by Mahmud Tughluq in 1391 A. D., to displace Farhat-ul-Mulk, Governor of Gujarat. Muzaffar Shah acknowledged the authority of the Delhi Sultans till 1407 A. D., when he ascended the throne as Sultan Muzaffar Shah.

Socio-Economic Impact of the Turkish Rule

The Turkish rule set in a process of change in political, social, economic and cultural spheres. In political sphere a dual process was the consequence. The old ruling order, the Rajput aristocracy was displaced from the position of vantage and its place was taken by foreign Muslims. Existing social order was also affected significantly. Considerable sections of the people went over to the new faith. However, the relations between the Hindus and the Muslims, particularly Jains were good. Still the Turks had destroyed the temples at Khambhat, Sidhpur and Somnath and the famous Bhandars of old manuscripts of Khambhat etc., were transferred to far away Jesalmir in Rajasthan. The first Governor of Gujarat, Alp Khan ruled Gujarat benevolently till his death in 1316 A. D. The basic struggle of the Turks was against Rajputs, former ruling class who still retained both land and considerable local authority. They had no desire to injure prominent urban trading community like the Jains. Likewise, Jains did not desire to oppose the new rulers, as their vital interests were not affected. During the Turkish rule towns like Khambhat, Petlad and Gandhar seems to have acquired prominence.

That the district was prominent is evident from the fact that Zafar Khan had received a delegation of prominent merchants of Khambhat. These merchants told him detailed stories regarding Farhat-ul-Mulk's high-handed activities. Zafar Khan visited Khambhat and soothed the merchants who were alarmed by the pro-Hindu policy of the ex-Governor.

Rule of Ahmadabad Sultans from 1407 to 1573 A. D.

Kheda district being adjacent to Ahmadabad was continuously ruled by the Sultans of Ahmadabad. Almost all the Sultans visited the district. It would now be pertinent to review the history of Sultanate beginning with Muzaffar Shah as Sultan of Gujarat from 1407 A. D.

Muzaffar Shah as Sultan of Gujarat including the District, 1407-10 A. D.

Prior to his becoming as Sultan in 1407 A. D., Muzaffar Shah at Patan carried on administration for several years. He also refrained from assuming the insignia of royalty. His son Tatar Khan was very ambitious. He

wanted to be the Sultan at Delhi as it was appropriate time due to the chaotic conditions prevailing at that time. So it is alleged that Muzaffar got his son murdered. When his grand son Ahmad Shah came of age, he came to know of his fathers' foul murder. So he revolted against his grand father and put him to death by forcing him to drink a cup of poison. Thus, the first Sultan of Gujarat came to a very tragic end.

Ahmad Shah's reign (1411-1442 A. D.)

After the death of Muzaffar Shah I, Ahmad Shah ascended the throne of Gujarat on January 10 ; 1411 A. D., at the young age of twenty and began his illustrious career. Though nominally the third Sultan of the dynasty, his long reign of thirty two years, his successful expeditions against his Rajput and Muslim neighbours, and above all his foundation of the city of Ahmadabad as his new capital deserve to be remembered. Ahmad Shah can claim to have been the real founder of the independent kingdom of Gujarat. In the whole of Gujarat including the district, the rule of Muslims led to a significant social and cultural consequences. In the central Gujarat to which this district belonged, he was able to effect a successful penetration of his authority by the change in land ownership, signified by the wanta tenure and the emergence of the Molesalam Girasias², who were originally Rajputs.

During his time the town of Nadiad became famous. It may be pointed out that Ahmad Shah's relatives were at war with him. In this fight they were assisted by three Khatri of Nadiad, viz. Jivandas, Vinayakdas and Prandas. These persons captured Nadiad and invited the wrath of the Sultan. In the subsequent encounter Jivandas advised the relatives to attack Patan but as the relatives did not agree among themselves, some fled to Khambhat while others went to Khēralu and to Sorath. Jivandas died in the battle of Nadiad. Thereafter Ahmad Shah pardoned those relatives who sought his shelter³.

During the time of Ahmad Shah, Khambhat played an important part in supplying ships. These ships were used by Sultan Ahmad to attack Malik-ut-Tujjar who was sent by Ahmad Shah Bahmani to capture the island of Mahim. During the time of the Sultan, Khambhat was a prominent port. The chief articles of Khambhat trade mentioned by the travellers are Sardonyx, spikenard, lac, myrobalans silk, paper etc. Among these articles paper is mentioned by Nicolo Conti (1420-1444 A. D.) as being used in Khambhat and nowhere else in India.

1. BAYLEY'S *Gujarat*, 88.
2. "A Medieval Period" by DR. S. C. MISRA forming a part of his contribution in the *General Report on the Census*, Part I-A (i), (1961), p. 168.
3. SHAH P. C. AND SHAH C. F., (Editors), *Charotar Sarvasangrah*, Part I, Nadiad, (1954). p. 879.

Religious Persecution of the Hindus

Despite all his successful campaigns, it must be said that the hand of Ahmad Shah was heavy on his Hindu subjects. His vocation was to destroy as much as to build, and throughout his reign his efforts were directed towards breaking down the liberties, the temple, and faith of the Hindu chieftains of Gujarat. The Kheda district was no exception to this.

Another important event that took place during the time of this Sultan was at Matar. Ahmad Shah's behaviour towards the gallant chief of Matar needs to be recorded so far as history of the district is concerned. Matar is now an important town in the district. The chief was less fortunate in his dealings with Sultan. He was invited to the court and was thrown into the prison on refusing to stain the honour of his house by getting his daughter married to the Sultan. His wife secured his liberation by surrendering the beauty named Paniba, to the Sultan without her husband's knowledge. On his return to home, the Rajput asked to see his daughter and would not touch food until she had been presented. His wife at last confessed what she had done so in order to end his imprisonment. The result was tragic, for the Rajput rose, quick as thought, and seized his sword; his wife cast her arms round him, but he dashed her to the ground, plunged his sword into his breast and expired.¹ Sultan Ahmad Shah died in 1442 A. D. Ahmad Shah's active care for the trade and navel strength of his kingdom greatly enriched Khambhat. At the close of his reign, it was a very noble city, twelve miles round. He was succeeded by his son Muhammad Shah II who ruled for nine years and died in 1451 A. D. The next Sultan was Qutb-ud-din Shah. During his time Mahmud Shah Khalji of Malwa attacked Gujarat. A great battle took place at Kapadvanj which is described below.

Battle of Kapadvanj, 1451 A. D.

The young ruler was at the very outset of his reign faced with the formidable task of defending his kingdom against invasion of Mahmud Khalji who entered Gujarat with a huge army including a large force of elephants. The Malwa ruler, having crossed the frontier, took fort of Sultanpur², threatened the fort of Bharuch, plundered Vadodara and marched as far as Kapadvanj on his way to the capital of Gujarat. Sultan Qutb-ud-din took the field against the invader, and, advancing up to the ford of Khanpur-Vankaner on the Mahi river, turned to meet the Malwa Sultan in the vicinity of Kapadvanj. Here a great battle was fought in March or April, 1451 A. D., and though for a time, one wing of the Gujarat army gave way, the struggle ended in the victory for Qutb-ud-din. Mahmud Khalji's retreating army suffered a lot at the hands of the Kolis of the district.

1. *Forbes' Ras Mala*, (Oxford press), p. 320-325.

2. Sultanpur is now a small place in the Shahada taluka of the West Khandesh.

Sultan Mahmud Shah I, Begada 1458-1511 A. D.

Sultan Mahmud I commonly called Begada ascended the throne of his father on May 25, 1458 A. D., and reigned for the next fifty-four years in uninterrupted glory and prosperity. He was perhaps the greatest of all the Sultans of Gujarat.

Foundation of Mahmudabad on Vatrak, 1479 A. D.

A noticeable event so far as Kheda district is concerned is the foundation of the city of Mahmudabad (Mahemadabad) near Kheda in 1479 A. D. Strong embankments were raised along the river, and the city was adorned with a palace, handsome buildings and extensive gardens by Sultan Begada. At a later period this city was selected as residence by Sultan Mahmud III (1537-53 A. D.), who constructed in its vicinity his famous Deer Park.

The prosperity of the Gujarat Saltanat reached its culminating point during the long and glorious reign of Mahmud Begada.

Another event which needs mention during Begada's time is the harassment of Gujarat coast by Bahadur Khan Gilani. In Mahmud Begada's reign a vassal of the Bahmani called Bahadur Khan Gilani, so harassed the Gujarat harbours that, for the failure of the supply of betelnut, coriander seeds had to be eaten with betel leaves. The Bahmani Sultan fearing the consequences himself, marched against Bahadur Khan Gilani and killed him himself. Thus he pacified the Gujarat Sultan.

Barbosa's visit

The conditions of the district during Begada's time have been appropriately described by the traveller Barbosa. Duarte Barbosa is liberal in his praise of 'the fair city of Khambhat', its wealth and luxury, its industries and its craftsmen. As the emporium of the trade of all Hindustan, the city had a large foreign element in its population.¹

Khambhat was famous at this time for its skilled artisans and craftsmen of all types. Among the many commodities produced by them, Barbosa mentions cotton fabrics of all kinds, silk cloths, velvets, satins and thick carpets. Barbosa specially mentions the great quantity of ivory employed in inlaid and 'cunningly turned' articles such as bangles, sword hilts, dice, chessmen, chessboards and bedsteads. The town of Khambhat was famous for its lapidaries who made imitation precious stones and pearls of various kinds which appeared quite real.

Barbosa further goes on to say that while Khambhat was the centre of the export trade in agates and cornelians from Gujarat to the countries of Europe and Western Asia, the mines where these stones were extracted

¹ The Book of Duarte Barbosa, edited by M. LONGWORTH, DAMES, I, 136, 141.

were located in the vicinity of Limodra, a place on the banks of the river Narmada, close to Ratanpur in the former Rajpipla State.

Under Mahmud Begada (1459-1513 A. D.) Khambhat reached its greatest glory on account of great naval activities and trade. "In 1514 A. D. its houses were of stone and whitewash, handsome, and very lofty. The streets and squares were large and the country rich, fertile, and full of provisions. Its people, well fed and well dressed, led easy lives, spending much of their time in pleasure and amusement. Drawn in oxen and horse carriages lived with rich silk and stamped kid skin mattresses, cushions and pillows, with bands of musicians playing instruments and singing songs, festive parties were continually passing through the streets on their way to the rich gardens and orchards outside the city walls."¹

The end of the Mahmud Begada's rule is also to be noted for the arrival of an emissary from Iran. Shah Ismail of Iran had sent at this time Yadgar Beg Kazalbash as an ambassador. He could not seek meeting with Sultan as latter was breathing his last. However, the next Sultan Muzaffar Shah honoured him. This ambassador had also brought number of presents with him for the Sultan.² This shows that Iran and Gujarat had frequent cultural contacts.

Mahmud Begada's reign should also be referred to for number of important monuments and buildings constructed in his kingdom. In the district particularly a well which is said to have been constructed by him called "Bhamariya Kuva" in Mahemadabad is an everlasting and a permanent monument. This well is at a distance of 2 furlongs from the railway station. One Chanda Suraj Mahel is also said to have been constructed by Mahmud Begada in the memory of his wives on the bank of river Vatrak near Mahemadabad. Another monument which deserves mention is Roza-Rozi. The Sultan's rule is also famous for the lovely gardens, orchards and plantation of trees on highways and roads.

It may be pointed out that during 15th century Gujarat had attained world wide fame as the 'Queen of the Eastern Sea'. The Portuguese entered the Indian Ocean by the end of the 15th century (1498 A. D.) and came in direct clash with the Gujarat navy in 1507-08 A. D. During Begada's rule the combined navies of Gujarat and Egypt stoutly opposed the Portuguese Navy. Gujarat navy under the command of Malik Ayaz stopped their onward march for the time being, having defeated them at the battle of Chevel.

1. STANLEY'S BARBOSA, 60 Barbosa's travels probably lasted from about 1501 to 1517. He visited Cambay (Khambhat) only for a short time after the death of MAHMUD BEGADA.

2. JOTE RATANAMANI RAO, *Gujaratno Sanskritik Itihas*, Part III, *Islam Yug*, Ahmedabad, (1957), p. 620.

Sultan Muzaffar II

In 1511 A. D., Sultan Muzaffar II ascended the throne. He was called Prince Khalil Khan. He assumed the title of Muzaffar Shah II. Brave and generous, fervently pious and learned, he seems perhaps the only ruler of his dynasty whose character commanded admiration and regard. His administration justly earned him the title of the 'Clement'.

During the reign of Sultan Muzaffar II, Malik Ayaz once again defeated the Portuguese navy in 1521 A. D. near Port Cheval and harassed them for 21 days by staying there. Thus, he saved the trade of Khambhat, Div and other ports of Gujarat.

After Sultan Muzaffar II, the combined reigns of the next two nominal rulers of Gujarat occupy less than six months. According to the dispositions made by Muzaffar II, during his lifetime, his eldest son Sikandar, son of Bibi Rani, came to the throne on the day of his father's death (April 5, 1526 A. D.).

Sultan Bahadur Shah

The history of the district takes interesting turn during the time of Sultan Bahadur Shah. (1526-1537 A. D.). Sultan Bahadur Shah's reign also witnessed number of battles fought with Rajputs, Mughals, etc. The battles with Portuguese have been described under the name of 'Battles of Cambay Navy'. In 1527-28 A. D. battles were fought at Cheval and Bandra in which the Gujarat navy sustained heavy losses. However, in 1530 A. D., Gujarat navy achieved a victory at Cheval by defeating Portuguese. This victory was set at naught by Portuguese in 1533 A. D. when Port Bassein belonging to Gujarat was plundered by the Portuguese with the adjacent Ports upto Tarapur in north. Sultan Bahadur Shah could not effectively defend them as Gujarat was under the grip of Mughal invasion at this time. He made truce with Portuguese and allowed them to build a fort at Div. From this time onwards the power of Gujarat navy was reduced.

During his short but brilliant reign of ten years Sultan Bahadur continually travelled throughout his dominions,¹ inspite of the many distant military operations. Besides, his visits to the three capital cities of Gujarat, he was often present at the sea-port towns of Khambhat and Div. His interest in these ports may be due to the fact that they were the emporia of the sea borne trade of India during this period, and the custom duties levied at them furnished a very large part of the resources.

1. The SULTAN was so famed for his rapid journeys that making (a Bahaduri Journey) became a proverbial saying, applied to any one who covered a great distance in a short time.

Humayun's Conquest of Gujarat, 1535-36 A. D.

Bahadur Shah's misfortunes began to commence after the destruction of the combined armies of Gujarat and Malwa in the trenches of Mandasor, and the fall of the capital of Malwa. This encouraged Humayun to follow Bahadur into the heart of his kingdom. Within three days he hastened from Mandu by forced marches to Champaner with ten thousand cavalry, ordering the rest of the army to follow. Leaving the fort in charge of Ekhtiyar Khan and Raja Narsingh Dev, Bahadur Shah fled to Khambhat. When Humayun reached Khambhat he learned that Sultan had left the city the same day for Div in the extremity of the Kathiawad peninsula. At this time, there were in Khambhat harbour a hundred ships which the Sultan had built for the purpose of warding off the aggression of Portuguese, but before his flight to Div, he had them all set on fire to prevent them from falling into the hands of his enemies.¹ During his stay at Khambhat, Humayun's camp was robbed by a body of Kolis and in revenge the city was pillaged.

Finding that Bahadur Shah had fled away to Div, Humayun finally abandoned the pursuit. The Emperor, for the first time, encamped at Khambhat "on the shore of the sea" which none of his ancestors had ever seen. During his brief halt at this ancient seaport, an incident happened which deserves mention. The incident must have been deeply mortifying to his pride. Prof. Commissariat describes the incident in the following words :

"Taking advantage of the slender force that accompanied the invader, Bahadur's officers pointed out to the chiefs of the rude Koli and Gowar tribes of the district that they had a very favourable opportunity for surprising and plundering his camp. The idea was readily taken up, and a night attack was planned by some five or six thousand of these wild aborigines of Gujarat. An old woman of this tribe betrayed the plan of the attack to the Emperor by seeking an interview with him in person. On being questioned, she confessed that her motive was to secure the release of her son who had been captured and detained in the Imperial camp. The troops were drawn off as a measure of precaution and Humayun retired with them to some rising ground at a distance to watch the event. The mob completely plundered the royal tent and in confusion and melee several eminent persons were killed, including Sadar Khan, the Gujarat noble, and Jam Firuz, the ruler of Thatta in Sind, whose daughter had been married to Sultan Bahadur. As soon as day broke, the Emperor led his disciplined troops against the disorderly assailants, who were found dispersed in every quarter of the camp, and routed them with much slaughter. Enraged at the insult offered to him, Humayun ordered the unoffending town of Cambay to be set on fire and given up to plunder for three days.²"

1. *Akbarnama*, I, 307.

2. *Akbarnama*, I, 309-10 W. Erskine, *Babar and Humayun II*, 60-62, cited in "*History of Gujarat*" by Prof. Commissariat.

From Div, Sultan Bahadur sent one of his nobles Mahmud Lari, Muhtaram Khan, to Khambhat to talk to Rumi Khan who was with Humayun in his camp. Bahadur Shah's anger was conveyed to Rumi Khan who "perspired with shame". Rumi Khan was persuaded to dissuade Humayun from attacking Div. Rumi Khan thereupon, went to Humayun and requested him to postpone the attack on Div to another time as the sea-air was bad for his health. Humayun agreed to his request.

After the death of Sultan Bahadur Shah, Mahmud Shah III came on throne of Gujarat. During his short rule he tried to capture the fortress of Div from the Portuguese, but he was not successful and Gujarat ports were pillaged by the Portuguese naval commander.

The only incident so far as the history of the district is concerned is the construction of "Deer Park" at Mahmudabad in the time of Mahmud III. He had in 1546 A. D., removed his seat of Government of Mahmudabad on the Vatrak, the city founded by Mahmud Begada about 1479 A. D. In the words of Prof. Commissariat, "Here he laid out a magnificent enclosure, six miles in area, which he named the 'Deer Park' (Ahukhana) and at each corner of the same was erected a pavilion adorned with beautiful gift trceries. By the side of each pavilion was a bazaar, and in every shop every thing that conduced to pleasure and luxury. In many retired corners of the park five gardens were laid out and kept perpetually green by means of water courses. Even the trunks of trees were encased in brocade and velvet, and the branches covered with satin and *kinkhab*. In these secluded retreat, the Sultan passed his time with his "deer eyed spouses" and in the enjoyment of all pleasures of youth." In this manner did the voluptuous ruler of Gujarat fritter away on his selfish and senseless pleasures the revenues received from an oppressed and hard-worked peasantry.

Mahmud Shah III was followed by the boy-king Ahmad Shah III, a young boy. The weakness of the central authority in this region was evident as the nobles virtually became independent within their territories. An imprudent bid for independence from the clutches of Amirs brought the nineteen year old Sultan to his death in 1561 A. D. (April 2nd).

Another boy was put on the throne under the title of Muzaffar Shah III to be the last ruler of the dynasty and the rivalry of the nobles continued unabated. One of the nobles who was fed up with Sultan, invited the Emperor Akbar and this hastened the end of the Sultan's regime.

Akbar's Conquest of Gujarat (1572-73 A. D.)

During the last days of Muzaffar Shah III's reign, due to the intrigues of the Amirs, Akbar was tempted to invade Gujarat and he was invited

by Itimad Khan. Akbar started on the Gujarat expedition from his capital at Fatehpur Sikri on July 2, 1572 A. D., reaching Ajmer on the 26th of the same month. In the vicinity of Deesa, news was brought to the Emperor that Sher Khan Fauladi had raised the siege of Ahmadabad and had fled to Junagadh while his two sons were conveying his family and goods to a place of safety. Akbar sent Kunvar Man Singh, son of Raja Bhagvandas, in the direction of Idar in pursuit of Sher Khan Fauladi's sons.¹ On the 7th November, 1572, the Imperial camp arrived at the pleasant city of Patan formerly known as Naharvala. At Jotana, Akbar received Muzaffar Shah, the last Sultan of Gujarat. Then Akbar Shah received Itimad Khan at Kadi and entered Ahmadabad on 20th November, 1572, A. D. Thus he captured Gujarat with very little loss. After staying for 20 days in Ahmadabad, he went to Khambhat.

Akbar's visit to Khambhat

Akbar's visit to Khambhat in 1572 A. D., is important so far as the history of the district is concerned. Akbar left Ahmadabad for Khambhat on 8th December, 1572 A. D., and reached the famous sea port four days later. The merchants from Rome, Syria, Iran and other foreign countries residing there came and paid him homage. The ships were decorated. Here the Emperor had his first sight of the sea, and embarking on a ship with a select party he made an excursion on the waters.

In 1572 A. D., Khambhat, then yielding an yearly revenue of Rs. 4,00,000 passed under the Emperor Akbar. Akbar brought weavers and other skilled workers, and founded two suburbs calling one after himself and the other Sikandar or Shakarpura.² Though, by lowering trade and transit dues, Akbar increased the prosperity of the province, Khambhat was, from time to time, unsettled by the movements of insurgent bands, and was thrice attacked and pillaged. The famous Portuguese historian Couto writes that Akbar was visited by the Portuguese merchants who happened to be at Khambhat at that time. Emperor put on their dress and allowed them to kiss his hand. The acquaintance thus cultivated with the Portuguese at Khambhat was carried further when Akbar encamped at the port of Surat.

End of the Gujarat Sultanate

During Akbar's invasion of Gujarat, Sultan surrendered himself to the Emperor in the neighbourhood of Kadi. He had been kept in charge of various persons till 1578 A. D., when he managed to evade surveillance and took refuge first with the Hindu ruler of Rajpipla and later on with

1. ABUL FAZL'S *Akbarnama*, trans. by H. Beveridge, III, 6-8. Al-Badaoni, *Muntakhab-ut-Tawarikh* II trans. by Lowo, 143-44.

2. Robertson in *Bombay Government Selection* (New series) XXVI, 55.

one Loma Khuman, a Kathi Chief in the village of Kherdi, near Rajkot, in Saurashtra. He awaited some favourable opportunity for regaining his throne. Later on Sultan was invited by Mughal troopers. Sultan returned victorious to Ahmadabad and his second reign commenced in 1583 A. D. After recovering Ahmadabad, Sultan also recovered Vadodara, Bharuch and Khambhat (of this district). However, after the arrival of Akbar, Mirza Aziz Koka brought to a successful termination Muzaffar's rule in Gujarat. Sultan was captured in 1592 A. D., and at the village of Dhamadka in Kutch he committed suicide.¹

Visit of Foreign Travellers

During this period mention must be made of prominent travellers who visited port of Khambhat at this time. They were Hieronimo di Santo Stefano and Ludovico-di-Varthema (1502-6 A. D.). Hieronimo-di-Santo Stefano a Genoese merchant visited India on a mercantile speculation at the close of the 15th century. He visited the port of Khambhat. The Italian traveller Varthema who visited Khambhat about 1506 A. D., tells us that some 300 ships of various nations rolled in the port to and fro and that the city supplied Persia, Turkey, Syria and Barbary with silk and cotton stuffs.

However, from the beginning of the sixteenth century the trade of the Khambhat suffered at the hands of the Portuguese. Many of its former marts on the coasts of Africa and Arabia were destroyed and much of the traffic with the southern coast of India and the islands of the eastern Archipelago was lost.

An account of the condition of the district is available from the report of the Venetian merchant Caesar Frederich who visited Khambhat by way of Aleppo, Basra and Hormaz. Khambhat, at that time was in (1563 A. D.) the grip of a great famine. The district at this time was ruled by Sultan Muzaffar III. For Caesar Frederich witnessed the Hindus of the town taking their children, both sons and daughters, to the Portuguese and asking the latter to buy them. He saw them being actually sold for eight or ten larins each. The Venetian merchant was astonished at the commercial activity of this port. If he had not seen it, he could not have believed the extent of the trade at Khambhat. Among the commodities brought in from foreign countries are mentioned spices, silks from China, sandals, elephants' teeth, velvets and gold sequins. On the other hand, the merchants sent to Div for export from India, 'an infinite quantity of cloth, white and painted, indigo, ginger, myrobalans sugar, raw cotton, opium, asafoetida, cornelians, agates, etc.' Among the handicrafts of Khambhat, Frederich selects for special mention the manufacture of bracelets made of elephants'

1. COMMISSARIAT M. S., *A History of Gujarat*, Vol. II, Bombay, (1957), p. 26.

teeth in diverse colours for the Hindu women, who took a marvellous fond delight' in them and had their arms fully decked with these ornaments.

The Cultural, Political and Social Progress under the Sultanate of Gujarat

The age of Sultans witnessed remarkable transformation in the district including Gujarat. A new tenure system known as the Wanta came into existence. It was a share left to the Rajput after a major portion, the *Talpad* had been acquired by the rulers. New communities were formed and Islamized like Molesalam Girasias who had been previously Rajputs. The system of Todgaras also came into existence. This period witnessed the rise of Ismailism. The trade and commerce flourished during the age of Sultans. The commerce with West Asia continued till the advent of Portuguese. Many foreign travellers including Barbosa have given glowing picture of trade and commerce which flourished at the port of the Khambhat. The travellers described the pattern of overseas trade. In this trade, textile both silk and cotton, oil seeds and oil, wheat and horses formed the principal items of exports. Barbosa also noted the arts and crafts of the land. The producers of beautiful textiles, the weavers attracted his attention by their skilfulness. Other commodities mentioned by him were beautifully produced ivory, inlaid and metal goods like bangles, dyes, chessmen and bedsteads. In Khambhat then as now was flourishing trade in cornelians, agates and other stones. Ibn Battuta and Wassaf also noted the wealth of Khambhat and its merchants. Italian traveller Conti who arrived in the 16th century found Khambhat a very noble city. The wealth of Sultans was marked by both urbanity and good taste.

The Sultanate of Gujarat reached the pinnacle of prosperity under the rule of Sultan Mahmud Shah (Begado). He was fond of founding new towns and new villages. New arts and crafts were introduced. His court became a great assemblage of the people from all lands. His nobles were cosmopolitan. They included Rajputs, Brahmins, Turks, Russians, Arabs and Persians. The seaboard gave an advantage to Gujarat which was reflected in the society and the culture. Poets and saints from far off Turkey, Arabia and Iran flocked to the courts of the Sultans and they were given royal treatment. Thus they were patrons of art and learning.

In brief we can say that for a century and a half, the Sultans of Gujarat had held a commanding place among the powers of Hindustan and that they have left behind them memorials of their greatness in the architectural monuments at their capital which still evoke admiration after the lapse of more than five centuries.

MUGHAL PERIOD

The conquest of Gujarat by Akbar in 1573 A. D., was followed by the organisation of the kingdom as a Subha or Province of the Mughal Empire.

By now the Mughal rule had commenced in the district along with other districts. The province was ruled by viceroys sent by Mughal Emperors. The author of the *Mirat-i-Ahmadi* says that the sultans of Gujarat had, at the height of their power, held sway over no less than twentyfive *sarkars*, or districts. Akbar after conquering Gujarat divided the province of Gujarat into 16 *sarkars*.¹

The imperial period of the history of Gujarat, during which Gujarat remained a province of the Mughal Empire, extends over one hundred and eighty five years, from 1573 to 1758 A. D., the year in which the capital city of Ahmadabad was finally taken by the Marathas. The first of the long line of Subahdars who were sent from Delhi to govern the province was Akbar's favourite foster-brother Mirza Aziz Koka, the Khan-i-Azam. The viceroyalty of Aziz Koka lasted from the end of 1573 to 1575 A. D.

Rebellion of Gujarati Nobels and Mirzas

The Emperor had hardly left the capital for Khambhat when on the march he heard that the Gujarat nobles, whom he had at their special request given permission to remain at Ahmadabad, had begun to waver in their loyalty to him. It is evident that when too late they realised that they had bartered away their political independence and they now longed to get back their power. The Abyssinian noble Ikhtiyar-ul-Mulk, the chief of the Habshi guards under the late Sultan, escaped with his troops in the direction of Idar. Itimad Khan and other nobles, with the exception of Mir Abu Turab, were also contemplating disloyalty and fight so that Hakim-Ain-ul-Mulk and Abu Turab could barely restrain them from their purpose pending the arrival of the Imperial orders. Akbar at once despatched Mir Bakshi, Shahbaz Khan, to Ahmadabad to arrest and bring over all the Gujarati nobles to his camp and they were distributed for custody among his officers. Itimad Khan now fell into disgrace and was handed over to the care of Shahbaz Khan. He was, however, released in 1575 A. D., and taken back into favour.

Akbar had by now decided to attack the Mirza and to intercept his march. He left the royal harem, as also Prince Salim and others, in his camp at Vadodara in charge of trusted nobles, and with a handful of select followers was in full march for the Mahi. He consented, however, to the loyal advice tendered by those about him and despatched Shahbaz Khan to bring back the Imperial generals who had been sent off to Surat. On the way he received the news that Ibrahim Mirza had crossed the Mahi at the Vankaner ford and was on the way to Sarnal, a small town about five miles east of Thasra in the district. Akbar was preparing to attack his cousin with only 40 men fully armed when the other officers who had

1. *Mirat-i-Ahmadi*, Supplement translated by SYED NAWAB ALI, M. A. and CHARLES NORMAN SEDDON, I. C. S.

been recalled joined him. Even then the Imperial party did not number more than 200 persons while the Mirza had a thousand troopers under him. As Akbar's party entered the gates of Sarnal, Ibrahim Hussain left the town by another gate.

Battle of Sarnal, December 23rd 1572 A. D., should be noted so far history of the Mughal period in the district is concerned. In the open plain behind, which was very rugged and uneven owing to the slopes of the Mahi, and thickly intersected by numerous cactus hedges, the battle between the opposing sides was fought out. It was a sharp, short and a decisive battle. During the struggle, the Mirza's Mughal troops fought very bravely and Bhupat, the brother of Bhagwandas, was among those who were slain. Owing to the thorny bushes barely two horsemen could advance abreast at some places, and at one stage, Akbar and Raja Bhagwandas found themselves alone and attacked by three of the enemy's troopers, one of whom made for the Raja and the other two went for the Emperor. However, Akbar, whose life was in imminent danger managed to ward off the attack. Finding himself at last vanquished, Ibrahim Hussain sought safety in flight and escaped by way of Rajputana to his ancestral estates at Sambhal. He died a wounded prisoner shortly afterwards. After Akbar's reign Jahangir's reign commenced in Gujarat and the district. The Emperor visited Khambhat and passed through several other towns which are described below. Passing through the Parganas of Nadiad and Petlad, scattering rupees among the populace at every large town, the Emperor at last arrived at Khambhat, 'the place of the descent of prosperity', on December, 19 1617 A. D. On the road to it, Muquarrab Khan, the Viceroy of the Subah of Gujarat, waited on his master and presented as an offering a pearl which he had bought for 30,000 rupees.

Jahangir at Khambhat

Jahangir halted at Khambhat for ten days. According to him the port was at this period one of the largest in Hindustan, though large ships could not reach it. Some vessels from European ports were at this time in Khambhat harbour. They were gaily decorated in honour of the Emperor. Like his father before him, Jahangir sailed over the water in a boat, to a distance of about a kos. During his stay at this seaport, the Emperor summoned merchants, tradesmen, monks and indigent persons before him. He gave to each a dress of honour or a horse or money or other assistance according to their condition and status.

Novel Mintage at Khambhat

The Hijri year 1027 began on December, 29, 1617 A. D., when the royal camp was stationed at Khambhat, and it was probably to celebrate this

occasion that the Emperor gave orders for a novel form of coin to be minted in this town.¹

Emperor Jahangir also visited Mahemadabad and Vadasinor towns of the district. Shah Jahan's reign was marked by one of the most virulent famines which Gujarat has known, the terrible years, 1631-33 A. D., which had left their marks in the memory as the *Satyasio Kal*. The Kheda district was also affected by this famine.

The long reign of Aurangzeb seems to have been peaceful for Gujarat. It may be pointed out that in the beginning of Aurangzeb's rule Kheda district was quiet except for riots of Baraiya people. Their uprising was crushed and Thanas were established at Gajna near Khambhat, Petlad and in the areas of rivers Vatrak and Mahi. In the last years of Aurangzeb's rule riots took place at the towns of Kheda, Mahudha and Nadiad, particularly in 1705 and 1707 A. D. The district also experienced in the time of this Emperor a series of famines particularly in the years 1681-82, 1684-86, 1690-91, 1695-96 and 1698 A. D.

Foreign Travellers during Mughal Rule

Except the first few years, Khambhat was, during the whole of the seventeenth century free from pillage or disturbance. Its manufacturers maintained much of their importance, but the honour of being the chief Muslim port of Gujarat was gradually passing to its younger rival Surat. The old trade route through Khambhat and Ahmadabad north by Mount Abu was, at this time, closed by the disturbed state of Marwar and Rajputana. Deccan wars kept the Imperial headquarters in the south in Khandesh, and in the Deccan. The increase in the size, and the growing shoalness of the head of the gulf, made the mouth of the Tapi a safer anchorage for European ships. In 1608 A. D., Khambhat had still a topping trade for all sorts of cloth and rich drugs. Often near the city were, as many as two hundred small Portuguese grabs and frigates.² The Dutch established themselves in 1617 A. D. In 1623 A. D., they had a large and thriving factory.³

De la Valle, who was in Khambhat in 1623 A. D., though he says very little about the trade of the city or of the wealth of its people, gives the

1. *Tuzuk-i-Jahangiri*, I, 418. In 1573, along with the rest of Gujarat, the city of Khambhat passed under the Mughal Empire, though Akbar does not seem to have exercised in this city the sovereign's right to issue coins bearing his name. Under JAHANGIR we meet, for the first time with a reference to a distinctively Khambhat Coinage, and even then the issue was probably not for currency purposes but merely in commemoration of the Emperor's visit to the city. Cited in "*History of Gujarat*" by PROF. M. S. COMMISSARIAT, Vol. II, p. 61.
2. Finch (1608-1612) in *Kerr's Voyages*, VIII, 308.
3. DE LA VALLE's Letters, 64, 68. According to some accounts the Dutch had factory at Khambhat as early as 1604. A. D., but Stavourinus (III, 107) gives 1617 A.D. They would seem to have closed their factory before 1670.

impression of considerable prosperity of Khambhat. The suburbs, stretching far beyond the town, were adorned by reservoirs, especially by one beautifully built with a flight of marble steps. There was a hospital with rooms where men and women suffering from incurable diseases were lodged. Wards for aged and infirm animals were also kept.

The Advent of the Parsis

The Parsis advent in India has been described by Henry Lord, an Englishman who arrived at Surat in the twenties of the seventeenth century. According to him the exodus of Parsis took place after the death of their last Emperor Yezdegard on account of the religious persecution at the hands of Arabs. They all sailed in seven ships. Out of these seven ships, one ship sailed to Khambhat. Here the fugitives were allowed to settle on the same conditions as at Sanjan and Variav. This account is given by Henry Lord who visited Surat in 1624 A. D. Ogilby's account, about fifty years later (1670), is interesting, though in some details incorrect.

The city, twice as big as Surat, was surrounded by a stone wall with twelve gates. In the middle were there great market places and fifteen pleasant orchards with four pools supplying water all the year round. The streets were straight and broad and locked every night by a great pair of gates. The houses made partly of bricks and partly of freestone, were very moist and very cool. In England they would be accounted mean, yet they were the best in the country, covered with tiles, and having gutters for the rain water. Outside of the walls, were great suburbs, the chief ornament of the city. Though many ships came from all places, the haven was of no consequence, only a bare road. Ships of burden were forced to lie a good distance from the shore. Small vessels could anchor at high water close before the city but at low water they lay dry. The tides at Khambhat were exceedingly swift. The flood rushed so furiously that no horse could outrun it and rose to its full height in a quarter of an hour.¹ About the same time, Tavernier (1642-1666 A. D.) states that a bank of silt, about a mile and a half broad, had formed between the town walls and the water, and the great ships could not come nearer.

Early in the eighteenth century Khambhat had further declined. It was (1720 A. D.) still a place of good trade, contributing much to the wealth and grandeur of Surat, the chief centre of commerce. However it was harrassed by the Pataners, mostly horsemen and bold fellows who borrowed round sums from the city by way of compulsion.² The Rajputs and Kolis plundered

1. Atlas, V. 213-353.

2. These were probably the Kathis, called Pataners, from the city of Dev of Mungi Patan (north latitude) 20 55' east longitude 70°21') on the south-west coast of the peninsula. Patan, on the south point of Veraval harbour, has within its walls the famous temple of Somnath.

even to the gates, and sometimes surprised the city itself for which neglect the Governor's head answered. In 1716 A. D., they were very bold and presumptuous so that a stop was put to the trade of Ahmadabad and Khambhat. The Governor of Surat¹ raised an army of 20,000 men to chastise and restrain them. However, they laid so many ambuscades that in two months the army was reduced to less than half, and the rest were obliged to go home with sorrowful hearts to Surat.²

Post—Aurangzeb Period and the District

The year 1707 A. D., is a landmark in the history of Gujarat because the long reign of Aurangzeb came to an end in this year. The district along with the rest of Gujarat was now affected by the post-Aurangzeb period of internal feuds, strifes and Maratha intrusions. Even at the time of his death Gujarat was invaded by Maratha forces under the leadership of Balaji Vishwanath. During the reign of Emperors Farrukh-Siyar and Muhammad Shah the power deteriorated and the stability of the Mughal rule from then onwards was on decline. During the time of these Emperors following Viceroys were sent from Delhi.

	A. D.
1 Ibrahim Khan	1707-08
2 Ghazi-ud-din Khan Bhadur Firuz Jung	1708-10
3 Asaf-ud-daulah Asad Khan (by deputies)	1712
4 Shahamat Khan (Amant Khan)	1713
5 Daud Khan Panni	1713-15
6 Maharaja Ajit Singh of Jodhpur	1715-17
7 Khan Dauran : Haider Ouli Khan as Deputy	1717-19
8 Maharaja Ajit Singh (again) : Anup Singh as Deputy	1719-21
9 Haidar Ouli Khan (Muiz-ud-daulah)	1721-22
10 Nizam-ul-mulk : Hamid Khan as Deputy	1723-24
11 Sarbuland Khan (Muwariz-ul-mulk)	1725-30

It may be pointed out that from 1723-24 A. D., the internal strifes began to increase when Hamid Khan was Deputy under Nizam-ul-mulk the Viceroy. In 1723 A. D., Sarbuland Khan Bahadur was appointed as Viceroy. The Gujarati noble Shujat Khan was appointed as Governor of Surat. Shujat Khan requested Hamid Khan to hand over the charge. However, the latter asked Shujat Khan to allow him to stay on till the rains were over. This request was refused and after a short skirmish Hamid Khan left the city and went to Dohad. Hamid Khan took the help of Kanthaji Kadam Bande and at Kapadvanj, the opposing armies met at in this district. In December 1724 A. D., Shujat Khan was wounded and killed. The activities of Hamid Khan and his allies Marathas are now described in detail.

1. This was Haidar Kuli Khan who afterwards was (1721-1722 A.D.) 51st Viceroy. In 1716 A.D., when appointed both to Khambhat and Surat, he chose Surat for himself and sent a deputy to Khambhat.

2. HAMILTON's *New Account of Hindustan*, I, 145.

During this period two prominent events occurred viz. (1) death of Sujat Khan and (2) murder of Pilaji Rao Gaekwad at Dakor. It may be pointed out that as the conditions at Delhi in the beginning of 18th century worsened the practise of sending Deputy instead of Viceroy came into existence.

In 1725 A. D., the whole city of Khambhat was threatened with destruction by two rival Maratha armies, under Pilaji Gaekwad and Kanthaji Kadam. At Pilaji's approach the country people flocked in alarm to Khambhat. Following them, he demanded Rs. 5,00,000 and when payment was refused he set fire to the suburbs. Soon after Kanthaji came, claiming sole power to levy contributions, and offered Pilaji Rs. 20,000 if he would leave. Refusing to leave, Pilaji was attacked and defeated. Then Kanthaji demanded a contribution of Rs. 1,10,000 of which the English share was to be Rs. 5,000. Mr. Daniel Innes, the Resident, remonstrated, pleading the privileges of trade and the exemption from all payments conceded to the English by Shahu Raja. After receiving the first instalment of Rs. 500, they were forced to leave and nothing more was paid. The followers of Hamid Khan, the Musalman Governor of Ahmadabad, next appeared before Khambhat, levying Rs. 35,000 on the town, and demanding Rs. 1,000 from the Residents.

After Hamid Khan's followers left, a new Deputy was appointed on promise of sending Rs. 90,000 to Ahmadabad. This sum had to be wrung from the people of Khambhat and no sooner did the unhappy merchants and shopkeepers hear of his approach, than they hid themselves, or made their escape to the neighbouring villages. For six days not a man was seen in Khambhat, though the Governor threatened, unless, the people came back, to give over the city to pillage. The details of Khambhat Merchants resentment are also available from English Records.

The Decline of Mughal Rule and Maratha Inroads

The decline of the Mughal empire which set in the second half of the reign of Aurangzeb was marked by the increasing tempo of Maratha inroads. Mughal rule in the district lasted for half a century after Aurangzeb's death. The period from 1721 to 1724 A. D., interests us, as during this period armies of Hamid Khan, Deputy of Nizam-ul-mulk and Kanthaji came to Kapadvanj. At this town Hamid Khan received the information about the movements of Sujat Khan, a Deputy of Sarbuland Khan, viceroy of Gujarat and Malwa. At a favourable opportunity Hamid Khan attacked and slew Sujat Khan within a few miles of Ahmadabad. Kanthaji collected Chauth and Sardeshmukhi from the district.

At this time Rustam Ali Khan was in command of Petlad and Surat. He could not tolerate the death of his brother Sujat Khan. He, therefore,

concluded a truce with Pilaji Gaekwad, and together they crossed the river Mahi on their way to Ahmadabad. At town of Adas which lies at present in the district, a battle was fought. In this Rustam Ali was able, on account of superior artillery, to drive back Hamid Khan. Meanwhile Pilaji received overtures from Nizam-ul-mulk to assist his persons. He, therefore advised Rustam Ali to charge the fugitives. While complying, Rustam Ali left his guns behind, when Pilaji, seizing them treacherously, opened fire. Rustam Ali fought bravely, but at last despairing of success and deeply affected by the perfidy of his ally, stabbed himself to death reaching the village of Vaso (1724 A. D.) which is in the district.

Kanthaji and Pilaji, jointly proceeded to levy the Chauth. There was rivalry between Pilaji and Kanthaji. Their difference of opinions resulted in a trial of arms at Khambhat, in which Pilaji was defeated and had to retire in 1725 A. D., to the town of Matar, a taluka headquarters in the district. Kanthaji, thereafter levied a contribution of rupees one lakh and eleven thousands from Khambhat. Of this amount, the English factory was required to pay Rs. five thousand. Hamid Khan now feared that the contention between these two Maratha Chiefs would lead to the desertion of one or another of his allies. He, therefore intervened and effected an understanding between them, according to which the Chauth of the districts east of Mahi was assigned to Pilaji Gaekwad and that to the west of Mahi to Kanthaji Kadam.

Khambhat Merchants' Resentment : (1744 A. D.)

We find another interesting local incident at Khambhat referred to in the English records.¹ It appears that, about this time, the native merchants of Khambhat left the town in a body to show their discontent at some oppressive measures taken by Najam Khan, the Governor. They evidently asked the head of the English factory to join them, which he declined to do after some hesitation. It should be noted that company had given strict instructions to its residents to observe neutrality in respect of local politics. The positive orders of the Court of Directors to their servants in India on the subject of political neutrality mentioned above, were strictly obeyed by the Chiefs of the factories; and the evidence is clear that in Gujarat, till the middle of the 18th century, i. e., more than one hundred and forty years after the establishment of the English factory on the Tapi, Company's agents wished to play the role of merchants only and nothing more, and that their subsequent acquisition of political power at Surat was in a large measure forced upon them by the chaotic conditions in which they found themselves involved.

1. The correspondence was conducted between THOMAS HOPE in charge of English factory at Khambhat and JAMES HOPE.

Hamid Khan and Maratha's Plundering Raids in the District

Emperor of Delhi was offended at Hamid Khan's conduct in disobeying his orders and giving support to Marathas. He therefore sent Sarbuland Khan. At this time Marathas sided Hamid Khan. They crossed the river Mahi and joined him at Mahamadabad. Near Ahmadabad the battle was fought out and Marathas became victorious. Thereafter Hamid Khan and Marathas engaged themselves in raids and plundering expeditions but at Sojitra and Kapadvanj, (both the towns are in the district) they were routed by Sarbuland Khan's son Khan Azad Khan in 1725 A. D. who retook Baroda. About this time Kanthaji attacked the town of Umreth where many wealthy Brahmins resided. Subsequently to assist Sarbuland Khan, Peshwa Baji Rao sent Chimanaji Apa to secure advantages from viceroy. Chimanaji exacted a heavy contribution from Petlad in 1728 A. D. and plundered Dholka. He, however agreed to give guarantee about the safety of country, and the Peshwa was given the right to levy Chauth and Sardeshmukhi. Sarbuland Khan acceded to his request. Peshwas promised to keep up a body of 2500 horse in order to put an end to depredations committed by Marathas and other free-booters.

The animosity between Bajirao Peshwa on one hand and Pilaji Gaekwad, Trimbak Rao Dabhade and Kanthaji Kadam led to an open rupture. At Bhilpur, Dabhade was killed by the army of Peshwa headed by Bajirao, who gained victory. A treaty was concluded in 1731 A. D. Soon after this Pilaji was murdered at Dakor. The period that followed the year 1737 A. D., was one of rivalry between Peshwa and Gaekwad. A battle was fought at Mogari near Anand between Kanthaji and Rangoji agent of Damaji in which former was defeated. Peace was concluded between these two rivals by a treaty in which it was stipulated that Damaji should receive district north of river Mahi. Minor skirmishes went on. Meanwhile Momin Khan died in 1743 A. D., and orders were received from the Imperial Court directing deputy Fida-ud-din to carry on Government in conjunction with the deceased viceroy's son Mufta-Khir Khan. Open hostilities soon commenced between Rangoji and Fida-ud-din Khan and Mufta-Khir Khan. One Abdul Aziz Khan, commandant of Juner near Puna, contrived to send a forged order from the Emperor appointing him as viceroy. Abdul Aziz Khan also appointed Jawanmard Khan Babi as his Deputy. Thereupon the troops became clamorous for their pay and placed the viceroys under arrest. They were, however, eventually released and both departed. Fida-ud-din for Agra and Mufta-khir Khan for Khambhat. After taking Petlad, Khande Rao Gaekwad and Rangoji marched on Ahmadabad and obtained their former rights and possessions. Jawanmard Khan continued as Deputy viceroy and he met Rangoji deputy of Khande Rao Gaekwad at Kheda in 1744 A. D., and established friendly relations. Between 1751 A. D., and 1753 A. D., skirmishes continued between Marathas and Mughals. In 1753 A. D., a treaty was concluded between Peshwa and Gaekwad. From 1753 to 1803 A. D., the rivalry

between Peshwa and Gaekwad continued unabated. The district accordingly came under the sway of one or another partly depending upon their strength. The affairs, however, began to be settled with the Treaty of Bassein which was entered into between Peshwa and English in 1802 A. D.

Mehwasi Chiefs

During the latter part of the eighteenth Century, the Mughal rule was on wane and the Maratha authority to shelter people from the raids of freebooters and the exactions of their stronger neighbours drove owners of many villages to seek the protection of local chiefs. In the Maratha period, the continued state of warfare resulted in the country being classified into peaceful (*Rasti*) and troubled (*Mehwasi*). The trouble was mainly caused by Koli freebooters and some Rajput Chiefs, who either as ejected from an original ruling position or having always been freebooters in the wilder parts of the country, maintained a hold by terror and force on the neighbourhood. A number of chiefs, who had lost their domains settled where they could and got hold of what they could.¹

These Mehvasi chiefs were the petty chiefs and Zamindars residing in the vicinity of Mahi river. They possessed villages ranging from the one to twelve. "In the centre were three kinds of villages : *rasti* or peaceable *mehwasi* or refractory, and an intermediate class of *rasti-mewas* villages. The refractory villages were occupied by the turbulent descendants of the Rajput and Koli warriors. Here Koli *Thakurs* or Chiefs administered despotically their little clusters of huts. Revenue was demanded but seldom paid.² Small estate of Anghadi and large property of Umeta belonging to Mehvasi chiefs were placed under the protection of British Officer under the agreements of 1812 and 1829 A. D. After the Independence Mehvasi chiefs have been dispossessed of their rights.

BRITISH PERIOD

In 1583 A. D., the English made their first attempt to open a trade with India. Three merchants, Fitch, Leeder, and Newberry, with letters from Queen Elizabeth to Akbar 'King of Cambay' started for Gujarat by way of the Persian Gulf. Reaching Hormuz in safety, their efforts to trade were at first successful. However, they were soon seized by the Portuguese, imprisoned, and carried to Goa. Escaping from Goa, Fitch traded in India for some time, but none of them carried out the original scheme of visiting Khambhat.³ However, the English, in 1613 A. D., gained permission to start a

1. BADEL-POWELL, *The Land-system of British India*, Vol. III, pp. 277-79.
2. Government of India : *The Imperial Gazetteer of India*, Vol. XIV, (1908), p. 284.
3. Fitch in Hakluyt's *Voyages*. II.375-402. Thanks chiefly to the fame of Mahmud Begada, European writers in the sixteenth century used Khambhat in the sense of India.

factory, and in 1616 A. D., were strong enough to have the Portuguese dismissed from the town.¹ Shortly after the beginning of the seventeenth century (1611 A. D.), the English traveller Finch describes Cambay (Khambhat) as compassed by a strong brick² wall, with high and handsome houses forming straight paved streets, each with a gate at either end.

The English were the only Europeans who kept a factory at Khambhat after the close of the seventeenth century.³ The history of the English at Khambhat, in the beginning of the eighteenth century, runs in most respects parallel with the history of their larger establishment at Surat. At both the places there were the same annoyances and obstructions. Both were subject to the oppression of Mughal Governors and were harassed on land by lawless Marathas, and at sea by no less lawless Kolis and Rajputs. In 1720 A. D., Mr. Wayard, the Resident, suffered much from the extortions of the Muhammadan Governor.

The real connection of the British with Kheda district commenced in 1803 A. D. Part of Kheda district came into British possession in 1803 A. D. and the rest in 1817 A. D. Under the terms of the Treaty of Bassein (December 31, 1802), the Napad group of villages was handed over by the Peshwa. In 1803 A. D., the Gaekwad ceded Nadiad, Matar and Mahudha, as well as the fort and town of Kheda, for the maintenance of troops supplied by the British Government as per terms of the subsidiary system of Lord Wellesely. Again by treaty dated November 6, 1817 A. D., the Gaekwad ceded Mahamadabad, Alina, Thasra Antroli, and half of the town and district of Petlad to provide for the payment of additional troops. At the same time Kapadvanj and Bhalaj were received in exchange for the district of Vijapur in Northern Gujarat.

The territories of Kheda acquired in 1803 A. D., together with Dholka, Dhandhuka, Ranpur, and Gogha, which now form part of Ahmadabad and Bhavnagar districts, remained in charge of the Resident at Vadodara from the date of their cession till May, 1805 A. D. During this time an European Assistant and native officers administered according to local usage, the police and judicial matters. In 1805 A. D., a Collector was

1. Sir T. Ross in Kerr's Voyages, IX, 315.

2. This is probably correct as Forbes (*Oriental Memoirs* II. 18, 19) speaks of it as a brick wall. Mandelso (1638) talks of a handsome wall of cut stone (*Travels* 101, 108), Ogilby (1670, *Atlas* V. 213) of a double stone wall, and Baldaeus (about 1660, *Churohil*, III 506), of a triple wall. Thevenot (about 1666, *Voyages* V. 36) a more careful observer, gives some further details. The town walls were beautifully built of brick about four yards high and with towers at intervals. The Governor had a castle, large but not beautiful. The houses were built of sunburnt bricks. Outside of the town were many fine public gardens and a marble tomb built by a king of Gujarat in the memory of Governor of Cambay. Mandelso (1638) and Baldaeus (1660) both speak of Cambay (Khambhat) as twice the size of Surat.

3. It seems doubtful whether the English had a factory between 1660 and 1700 see Macpherson's *commerce* 183.

CHAPTER II—HISTORY

appointed, with jurisdiction over the ceded tracts, both those to the north of the Mahi and those to the west of the Gulf of Cambay (Khambhat). In the same year the town of Kheda was selected as a large military station. The increase in the British possessions consequent on the treaty of November, 1817 A. D., necessitated fresh administrative arrangements. The territory north of the Mahi was from January, 1, 1818 A. D., divided into the two districts of Kheda and Ahmadabad.

Important Events During British Regime in the District till 1856 A. D.

In the district after the British acquired it, there were some skirmishes. Towards the end of 1824 A. D., the Kolis of the village Dudhal exhibited violence and strongly opposed a party of Native Infantry headed by Lieutenant Ellis. In the encounter Ellis was killed while storming the village. It was not until the beginning of 1825 A. D., that a wing of the 8th Native Infantry and a squadron of dragoons were ultimately able to restore order.

In the same year, i. e., 1825 A. D., a person called Govinddas Ramdas who persuaded his followers to believe that he was endowed with supernatural powers attacked the town of Thasra (night of the 17th March, 1825 A. D.) with 500 persons. His purpose was to remove the local officer appointed by the British Government. However, he did not succeed. There was dissatisfaction among the Desais of this district as Desaigiri was abolished from many parts of the district and the Desais with the co-operation of Patanwadias and Barias unsuccessfully resisted the attempts of the East India Company to break their hold in the rural areas.

In 1830 A. D., Kapadvanj was included in Ahmadabad, and Kheda became a sub-collectorate under the Collector of Ahmadabad. In 1833 Ahmadabad and Kheda were again separated. Since then more than one villages have been transferred from one district to the other. Thus after 1825 A. D., till the revolution of 1857 A. D., Kheda district was peaceful but was ruled firmly.

CAMBAY STATE

Khambhat was feudatory State in the Political Agency of Kheda lying at the head of gulf of the same name, in the western part of the province of Gujarat. between 22° 9' and 22° 41' N. and 72° 20' and 73° 5' E., with an area of 350 square miles.

Between 1299 to 1730 A. D., Khambhat was under Sultans of Delhi and Ahmadabad and Mughal rule. During the fall end of the Mughal rule; the State of Khambhat came into existence.

Commencement of Cambay (Khambhat) as a Separate State

Mirza Jafar (Momin Khan I) 1730-1743 A. D.

It is interesting to know as to how Khambhat became a separate State under Momin Khan I. For two years after his father-in-law's death (1730 A. D.), Mirza Jafar Najam-ud-daulah remained in charge of Petlad. In 1730 A. D., in consequence of some misunderstanding with the Viceroy, he retired to Delhi. Well received at court he returned in the same year (1730 A. D.) to Gujarat with Maharaja Abhayasing, the new Viceroy. Mirza Jafar did the Maharaja good service inducing Mubarz-ul-mulk the late Viceroy to retire from Gujarat without a struggle. In reward, he was made paymaster of the troops, reporter on Gujarat and Governor of Khambhat. The management of the lands near Khambhat was entrusted to his cousin Fida-ud-din Khan. For a time Mirza Jafar held Petlad in farm. However, disputing with the Viceroy, he was forced to give it up. In 1733 A. D., in consequence of Mula Muhammad Ali's disturbances,¹ Mirza Jafar was ordered to take charge of Surat. However, his agent failing to take it, the city remained in the hands of Tegbag Khan. At Khambhat, Mirza Jafar was nearly independent. In 1732 A. D., when the Viceroy left, he treated Ratansing the Deputy Viceroy with little respect, and in 1724 A. D., when ordered to relieve Vadodara, he withdrew, and left the city to fall into the Gaekwad's hands (1734 A. D.). In the following year (1735 A. D.), the Viceroy suspected Mirza Jafar of secretly helping Sohrab Khan to gain Viramgam. Moreover so strong was the ill-feeling between them, that Mirza Jafar, afraid of assassination, withdrew to Khambhat. Soon after (1736 A. D.), engaging a Maratha force near Khambhat, he was defeated and compelled to retire within the walls, where he remained inspite of Ratansing's orders to help him against the Marathas. Ratansing, in return, handed over Petlad, Arhar-Matar and Nadiad to Sher Khan, one of the Babi family. Mirza Jafar was preparing himself to resist this transfer, when with the title of Najam-ul-daulah Momin Khan Bahadur Firoj Jang, he was (1737 A. D.), appointed Viceroy. Opposed by Ratansing and the Jhaloris, Momin Khan was forced to seek the help of the Marathas. Summoning Rangoji, he promised that, if they were successful, he would make over to the Marathas one-half of the Gujarat revenue, except the receipts from Ahmadabad and Khambhat. Very shortly after (1737 A. D.), Abhaysing was again chosen Viceroy. At the same time Momin Khan was told that the appointment of Abhayasing was nominal, and that Emperor wished Momin Khan to persevere in expelling Abhaysing and his adherents. Momin Khan accordingly appointing his son-in-law Najam Khan Governor of Khambhat, advanced against Ahmadabad, and with the aid of his Maratha allies, after a siege of nine months, captured the city. During most of the five following years Momin Khan's

1. Details are given in the *Surat Statistical Account*. *Bombay Gazetteer*, II, pp.110-11.

headquarters were in Ahmadabad. However, in 1741 A. D., he visited Khambhat, and took what steps he could to prevent its decline. In 1743 A. D., Momin Khan died.

As a temporary measure, he was succeeded in the Government of Gujarat by Fida-ud-din Khan his reputed brother, and Mufta-khir Khan his son. In the following year (1743-44 A. D.) Mufta-khir was formally appointed Viceroy. Failing to hold his own against Jawan Mard Khan and other members of the Babi family, he was forced to retire to Khambhat. Here along with Fida-ud-din Khan, Najam Khan, and Rangoji, plans were discussed for an attack on Ahmadabad. In return for his alliance, Rangoji, on Gaekwad's behalf, demanded one-half of the Khambhat revenues in addition to those of the rest of Gujarat granted by Momin Khan in 1737 A. D. Mufta-khir Khan and his party at first refused; but Rangoji, bringing an army close to the city, made them agree, and advance him a further sum of Rs. 80,000¹. These schemes against the Babi coming to nothing, Mufta-khir Khan remained in Khambhat for five years. From time to time he tried to enforce his right to be Viceroy, but his attempts failing he tried to gain possession of Khambhat. With this object he procured the death of his brother-in-law Najam Khan, who since 1737 A. D., had managed the city.

English Factory, 1737-1748 A. D.

In these troubles the English factory suffered many exactions. In 1737 A. D. Momin Khan I pressed by the Marathas for the price of their alliance, extracted from Khambhat ruler a sum of Rs. 1,50,000. "Attempting on one occasion to wring a contribution from Mr. Hodges, the English Resident, he was at first bought off by the present of a fowling piece. He then wanted to buy silk, iron and sugar of the value of Rs. 30,000 to 40,000. This too the Resident managed to evade. However, he was not always so successful, and had from time to time to pay large sums"². In 1741 A. D., the Nawab forbade the exportation of indigo, and seized some property belonging to Lambton, the chief of Surat, who had disregarded his order. This act was declared as an infringement of the English Company's privileges, and some grabs were ordered to seize Khambhat boats. On this occasion the Nawab speedily came to terms with the English.

1. According to the account given in the *Surat Diaries*, Rangoji sat down before Khambhat with twenty thousand men, and from this time, although obliged to take, less the Marathas claimed half the revenue of the city. On the occasion of the Maratha advance, the Nawab insisted that some of the bastions should be defended by the English resident. He succeeded in mustering a native officer and five peons, but the courage of the little party was not tried. The invaders, unprepared to batter stone walls satisfied their revenge by cutting off the ears and noses of all Musalmans on whom they could lay hands. *Surat Diaries*, 1743-1746, in *Bombay Quarterly Review*, IV, 231.

2. *Bombay Quarterly Review*, IV, 233.

The same process of capturing boats was, with similar results, adopted by Sewel the next Resident¹ in 1743 A. D.

The City, 1737-1748 A. D.

Though trade was gradually deserting Khambhat, the eleven years (1737-1748 A. D.) of Najam Khan's management seems to have been fairly prosperous. The Viceroy was interested in Khambhat; and, as noticed above, in 1741 A. D. paid it a special visit with the object of inquiring into the causes of its decay. During the years (1743-1748 A. D.) that followed Momin Khan's death, though the Khambhat revenues were from time to time under pressure by Maratha demands, the city was never attacked, nor its neighbourhood laid waste. The suburbs founded by Akbar were still inhabited, and the other nine quarters beyond the walls continued to support skilful and well-to-do craftsmen. At the same time the revenues had fallen off, and, in spite of the levy of fresh taxes², the total receipts were not more than Rs. 4,00,000. At the close of 1750 A. D. (December) the Jesuit Father Tieffenthaler found Khambhat governed partly by a Maratha, the Damaji called Rav, and partly by a Mughal. The Mughal paid the Emperor no tribute because he could keep from the Marathas and the savage Kolis hardly enough for himself and his garrison. The objects of interest were two mosques, one of cut stone very beautiful; the Governor's house; and the English factory. Most of the people were Hindus; the rest, except 200 Parsis were Musalmans. The English brought various wares from Bombay and sent away cotton goods. These goods, woven in considerable quantities in villages round, were of a special make much in demand in other countries, even in Europe. The only other industry was manufacture of salt. The only small one-masted craft could come to Khambhat, and even they, except in the rains and at very high springs when they could reach the walls, had to stop half a mile from the city. Seven years earlier the tide dashed in with such a speed that a horseman at full gallop could hardly outturn it. Now (1750). The tide set against the east shore of the gulf, but at Khambhat came so slowly and quietly as to give no great shock to vessels at anchor.³

1. *Surat Diaries, 1741-1748.*

2. Najam Khan was the first ruler of Khambhat who taxed grain. Every cart-load was charged 4 as. For sometime the cultivators succeeded in avoiding the weight of this cess by increasing the cart-load from 32 *mans* to 60 *mans* when Najam Khan found this out, he changed tax to one of 3 pice on every 5 *mans*. ROBERTSON, 65.

3. Res. Hist. et Geog. de I. Inde. I. 381-383. In Tieffenthaler's opinion this change was due to the rising of the banks at the head of the gulf, to the filling of the bed and the removal of a groin of sand that used to stop the mouth and pile up the tidal waters till they forced their way in and rushed as along a ditch. In his sketch (458) the whole top of the gulf is entered as covered at the flood and dry at the ebb.

Momin Khan II (1748-1783 A. D.)

On hearing of Najam Khan's death, the Delhi Government confirmed Mufta-khir Khan in the Chiefship of Khambhat, dignifying him with the title of Nur-ud-din Muhammad Khan Momin Khan Bahadur and with the rank of a noble of 6,000. Fida-ud-din Khan, when he heard of the death of Najam Khan, on pretence of condoling with the family marched to Khambhat, but he was refused admittance and forced to retire. Succeeding without opposition, one of Momin Khan II's first acts was to poison his half sister Nur Jahan or Khanum Begam, the widow of the late Governor.¹ In 1752 A. D., when news reached Gujarat of the division of the province between the Peshwa and the Gaekwad, Momin Khan, who was always quarrelling with the Gaekwad's agent, begged the Peshwa to include Khambhat in his share. The Peshwa agreed and in the course of the year (1752 A. D.), Momin Khan paid Pandurang Pandit the Peshwa's Deputy Rs. 7000, together with a present of four small cannons. In the following year (1753, April) Raghunathrav, the Peshwa's brother, advancing within ten miles of Khambhat, forced Momin Khan II to raise his yearly payment to Rs. 10,000.

The Nawabs (1720-1880 A. D.) and the Maratha Attack, 1753 A. D.

Even this was not enough to protect Khambhat from Maratha demands. During the rainy season many parts of the fort at Khambhat fell down. Hearing, this Shripatray before the rains were over, made ready a detachment of troops and sent forward a messenger to examine the State of Khambhat. He left Ahmadabad with a body of horse and a party of five hundred Mavalas. After a few days march, at Petlad, about sixteen miles north east of Khambhat, Shripatray halted and prepared to attack the city. Here Vrijlal, Momin Khan's steward, on his way from Bombay, hearing that Shripatray was at Petlad, went to pay his respects. Suspecting Shripatray's designs, Vrijlal sent his master an express message to be on his guard against surprise attack. Momin Khan made every effort to repair the walls. On the first favourable evening Shripatray moved from Petlad. He counted on being at Khambhat by midnight. However, the guide lost his way, and he did not reach the city till shortly before day break. On nearing the town, the besiegers met with a second disappointment. Where they expected a breach, they found a new and strong fortification. One part of the wall seemed undefended, and this the Mavalas scaled. However, the assailants were driven back. By this time Momin Khan was on the spot with reinforcements, and a third attempt was repulsed, with heavy loss. During the course of fighting, Momin Khan was brought on knees by Shripatray, who laid Khambhat villages waste. This device succeeded, and Momin Khan anxious at any cost to be rid of the Marathas, agreed to

1. Robertson, 65.

pay Rs. 7,000. The Marathas withdrew, but such had been their violence and greed that the eleven suburbs were almost entirely deserted. For the next year the district round Khambhat yielded him nothing. All But Rs. 60,000 had been carried off by Shripatray, and of what was left, the whole was given to the Peshwa, half as his ordinary share, and the rest as a special present on condition that no Maratha chief should in future collect the revenue at Khambhat. At the same time Momin Khan seeing that he could not trust the friendship of the Marathas, determined to increase the strength of his army. With this object he was forced to resort to many acts of extortion. And though, for the time, his measures brought him large sums of money, they did his State a lasting injury, forcing from it many wealthy and peaceful subjects.

1755-1757 A. D.

Soon after this, the Peshwa made a second attempt on Khambhat. Bhagvantrav, his agent, sent without troops, was well received. However, Momin Khan knew why Bhagvantrav had come, and, on getting hold of a letter from Bhagvantrav to Salim Jamadar at Ahmadabad inviting him to attack Khambhat, he surrounded Bhagvantrav's house and made him prisoner. An attempt of the Maratha garrisons of the neighbouring towns of Jambusar, Virmgam and Dhandhuka to force the release of Bhagvantrav failed. It was finally agreed that Bhagvantrav should be released, and that relations between Momin Khan and the Peshwa should remain unchanged. In the following year (1754 A. D.) Bhagvantrav made another attempt on Khambhat. After several doubtful engagements, peace was concluded on condition that Momin Khan should pay Rs. 10,000. The chief events of the next two years (1755-1757) of Momin Khan's rule, the most successful period of his life, belong to the general history of Gujarat. He collected tribute from Saurashtra, captured Gogha, recovered Ahmadabad from the Marathas and defended Ahmadabad. Capture of Ahmadabad by Momin Khan infuriated Gaekwad and he attacked Ahmadabad. Simultaneously Khambhat was also invaded by land and sea.

Damaji's Fleet

It appears that Damaji utilised his fleet, which had become a terror on the Gujarat coast, for the purpose of the campaign against Momin Khan II. Writing on January 1, 1757 from Khambhat. Robert Erskin says that the Governor of that town had sent out his fleet to intercept Damaji's gallivats, "which, he had advice, were coming to Jambusar with cannon to be employed against this place or Ahmadabad." He further conveyed the report that Damaji intended shortly to besiege Khambhat or Ahmadabad with an army of eight or ten thousand men, and he asked the Chief at Surat to send him a gallivat, with a body of Topasses,¹ to remain at his disposal 'till this confusion was at an end.'

1. Topasses was the name by which half-caste Portuguese soldiers (mestizos) were known to the English at this period.

After frequent skirmishes Momin Khan II was forced to restore Ahmadabad to Marathas in February, 1758 A. D. The conditions of surrender were, on the whole, favourable. He kept Khambhat, and was paid by the Peshwa a sum of Rs. 1,00,000. On the other hand, he was forced to pay the Marathas an yearly tribute of Rs. 10,000 and to give up all claims on the town of Gogha. On return from Ahmadabad, Momin Khan was at first harassed by his troops for arrears of pay. However, he pacified troops with the help of his steward Vrijlal.

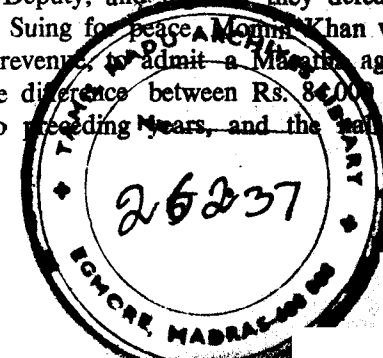
Shortly after this (1757 A. D.), Momin Khan is said to have instigated the murder of his steward Vrijlal. He attempted to evade the Peshwa's tribute, and in hope that his failure might be over looked, he made arrangements for paying a visit to Poona. However, Sadashiv Ramchandra, the Peshwa's Deputy, refused to allow him to leave until he had made good his arrears. Advancing against the city he continued to besiege it till Momin Khan handed him a sum of Rs. 20,000. Shortly after, Momin Khan set out for Surat, and was there received by Mr. Spencer, the chief of the English factory. From Surat he sailed for Bombay, where the Governor, Mr. Bouchier treated him with much courtesy. After a short stay, he went on to Poona, reaching the end of his Journey in 1759 A. D. At Poona he was received with attention. The Peshwa's cousin, Sadashivrav, met him at the gate of the fort and conducted him to Balajirav, who, embracing his visitor, seated him in the place of honour next his own, and, after a few days, paid him the compliment of a return visit. After two months stay he returned to Bombay, receiving from the Peshwa, the present of an elephant and other valuable gifts. Whatever were Momin Khan's views in undertaking this journey. It in no way changed his relations with Peshwa. A fresh treaty was drawn up with conditions the same as those previously in force. From Bombay Momin Khan travelled overland to Surat, reaching Khambhat before the close of 1759 A. D. After his return, Momin Khan was at pains to gain as a friend Ganesh Apaji, the Peshwa's representative, and so successful were his advances that it was arranged that the Peshwa's agent should be withdrawn from Khambhat, and that all Maratha claims should be satisfied by the yearly payment of Rs. 84,000.

Muslim Revival, 1761 A. D.

In 1761 A. D., the Delhi Court, taking advantage of defeat of the Marathas at Panipat on 7th January, 1761 A. D. directed the chief Muslim nobles to join together in driving them out of Gujarat, Momin Khan II and the Governor of Bharuch took Jambusar. Damaji Gaekwad advanced to the aid of Sadashiv Ramchandra, the Peshwa's Deputy, and together they defeated Momin Khan, laying waste his territory. Suing for peace, Momin Khan was forced to pay the Peshwa half of his revenue, to admit a Maratha agent into Khambhat, and to make good the difference between Rs. 84,000 the amount of tribute paid during the two preceding years, and the total of his revenues.

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From 1760 to 1766 A. D. though Momin Khan kept on good terms with the Marathas, his exactions and oppressions half emptied the city. In 1766 A. D. his minister, Aga Rashid Beg, hit on a plan for obtaining the Brahmin's hidden treasure. In order to obtain the treasure, Brahmins were called to pray for Momin Khan's health. Afterwards they were treacherously tortured and many of them left Khambhat.

Kathis and Kolis, 1766 A. D.

At this time (1766 A. D.) Khambhat was so harassed by Kathis and Koli forays, that Momin Khan agreed to pay them a yearly sum of Rs. 4,000, and provided they did not plunder his villages, allowed them to pass unchallenged through his lands. After Damaji's death in August 1768 A. D.¹ Momin Khan continued on good terms with the Gaekwad.

Momin Khan Murders his Son, 1772 A. D.

In 1772 A. D., Momin Khan, ashamed of his excesses or afraid of his talents, caused the death of his son Khan Jahan, a youth of twenty-two years. Mirza Teman, his accomplice in the murder of the Prince, was promoted to be Deputy Governor, and had great influence in Momin Khan's councils. In spite of the crime which gained him office, Mirza Teman proved a good governor and during his ten years of power the people of Khambhat had some respite from the oppression that marked the rest of Momin Khan's reign. In 1782 A. D., Mirza Teman was thrown into prison, but was afterwards released and dismissed. Prosperity had now utterly forsaken Khambhat. The city was in ruinous condition.

Gaekwad-Affairs, 1768-1782 A. D.

During the ten years of Mirza Teman's power the Nawab of Khambhat played an important part in Gujarat politics. Damaji, dying in 1768 A. D., left four sons, Sayaji, Govindrav, Manajirav and Fatehsing. Sayaji being of weak intellect the second son Govindrav claimed to succeed, and this claim was, in 1768 A. D., recognized by the Peshwa. This arrangement continued till, in 1772 A. D., Fatehsing induced the Peshwa to recognize Sayaji's claim and to appoint Fatehsing to be Sayaji's Deputy. Then followed the intrigues at Poona that ended in the murder of Narayanrav, and the succession of his uncle Raghunathrav or Raghoba. Siding with Govindrav, the new Peshwa despatched him to Gujarat with orders to remove Fatehsing from Vadodara. Momin Khan, who had formerly supported Fatehsing, thus became opposed to the interests of Raghunathrav, and when in the next turn of affairs, Raghunathrav reached Khambhat, a suppliant for help Momin Khan refused

1. Damaji, a great chemist, had often tried to find the philosopher's stone, and it was from breathing the sickly steam of some poisonous drugs that he met his death in the town of Patan. *Bom. Gov. Sel.* XXVI

CHAPTER II—HISTORY

to admit him, and Raghunathrav was forced to move on Bhavnagar and from there to Bombay.

English Expedition Against Fatehsing, 1774 A. D.

Two years later (1774 A. D.) Raghunathrav returned to Khambhat. Backed by an English detachment, he was anxious to take revenge on Momin Khan for his rudeness. Sir Charles Mallet, the Resident, succeeded in inducing Raghunathrav to forego his grudge against Momin Khan and present him with valuable gifts. Shortly after, not more than thirty miles from Khambhat, was fought the battle of Adas, in which, not without severe loss, Raghunathrav, with the help of the English, defeated Fatehsing and the Gaekwad army. Then (1779 A. D.) came the change in English Politics which led them to abandon Raghunathrav's cause and allow Fatehsing to rule in Gujarat. When English influence ceased, Momin Khan went back to his alliance with Fatehsing, and in 1777 A. D., aided Fatehsing in his contest with Govindrav. The alliance profited Momin Khan as in suppressing Kathis, he received six villages yielding an yearly revenue of Rs. 9,000. In spite of this agreement Momin Khan also tried to keep up friendly relations with Kathis. However, hearing of his league with the Marathas, they plundered large part of his lands. To fight Kathis, Momin Khan received from Fatehsing sums amounting in all to more than Rs. 20,000.

Settlement, 1780 A. D.

After the capture of Ahmadabad in 1780 A. D. by British from Fatehsing, who received the Peshwa's share in the revenues of Gujarat north of the Mahi, agreed to remit the Khambhat tribute. In return for this concession Momin Khan made over to English the charge of the Khambhat custom house gate. This gate was restored to the Nawab in 1783 A. D., and, at the same time, under the Treaty of Salbai (24th February, 1783), the right of Peshwa to share in the Khambhat revenues was renewed.

Kutbi Khanum

In 1782 A. D., Mirza Teman, the Khambhat minister, was dismissed from office. The Mirza was succeeded by Kutbi Khanum, a woman of great beauty, who formerly had much influence over Momin Khan. Her heavy extortions were then more keenly felt after comparative security of Mirza Teman's management. Kutbi's term of power did not last long. In 1783 A. D., after ruling for thirty five years Momin Khan died.

Muhammad Kuli (1783-1789 A. D.)

Four months before his death Momin Khan II chose as his successor Muhammad Kuli, the son of Najam Khan, whom he had poisoned in 1748

A. D. After ruling for six uneventful years (1783-1789) Muhammad Kuli died in 1789 A. D. He had only one dispute with the neighbouring powers. An offender of the name of Tapidas, flying from a Vadodara village, took shelter in Khambhat. Asked to 'give him up, Muhammad refused and allowed him to escape. Fatehsing advanced to Khambhat and finding Tapidas fled, forced Muhammad to pay a fine of Rs. 15,000. With this exception the six years of Muhammad's rule was a time of quiet and good Government. He left three sons the eldest of whom succeeded him in 1789 A. D.

Fateh Ali, 1789 A. D.

About the same time, at Vadodara, Manajirav succeeded his brother Fatehsing. One of Manaji's first acts was to demand back the six villages granted by Fatehsing, and to pay for the garrison against Kathi inroads. Fateh Ali refused and it was finally arranged that the Baroda state should be allowed to withhold the yearly money payment of Rs. 10,000 on account of the Kathis, and the six villages should continue to belong to Khambhat. Fateh Ali's next act was to send a large present to Delhi. In return he received the title Najam-ud-Daulah Momtazu Mulk Momin Khan Bahadur Dilwar Jung, and the rank of a commander of six thousand as Nawab of Khambhat. In the early years of Fateh Ali's rule Khambhat was from time to time disturbed by Maratha demands. In 1792 A. D., the six disputed villages were again annexed by Baroda, but were a second time restored to Khambhat. About 1799 A. D., Atmaram Bhau, the Peshwa's agent, entered the Khambhat district, and was bought off only by the payment of Rs. 30,000. Again, in 1800, Babaji Apaji, general of Anandrav Gaekwad, in passing to collect the Kathiawar tribute, under the name of arrears, extorted from Fateh Ali a sum of Rs. 50,000.

The British 1802-1807 A. D., and the Cambay State

The British factory was (21st August, 1797 A. D.) negative in point of utility and in expense positively burdensome. The Bombay Board were of the opinion that everything could be done through native brokers. Before this opinion could be acted on, events took a turn which brought the British Government into closer relations with Khambhat. Madharav of Kadi attempted to take Vadodara from his cousin Anandrav. The Bombay Government in response to an appeal for help by their ally Gaekwad, sent a detachment of troops, which under the command of Major Walkar, arrived in Khambhat in 1802. Mr. Duncan, Governor of Bombay, accompanied this force and held interviews with Ravji Apaji, the Gaekwad's minister. The arrangements then made (1802, March and June) did not affect the position of the Cambay State. However by the Treaty of Bassein passed soon after (31st December, 1802), all the Peshwa's rights in Khambhat were ceded to the British. In the following year (24th May, 1803), at the Nawab's request, the Bombay Government agreed to farm the tribute to the Nawab

for four years, the Nawab engaging to pay yearly a sum equal to the amount formerly paid to the Peshwa.

Gaekwad Claims, 1806 A. D.

In the following years, Babaji Apaji, by putting a stop to the Kathi forays, made the Khambhat forts along the east bank of the Sabarmati no longer necessary. Under these circumstances, in 1806 A. D., Bapu Kashi, commander of the Gaekwad's Mahi Kantha force, received orders to annex the six villages whose possession had so often been disputed by the Gaekwad and Khambhat. At the same time Bapu Kashi took bonds from many of the Khambhat villages for the payment of sums of money. Fateh Ali complained to the Governor of Bombay, and Major Walker, the British Resident at Vadodara, had the bonds restored under promise that English Government would put pressure on Fateh Ali to pay the Gaekwad's lawful claims.

British Ascendancy 1818 A. D.

In 1818 A. D., in consequence of the supremacy of their power in Gujarat, the British Resident at Khambhat was withdrawn, and in his place, the Chief Executive Officer in Kheda district was appointed as an Agent.

Bande Ali Nawab, 1823-1841 A. D.

In October 1823 A. D., Fateh Ali Khan died. As he left no male issue, he was succeeded by his brother Bande Ali Khan, who ruled for eighteen years. Dying (15th March, 1841 A. D.), without a son, the succession went to his brother Yawar Ali Khan. This prince waived his right in favour of his son Hussain Yawar Khan whose hereditary title was Najam-ud-Daula Mumtaz-ul-Mulk Momin Khan Bahadur Dilawar Jang.

Period between 1818 to 1880 A. D.

Since 1818 A. D., the relations between the Cambay State and the Imperial Government had remained unchanged. There were no treaty engagements, and, except the payment of an yearly tribute, the Nawab of Khambhat was almost uncontrolled in the management of his State. Over his own people he had the power of life and death. There was no appeal from any of his awards; and the Political Agent, the Collector of Kheda, exercising no direct authority, was little more than the recognised medium between the Nawab and the Government of Bombay. Under the Proclamation of 1857 A. D., the right of any succession valid according to Muhammadan law, had been secured to the Nawab, and he was entitled to a salute of eleven guns. The State had a military force of six field and two other guns, thirty-five artillery-men, 250 cavalry, and 330 infantry and police.

In 1838 A. D., three years before the accession of the Hussain Yawar Khan, in spite of the long peace, the lands round Khambhat were desolate, the city ruinous, and its trade dead. Since 1838 A. D., trade had to some extent, however, revived.

Hussain Yawar Khan called Momin Khan V who died in 1880 A. D., ruled Cambay State for 39 years. He had 7 sons. His eldest son died at a very young age. He was, therefore, succeeded by Jafar Ali Khan who ascended the throne in 1880 A. D. Jafar Ali Khan introduced many reforms. His notable achievements include establishment of hospitals and construction of railway between Petlad and Khambhat. He also constructed a market called Sheppard Market, a Library called Lord Ray Library. Jafar Ali Khan Water Works, and new roads, a beautiful garden called Neja and a Zoo and a Savings bank.

The year 1890 A. D. was an important one in the administration of Khambhat. The people of the State had long been expecting the introduction of the British Survey rates in their villages, and were grievously disappointed on learning that not only was the former system to be retained, but the rates of assessment were to be enhanced. The opposition of the villagers in the month of September took the form of an open resistance when they held Khambhat in a state of siege¹. Accordingly the Political Agent Mr. H. R. Cook, thought it necessary to obtain military assistance from Ahmadabad, and the riot was not quelled until the insurgents were fired upon and some had been killed.

In October 1890 A. D., a special Political Officer was appointed by Government, to whom the Nawab had delegated his authority and the administration was conducted by that officer with the assistance of the Dewan, also nominated by Government. It may be pointed out that the new administration had succeeded in liquidating a great portion of State debts, and had introduced survey rates, and much other needed reforms.

In her old age Jafar Ali Khan's wife gave birth to a son in 1911 A. D. Jafar Ali Khan died in 1915 A. D. His son Nawab Hussain Yawar Khan Momin Khan VII was 4 years old then. There was British Administration till the Nawab ascended the throne in 1930 A. D. During his time the State was merged in Indian Union.²

The ruler of Cambay was a Muhammadan of the Shiah sect. He had received a Sanad guaranteeing any succession to his State that may be legitimate according to Muhammadan law. He was entitled to a salute of

1. See *Bombay Administration Report* for 1890-91, pp. 9 and 10.

2. AMIN J. P. (Dr.), the Principal, R. P. Arts and K. B. Commerce College, Khambhat.

11 guns. A tribute of Rs. 21,924 was paid to the British Government. Cambay State contained 2 towns and 88 villages.

The last Ruler was Nawab Mirza Hussain Yawar Khan Bahadur. He had accepted the privy purse agreement. The amount of his privy purse had been fixed at Rs. 1,38,000 per annum. Later on this privy purse and privileges of the ruler were abolished from December, 1971.

BALASINOR STATE

This was the only Muhammadan State of importance in the Rewa Kantha Political Agency. The family of the chief of this State had descended from Sardar Mahamad Khan, fourth in descent from Sher Khan Babi I who was made "BABI" (Doorkeeper) of the Imperial Court. Sher Khan was subsequently commandant of the Koli district of Chunwal to the north-west of Ahmadabad.

In the general scramble for power and independence on the disruption of the Mughal Empire, Sardar Mahamad Khan Babi remained contented with the district of Balasinor and was allowed to do so on condition of his paying tribute to the Gaekwad in 1761 A. D.

Sardar Mahamad Khan was succeeded by his son Salabat Khan. It was during his life time that the control over the State came into the hands of the British Government. Both the Peshwa and the Gaekwad had previously established their rights of tribute over Vadasinor. Those of the former became transferred to the British Government in 1817 A. D., while those of the latter came under the general settlement between the Mahi Kantha tributaries and the Gaekwad in 1820 A. D. This State was under the Collector of Kheda till 1853 A. D., when it was transferred to the charge of the Political Agent, Rewa Kantha Agency.

After a peaceful reign of half a century, Jorawar Khan, the third successor of Salabat Khan, died in the year 1882 A. D. His name was held in respectful memory by his subjects for his remarkable kindness and generosity. He was succeeded by his son, Manawar Khan, who was 36 years of age at the time of his accession. Though this Ruler had not taken education in any modern school, yet his natural desire to rule his subjects justly and kindly impelled him to undertake a number of measures calculated to improve the material prosperity of his subjects. It was during his reign that the long standing dispute regarding the Pargana of Virpur consisting of 42 villages and some lands between Vadasinor and Lunawada was brought to an amicable termination. In 1890 A. D. a sanad was conferred upon him guaranteeing him succession in his family according to Muhammadan law of inheritance in the event of the failure of natural heir.

Nawab Manawar Khan died in 1899 A. D., when his son the Nawab Saheb Jamiat Khan, a child of five years, was duly installed on the Masnad. During his minority the State remained under British Administration uptill 31st December 1915, when the investiture ceremony took place, and the full reins of administration were handed over to him.

The Last Nawab and the Popular Agitation

The last ruler of the Balasinor State was Babi Shri Jamiat Khanji. He was known for his capricious and atrocious behaviour towards his subjects. He was excessively devoted to dramas, towards which he spent major portion of his time. Consequently he neglected his duties. Apart from dramas, Nawab was also fond of constructing Tajias which involved delicate workmanship. It is said that Nawab demolished (without compensation) those houses and shops which thwarted Tajia processions. In addition to this, the Balasinor State administration was also hostile to the interest of the people. Gradually, therefore, there arose political awakening among the people. This awakening received tremendous fillup on account of imposition of forced labour and Death Duty. The residents of Vadasinor residing in Bombay, therefore, established a Loksamaj. The President of the Samaj was Shri Manilal Hiralal Mehta. The first gathering of the Samaj was presided by Nawab. The second gathering was held under the Presidentship of Mohanlal Kameshwar Pandya in 1921 at Virpur, while the third gathering could not be held as the leading workers were harassed by the State authorities. On 20th May, 1922 Saryashri Kadakia Chhotalal Vallabhdas and others were arrested. Shri Chandulal Chotalal Gandhi was ruthlessly crushed by the State horses and died within a week. However, Sardar Vallabhbhai Patel and Nariman blessed the agitation.

The farmers of the State, to register their protest against forced labour migrated to Kailaspur in 1930-31 A. D. The State without filling cases arrested Manilal Vidyaram Joshi and others. In the same year, as the house cess was doubled, 100 residents of Vadasinor under the leadership of Desai Mojilal Amratlal migrated to Godhra. In 1932 a memorandum was submitted to Sir Fedric Governor of Bombay outlining the fascist and atrocious practices of the ruler. From 1936-37 onwards on account of tremendous opposition of the people and also due to wilful neglect of the orders of British Government, Nawab had to stay at Vadodara where he died on 2nd February, 1945.

When India became independent, the people of Balasinor State started a movement in 1947 for the merger of the State into the Bombay State. The State was finally merged in the Bombay State.

Vadasinor was a jurisdictional State with 104 villages covering an area of 189 sq. miles. The 104 villages were merged in the taluka as shown below :

- 1 Bhatvasana merged in Thasra taluka, district Kheda.
 - 1 Khadol merged in Kapadvanj taluka, district Kheda.
 - 1 Saheb Khantnu Muwada, merged in Malpur Mahal, district Sabarkantha.
 - 101 remaining villages constituted into Balasinor taluka, district Kheda
- 104

At the time of merger, the privy purse was fixed at Rs. 68,000 per annum, but the privy purse was abolished by a special Ordinance with effect from 6th September, 1970. On an appeal by some rulers, the Supreme Court struck down the Ordinance as *ultra vires* of the constitution with the result that the privy purse had been revived.

Subsequently, the Parliament passed the constitution (twenty-sixth Amendment) Bill in 1971 for abolition of the privy purse and privileges. The President of India has, with effect from 28th December, 1971, withdrawn the recognition of the Rulers of the States and, therefore, the Rulers cease to be Rulers and their privy purse and Personal Privileges hitherto enjoyed by them stand terminated from 28th December, 1971.

The privileges enjoyed by the Rulers and their families were mainly free medical facilities to them and their families, the Palace Guards at their official residence, exemption from the provisions of the Indian Arms Act, the Motor Vehicles Act, the Education Cess Act, exemption from the local taxation, use of red number plates on the cars belonging to them and their family members, their right to be addressed by their usual recognised titles, gun salute according to the official table, fishing and shooting rights, immunity from the process of the courts of law, full military or police honour at the time of their funeral or the funeral of their wives or heir-apparents and requisitioning of their private property etc.¹

UMETA STATE

The Umeta State had 14 villages, 5 non-jurisdictional and 9 jurisdictional. The five non-jurisdictional villages were under Talukdari tenure and were in Borsad taluka. The nine jurisdictional villages were included in the Mahikantha Agency but from 1827 A. D., it formed one of the component parts of the Rewakhantha Agency. Under the Scheme of Attachment, it was attached to the Baroda State and was under management due to the

1. G. R., G. A. D. No. PLR-1071-888-GH, dated 12th January, 1972.

minority of the Thakor. In August, 1947, the Thakor was given back his Gadi. But soon after the State merged into the Bombay State. All the 14 villages covered an area of 24 sq. miles and have been merged in the Borsad taluka.

The last ruler was Shri Jagdevsinhji. He belonged to the Parihar Rajput caste. His ancestors took part in the siege of Champaner by the Mahmud Begada and after its fall in 1484 A. D., one Jhangharji ran away and took refuge in the forest adjacent to the Mahi and gradually carved out a small State in the otherwise inaccessible and hilly part adjacent to the river.

The ruler had accepted the privy purse agreement in respect of the nine villages only and the amount of his privy purse had been fixed at Rs. 14,450 per annum. As stated before the privy purses and privileges of the Rulers have been abolished with effect from 28th December, 1971.

GHODASAR STATE

Ghodasar State had 15 villages covering an area of 16 sq. miles. The villages have been merged in the Mahemadabad taluka of the Kheda district. Besides the fifteen jurisdictional villages, the Thakor had five villages in the British India, viz., Navagam, Dolpura, Mota Ajabpura, Jalampura Wanta of Kuna and Charan-na-Muwada of Kuna.

The ruling family claimed Rajput descent. They came from Bundelkhand. The rulers lost the caste on marrying Koli women. They then styled themselves as Dabhis. The State paid the Baroda a tribute of Rs. 2,577 and 60 per cent of the State revenue agency *varads*. A sum of Rs. 3,000 was received annually from the British India. The Thakor had accepted the privy purse agreement. The amount of privy purse had been fixed at Rs. 25,000 per annum (*Vide* Government Resolution, Political and Services Department No. 2752/46-II, dated 6th October 1948). The Thakor had been allowed to retain the four Wanta villages of Nawagam, Dolpura, Mota Ajabpura and Jalampura in the Mahemadabad taluka.

These villages covering an area of 2,050 acres of land yielded an annual revenue of above Rs. 7,600. As stated before the privy purses and privileges of the Rulers have been abolished with effect from 28th December, 1971.

PUNADRA

The territories of Punadra form part of Kheda district. The Ruling family of Makwana Koli was converted to Islam by Mahmud Begada (1459-

1513 A. D.). The family claims descent from the Jhala Rajputs of Halvad in Kathiwar. The last ruler Ajitsinhji Shivsindhji accepted the privy purse agreement. The amount of privy purse had been fixed at Rs. 8,100. Before the merger, the Punadra State was a jurisdictional State and had 7 villages with 5 hamlets covering an area of 7 sq. miles. The seven villages have been merged in the Kapadvanj taluka of the district.

THE REWA KANTHA AGENCY

Rewa Kantha means the district or province on the banks of the river Rewa or the Narmada. However, in fact, the Rewa Kantha Agency comprised territories watered both by the Rewa and Mahi rivers.

It was placed under the immediate control and supervision of the Collector of Kheda who also functioned as ex-officio Political Agent for the States covered in the Rewa Kantha Agency. But these States constituting what in official language were called ('Foreign Territory'), were outside the scope of the British Indian Laws and Regulations, unless they were specially extended and applied. With regard to the territories under the rule of the larger chiefs, Political Agent had to perform certain diplomatic functions in the shape of advice and general supervision, while in the case of the petty Chiefs, the Agency had not only to administer civil and criminal justice, but had to protect life and property and to keep law and order. The Political Agent had also (1) to adjudicate on interstatal disputes, (2) to deal with questions of succession, (3) to fix maintenance of families according to their respective status, and above all, (4) to guide all States in the path of progress so that they might not lag behind but keep pace with the adjoining British districts. When a Chief died, leaving a minor son or sons, it devolved upon the Agency to take charge of his State, to administer it until the heir attained majority and take the opportunity to remove abuses, if any, and introduce reforms and improved methods of procedure during the temporary management, interfering, however, as little as possible with the State's autonomy. The agency contained 6 large and 60 small States. Out of these States, Balasinor State whose territories are now merged in Kheda district was a second class State.

THE MAHI KANTHA AGENCY

Mahi Kantha was the name given to a group of small chiefships situated between the rivers, Mahi and Sabarmati. The name Mahi Kantha means in Gujarati the bank of the Mahi. The Agency did not actually touch the Mahi river at any point though it stretched from within a few miles of it on the south to within 8 miles of the Abu Road Station on the north, and from Pol on the Rajputana border 18 miles from Kherwada cantonment on the East to Rampara within 15 miles of the Kathiawar border on the west.

The States of Ghodasar and Punadra were in Mahi Kantha Agency. Their territories were merged in the district. The States of Ghodasar and Punadra paid Rs. 3,501 and Rs. 375 *ghasdana* to Gaekwad.

INTEGRATION OF STATES

The possibility of grouping the Gujarat States into a single State as in Kathiawar was also considered after Independence but it had to be ruled out as the territories were interlaced and interspersed with the Baroda State territories and with the Ahmadabad and Kheda districts of Bombay State. The Gaekwad of Baroda had expressed himself against the formation of a Union of Baroda with the Gujarat States. After prolonged discussions with the Rulers of Gujarat States and popular leaders of the States, the Maharaja of Rajpipla expressed, on behalf of other Rulers, the desire to integrate their States in the following words :

“Gujarat looks up to us to make all sacrifices in the wider interests of India as a whole. We, therefore, have cheerfully responded to the call of duty and decided to take the first step in forming the province Maha Gujarat by integrating our States with the Province of Bombay.”

In pursuance of the instruments of merger signed by the Rulers¹, the administration of these States, was taken over by the Government of Bombay on the 10th June, 1948. The talukas and thanas of Rewa Kantha, Banas Kantha and Mahi Kantha were dealt with on the same basis as in Kathiawar and their administration was handed over by the Regional Commissioners to the Bombay State on behalf of the Government of India.

The another important step taken in the direction of Gujarati speaking States was the integration of the former Gujarat State Agencies in Bombay. It was evident that the continued existence of these numerous administrative units was not possible and desirable from the point of view of administrative efficiency as well as the satisfaction of the political aspirations of the people. The Mahi Kantha Praja Sangh, therefore, passed an unanimous resolution in January, 1948, asking for the merger of the estates and talukas with Bombay State. The resolution declared that the areas were very backward and by themselves would not be in a position to achieve any progress or carry on progressive administration. It may be pointed out that the merger of the Dangs and certain estates included in the Vatrak Kantha Thana of the former Gujarat States Agency with Bombay State clearly indicated that the time was ripe for the absorption of the remaining States in Bombay State. It was considered that the best way

1. Government of India, *White Papers on Indian States, Ministry of States*, (1948), p. 42.

to tackle the problem was to integrate the States with Bombay which would pave the way for the consolidation of Gujarati speaking people.

FREEDOM MOVEMENT AND THE DISTRICT

The revolt of 1857 A. D., in North India had its repercussions in Gujarat. In fact there was no mutiny by any of the Government's army regiments, but the arrival of Muslims, Marathas, Arabs and Rajputs to Gujarat from North India instigated certain militant communities such as Bhils, Kolis, etc., to raise the banner of revolt and consequently the disturbance spread to some parts of Gujarat including the district of Kheda.

Bhao Saheb Pawar, Bhonsale Raja, Maganlal Bania of Patan and Nihalchand Fattechand Zaveri of Vadodara prepared a plot to bring an end to the Company's rule in Gujarat and dethrone Maharaja Khanderao Gaekwad of Vadodara for his pro-British attitude. They tried to rouse the Kolis on the Mahi in the Kheda district, and at one time six hundred men were assembled in Pratappur. Sir R. Shakespeare, the Resident at Vadodara immediately instructed Ashburner, the Magistrate of Kheda to launch a sudden attack on rebels at Pratappur. Most of them were arrested and others were dispersed. Ten were blown off by the blast of guns while nine were sentenced to transportation for life.¹

Jivabhai Thakor of Khanpur with the support of Shri Garbaddas Patel, the Mukhi of Anand revolted and captured nearby villages in defiance of the British authorities. But his rebellion was soon crushed. Thakor Jivabhai was arrested and hanged to death.² Sarvashri Mulji Veniram Joshi, Bapuji Shavdas Patel, Aahaji Pagi, Dataiya, Krishnaram Kripashanker Dave, and companions of Shri Garabaddas were court martialled at Khanpur. All of them were blown off by mouth of the gun. Shri Garbaddas was sentenced to transportation for life.³

Oamad Odar, a Koli was sentenced to imprisonment with hard labour for seven years and forfeiture of property and effects of any description for aiding and abetting in a rebellion against the Government of the East India Company by a Special Court of Commissioners, Captain C. Buckle and Ashburner.⁴

In order to avoid an armed rebellion in future, the Government of Bombay invested Sir R. Shakespeare, the Political Commissioner of

1. DHARIYA R. K. (DR.), *Gujarat in 1857*, Gujarat University, Ahmedabad, (1970) pp. 23-34.

2. Ibid., p. 34.

3. *Charotar Sarvasangraha*, Lokmat Prakashan, Nadiad, (1954). pp. 998-999.

4. Copy of Judgment 28th January, 1858, Baroda Record Office (Henceforth BRO, Kaira Political Correspondence (KPC) Volume No. 277.

Gujarat with full power to disarm the entire population of Gujarat, *vide* its order of 17th February, 1858.¹

The District Magistrate, Kheda issued a 'proclamation for General disarmament to every town and village of the Collectorate and ordered that all arms whether registered or not must be deposited with the village officers within fortyeight hours from the receipt of proclamation.² The Nawab of Khambhat was asked to take effective steps and measures in his State to have all weapons surrendered and placed in safe custody for their disposal in such manner as might be decided later on. Further the Nawab was informed that in case he needed military aid to disarm his people, he should request for the same.³ When the Nawab refused to disarm his people, Sir R. Shakespear threatened him *vide* his letter, dated 27th April 1858, that if he did not extend his co-operation, the British force at Kheda would march on Khambhat. Thereupon, the Nawab through his representatives submitted to R. Shakespear five detailed lists showing the personal arms of the Nawab, the Sepoys, the people of the Khambhat City and its four suburbs as well as sixty-five villages of the State. These were collected and deposited in the custody of the State.⁴ Moreover, from Vadasinor, Veerpur, Petlad,⁵ and 558 villages of the district various types of arms numbering 19,852 were seized⁶ Kanhpur was burnt to ashes for its refusal to surrender its arms.⁷

Fourteen different types of arms including 112 swords, 38 guns and 200 arrows etc., were surrendered by the authorities of Vadtal temple.⁸

On 30th November, 1858, Tatya Tope and his rebellious associates after being defeated by Parke's forces, moved rapidly towards Vadodara and Kheda.

Tatya tried to rouse the chiefs of Kheda and Panchmahals to revolt against the British. He paid visits to some of the chiefs of these regions and advised them to intercept and stop the British forces coming from Surat to Kheda. Though most of the chiefs tried to stop the British forces on the opposite bank of the river Mahi, they were compelled by the

1. *Gujarat in 1857*, p. 74.

2. BRO, KPC, Vol. No. 277, from Alexander Gray, the Acting District Magistrate, Kaira to R. Shakespear, Special Political Commissioner, dated 25th February, 1858.

3. *Ibid.* From A. Gray to Nawab of Cambay, 26th February, 1858.

4. *Gujarat in 1857*, pp. 90-93.

5. *Ibid.*, Appendix E, p. 145, and Appendix H., p. 150.

6. *Ibid.*, Appendix F., p. 147.

7. *Ibid.*, p. 89.

8. BRO, KPC, Vol. 227 From A. Gray the Acting District Magistrate, Kaira to Sir R. Shakespear, 19th May 1858.

Britishers to disperse. For supporting the rebels, several persons of these regions were hanged to death on the banyan tree near Sarsa.¹ During these days, Tatya Tope is said to have hid himself at Nadiad in the house of Shri Biharidas Desai. His lands were confiscated later on by the British Government for giving shelter to the rebel leader.²

HOME RULE MOVEMENT

The partition of Bengal in 1905 stimulated the political thinking of the entire country and promoted the Swadeshi Movement, which later on merged into the successful struggle for freedom. During 1905-6 in the Kheda district a number of meetings were organised to protest against the partition of Bengal. The meetings held at Nadiad were addressed by Sarvashri Fulchand Bapuji Shah, Gokaldas Dwarkadas Talati (Gokaldas Bapu), Maganbhai Chaturbhai and Batukshanker. They urged people to adopt Swadeshi goods.³

After 1907 a large number of young men of the country turned to revolutionary activities to achieve freedom. Kheda did not remain aloof from such activities. Shri Narsinhbhai and Shri Mohanlal Kameshvar Pandya of Kathlal published so called seditious literature from press established near Navsari.⁴

A Home Rule League Branch was established at Nadiad just after the internment of Mrs. Anne Besant and in the beginning of July 1917, 5 branches of Home Rule League were started in a number of villages in the district *e. g.*, Anand and Kathlal. Throughout the district under the guidance of Mahatma Gandhiji signatures were collected for Petition to be made to Montagu in support of the Congress demand for Swaraj.⁶

In the presence of Mahatma Gandhiji a private meeting of Home Rule Leaguers of Nadiad and Ahmadabad was held at Nadiad on 16th December, 1917 to consider a scheme to implement the resolutions passed at the First Gujarat Political Conference (Godhra) and to consider the question of education as advocated by the Conference.⁷

1. *Charotar Sarvasangraha*, pp. 894-895.

2. *Ibid.*

3. YAGNIK I. K., *Atmakatha*, Vol., I., Ravani Prakashan Grah, Ahmadabad, (1967), p.p. 111.

4. *Charotar Sarvasangraha*, p. 898.

5. *Source Material* Vol. II, Bombay (1958,) pp. 727-728.

6. PARIKH S. D., *Kheda Satyagraha*, Gujarat VidyaSabha, Ahmadabad, (1966,) pp. 7-8

7. *Source Material*, Vol. III, Part I, Bombay, (1965,) p. 69.

KHEDA SATYAGRAHA

Owing to torrential rains during 1917-18 most of the Kharif crop was seriously damaged. Moreover, whatever crop was left was spoiled by rats, various pests and diseases.¹ The cultivators claimed that they were entitled to suspension of land revenue under Land Revenue Rules as the yield was below four annas in a rupee. The Government officers did not accept their contention and hence were not prepared to grant any relief to them.

Shri Somabhai Kashibhai of Nadiad first started agitation and printed application dated 15th November, 1917, praying for the total remission of land revenue began to pour in.² The first application containing four thousand signatures was sent to Bombay Government from Kathlal on 20th November, 1917. A similar application containing eighteen thousand signatures was sent by the Home Rule League Branch of Nadiad. Application from other villages were also despatched to the Bombay Government.³

On 25th November, a meeting of the citizens of Nadiad held under the presidentship of Shri Gopaldas Viharidas Desai, resolved to approach the Government for the relief in the land revenue and decided to collect the signatures of the cultivators on the application for remission.⁴ The Members of Legislative Council, visited twenty villages of Nadiad, Kapadvanj and Thasra talukas during December 1917 to inquire into the conditions of crops and recorded statements of several cultivators.⁵ They were accompanied by Shri G. V. Mavalanker, Secretary, Gujarat Sabha, Ahmadabad.⁶ They held public meetings at Mahudha, Kathlal and Nadiad to collect information. The district officers in their meeting at Nadiad decided that thirty nine villages should be declared for half suspension, one for full suspension and the rest including Nadiad and Narsanda for full collection.⁷ On 22nd December, 1917, the Collector, Kheda issued orders for suspension of land revenue totalling Rs. 1,75,868 in hundred and four villages of Nadiad, Mahamadabad and Kapadvanj talukas. The total land revenue of the district being approximately Rs. 23 lakhs, the relief granted amounted to only 7.4%.⁸

1. *Kheda Satyagraha*, p. 7.
2. *Source Material*, Vol. II, pp. 730-31.
3. *Kheda Satyagraha*, p. 9.
4. VERMA J. N., *Gandhijinu Jivan*, V, S. Thakore, Baroda, (1922.) p. 100.
5. *Charotar Samasangraha*, p. 901.
6. PARIKH N. D., *Sardar Vallabhbhai*, P. I., Navajivan Prakashan, Ahmadabad, (1959,) p. 80.
7. *Source Material*, Vol. II, p. 731.
8. *Sardar Vallabhbhai*, p. I, p. 80.

The Gujarat Sabha of Ahmadabad then took up the matter and issued a printed notice, dated 18th January, 1918, urging the people that they should not pay land revenue till the question was finally settled by the Government. A deputation under Gandhiji met Governor but it was of no avail.

Gandhiji with Shri Kalidas Jaskaran of Ahmadabad went to Vadtal, a village of Nadiad taluka to inquire about the state of crops. He also visited Anand, Lambhwel and Uttarsanda, for the same purpose.¹

On 21st March, 1918, Gandhiji addressed a meeting at Nadiad which was presided by Shri Gokaldas Talati. He requested the rich cultivators that they should not pay the land revenue so that the poor ones might not be discouraged.²

On 27th March, Gandhiji issued a circular stating that during the enquiries carried out by some M. L. C. and members of the Servants of India Society, it was found that Kharif crop practically yielded nothing. He found the same type of situation in about four hundred villages.³

While the propaganda for non-payment of land revenue was carried out vigorously in the district by a number of leaders, the Government officers were making strenuous efforts to collect the same. The District Magistrate told Gandhiji that as the Government was convinced of its claim, it would not hesitate for taking legal steps to compel the cultivators to pay and if they would not pay it voluntarily, the Government might impose some penalty as punishment and it might, if necessary resort to forfeiture of property.⁴ On the other hand Gandhiji continued his efforts for propagating Satyagraha and for preparing the people for the same. He addressed public meetings at Ode, Dantali, Chikhodra, Ras, Kasur, Ajarpura, Palaj and Sunav during the second fortnight of April, 1918.⁵ On 26th April the Panch of Dharalas, a backward community met at Nawagam. It resolved that no body should go for any kind of work or to plough the field of a person who had paid the assessment and nobody should undertake to cultivate the land attached for non-payment of land revenues or assist in collection of revenue.⁶

1. *Source Material*, Vol. III, P. I., p. 80.
2. VERMA J. N., *Gandhijinu Jivan*, p. 105.
3. *Source Material*, Vol. III, P. I., p. 82.
4. *Source Material*, Vol. III, P. I., p. 84.
5. For details see *Gandhijino Aksher Deh*, Vol. XIV., Navajivan Prakashan Mandir, Ahmadabad, (1969), pp. 297-314.
6. VERMA J. N., *Gandhijinu Jivan*, p. 111.

The properties of those who did not pay land revenue were attached. Houses were locked purposely and sometimes bolted from inside only to prevent or delay distraints.¹

The Satyagraha came to an expected end. The authorities accepted the people's contention and suspended land revenue collection from the poor peasants without openly announcing any concessions. When the campaign ended, only eight per cent of the land revenue was in arrears.² The campaign laid the foundation of awakening and of a true political education among the peasants of Gujarat.³

Rowlatt Satyagraha

The year 1919 may be deemed as an "*Annus Marabilis*" which constitutes an important landmark in the history of India's struggle for Freedom.⁴ The Rowlatt Act—a law designed to curtail the liberty of the people in a drastic manner was passed by the Government of India. This led to wide spread opposition to the Act. Protest meetings were organised at Ahmadabad, Nadiad and other places in Gujarat. These meetings were addressed by Sarvashri Sarojini Naidu, Swami Shraddhanand and others.⁵

On 9th April 1919, Gandhiji was arrested and on the following day after receiving a telegram at 2-30 p. m. from Delhi about his arrest, shops were immediately closed down in Nadiad. A meeting was held in Ahmadabadi Bazar and a black flag was hoisted. Workers of the mills struck work and took out a procession.⁶

On learning the news of riots at Ahmadabad and that a special train carrying British troops was being sent there, the people of Nadiad got excited. About two hundred persons made a successful attempt to detain that special train for about twelve hours.⁷ They removed a rail between Nadiad and Uttarsanda and the train was derailed on the 12th morning. Later on the telegraph wires between Uttarsanda and Boriavi, Anand and Navli, Navli and Vasad were cut and an attempt was made to demolish a culvert between the inner and outer signals of the Uttarsanda Station.⁸ At Narsanda and Vadad also telegraph wires were cut.⁹

1. *Source Material*, Vol. II, p. 734.

2. *Ibid.*, Vol. II, p. 735.

3. PATTABHI SITARAMAYYA, *History of the Indian National Congress*, Vol. I, S. Chand Delhi, 1969, p. 141.

4. *Struggle for Freedom*, Vol. XI, Bharatiya Vidya Bhavan, Bombay, (1969), p. 292.

5. GILLION K. L., *Gujarat in 1919, Essays on Gandhian Politics*, edited by R. Kumar Oxford University Press, London, 1972., p. 134.

6. *Source Material*, Vol. II., p. 755.

7. *Charotar Sarvasangraha*, p. 907.

8. *Source Material*, Vol. III, P. I. p. 119.

9. GILLION K. L., *Gujarat in 1919*, p. 142.

On the 13th April there was a disturbance at the Anand Station. The houses of the European Station Master and a licensed vendor were set ablaze.¹

One hundred and twenty three persons were arrested and eighty two placed on trial before a special tribunal. Out of these, seventeen were convicted.² After the disturbances, additional police was posted at Nadiad and it was decided to collect Rs. 15,556 exclusively from the Patidar and Bania Communities of the town³ by way of additional expenses.

NON-CO-OPERATION MOVEMENT

Gandhiji decided to utilize the period after the end of Rowlatt agitation for the preparation of starting a Civil Disobedience Movement. A number of copies of "HIND SWARAJ" in Gujarati were sold and distributed in Matar, Kheda, Nadiad, Kapadvanj and other places of the district as a part of propaganda.⁴ He made Nadiad the headquarters for the whole of Kheda district and Sarvashri Fulchandbhai B. Shah and Mohanlal K. Pandya were to give directions in case the movement was launched again.⁵ Gandhiji addressed a meeting of 12,000 persons at Nadiad on 30th September, 1920 in connection with non-co-operation movement. He advised the people to boycott Government schools and colleges and not to resort to courts.⁶ A public meeting of tax-payers of Nadiad Municipality was held on 1st October, 1920 and it was resolved to request its representatives in the Municipal School Board to forgo the Government grant in order to non-co-operate with the Government in the field of education.⁷ The Municipal Board passed a resolution and requested the Government to stop the grant.

In December 1920 the Nagpur Congress presented a programme of non-co-operation to the country and to fulfil it, a meeting of the workers of the district was called. According to the constitution of the Congress, (Kheda) District Samiti was formed with Shri Abbas Taiyabji and Shri Fulchandbhai Shah as President and Secretary respectively.⁸ Under the instructions of Gandhiji Shri Ravjibhai Nathabhai Patel started Khadi spinning at Vaso and later on went to Badalpur to propagate Khadi spinning in the villages of Borsad taluka. Sarvashri Bhaskerbhai Rambhai Patel and

1. GILLION K. L., 142.

2. *Ibid.*, p. 143.

3. *Charotar Sarvasangraha*, p. 907.

4. *Source Material*, Vol. III, P. I. p. 163-166.

5. *Ibid.*, p. 156.

6. *Ibid.*, p. 334.

7. *Charotar Sarvasangraha*, p. 909.

8. PATEL R. M., *Jivanna Jharana*, Part I, Navjivan Prakashan Mandir, Ahmedabad, (1948), p. 176.

Ravjibhai Manibhai Patel started Khadi work at Sojitra.¹ While Shri Ravishanker Shivram Vyas (Ravishanker Maharaj) started a national school at Sunav.² Shri Mohanlal Pandya started the activity of popularising spinning wheel at Kathlal.³ The work for Harijan upliftment was undertaken at Anand by Shri Tribhuvanbhai and at Borsad by Shri Parikshitlal Muzumdar.⁴ Shri Gopaldas Purshottamdas Desai formed a Taluka Congress Samiti in Mahemadabad taluka and worked as the Secretary till 1923 under the guidance of Shri Ravishanker Maharaj.⁵ The Non Co-operation Movement generated the general awakening of the masses of the district.

On 8th March, 1921, the Collector issued a notice to the Nadiad Municipality to hand over possession of three school buildings but the Municipality did not carry out his order. Hence the Collector took possession of these buildings with police help.⁶ Gandhiji commenting on the action of the Collector said in the meeting held at Nadiad on 14th March that it was "Unjust, illegal, insolent and the act of dacoit".⁷

In the April 1921, Gandhiji accompanied by Shri Vallabhbhai Patel visited Anand, Borsad, Ras and Vasad. Picketing of foreign cloth shops was carried out in the district at Umreth and Sojitra.⁸

The Government asked the Nadiad Municipality to put its schools under Government control by 17th December, 1921. Thereupon the Municipal Board on 16th December resolved to hand over its schools to National Education Trust and decided to give grant of Rs. 2,500 to it. The Collector obtained 'Stay Order' and prevented the Municipal Board from giving grant. The Government withdrew Rs. 3,000 from Municipality's balance with the Government sub-Treasury for running the schools. To show displeasure at the Government action eleven members resigned from the Board in January 1922.⁹ The newly elected Municipal Board in 1922 resolved to pay Rs. 900 per month as grant to National Education Trust.¹⁰ Now the Government obtained temporary stay order and then filed a civil suit against eleven members for the recovery of the amount

1. *Jivana Jharana*, pp. 165-167.

2. *Swatantrya Sangramana Ladvaiga*, Part I, Directorate of Information, Ahmadabad, (1969), p. 241.

3. DESAI S. M., *Rastrano Swatantrya Sangram ane Gujarat*, University Granth Nirman Board, Ahmadabad, (1972), p. 154.

4. *Ibid.*

5. *Swatantrya Sangramana Ladvaiga*, p. 59.

6. *Sardar Vallabhbhai*, P. I., p. 202.

7. *Source Material*, Vol. III, P. I., p. 368.

8. *Jivana Jharana*, P. I., p. 177.

9. *Sardar Vallabhbhai*, P. I., p. 204.

10. *Charotar Sarvasangraha*, p. 919.

spent after schools till January 1922. The members lost the case in the lower court as well as in the High Court. However, ultimately all the schools were handed over to the Municipal Board on 1st June, 1925.¹

Vadasinor Lok Samaj

In Vadasinor the heir of a deceased person had to pay inheritance tax to the State Government. To express opposition for this tax, the State subjects established 'Lok Samaj' under the presidentship of Shri Manilal H. Mehta of Godhra. Leading non-co-operators of the Bombay Presidency were invited to attend its conference at Vadasinor in May 1922. Public offices and residences of officers were picketed and the provisions going to the palace were stopped.² When Sarvashri Chhotalal Valabhdas Kadakia, and other workers of the Samaj were arrested, Vadasinor observed *hartal* for five days.³

After writing threatening letters in the name of 'Asahkar' in the early part of June, an attempt was made to bomb the Nawab and the Dewan of the State but both of them escaped unhurt.⁴

Borsad Satyagraha

After its failure to check the activities of an arch dacoit Babar Deva, the police entered into a pact with Alia, a muslim outlaw, who undertook the responsibility of capturing Babar Deva provided he was well armed and received assistance of some police constables with rifles. The police officers were informed through a confidential letter not to arrest Alia.⁵

At last the Government decided to post punitive police in the taluka and announced on 25th September, 1923 the imposition of Rs. 2,40,074 as punitive tax to be collected at the rate of Rs. 2-7 As.-0 P. per head for every male and female over sixteen years of age. On receiving complaints from the people of Borsad against this unjust act, Gujarat Prantik Samiti appointed a committee consisting of Sarvashri Ravishanker Maharaj and Mohanlal Pandya to inquire into the matter.⁶ Shri Mohanlal Pandya reported the findings of the committee to the Prantik Samiti which met at Borsad on 1st December, 1923. The Prantik Samiti decided to permit

1. For details see *Sardar Vallabhbhai*, P. I., pp. 205-212.

2. *The Administrative Report of the Balasinor State*, 1922-23, p. 3.

3. *Charotar Sarvasangraha*, p. 1038.

4. *The Administrative Report of Balasinor State*, 1922-23, p. 4.

5. *Jivana Jharana* P. I., pp. 226-227.

6. *Rastrano Swatantrya Sangram ane Gujarat*, p. 181.

hundred and four villages of the taluka to start Satyagraha and entrusted the responsibility of conducting it to Shri Vallabhbhai Patel. The Borsad Taluka Praja Parishad unanimously resolved to start Satyagraha.¹

Eleven to twelve groups of villages were formed for ninety villages of Borsad taluka and fourteen villages of Anand taluka.² Shri Ravishanker Maharaj was entrusted the responsibility of eighteen villages having population of Patanwadias and Baraiyas. Attachments of property went on throughout the taluka for the collection of the additional tax.³

In the meantime Shri Vallabhbhai Patel got a copy of the confidential circular issued to police officers instructing them not to arrest Alia. The bullets taken out from the bodies of the injured persons proved beyond doubt that the police rifles and ammunition were being used by the dacoits.⁴ The confidential circular was published in 'Young India' in the last week of December by Shri Mahadev Desai. On coming to know about this Sir Leslie Wilson, the Governor of Bombay at once sent the Home Member, Hotson to Borsad. After verifying the facts personally, the Home Member withdrew the police immediately. On 8th January, 1924, the Government abolished the additional punitive tax imposed on 104 villages and declared that the amount collected so far as well as the property attached would be returned to the concerned persons.⁵

Salt Satyagraha

The Working Committee of Indian National Congress met at Sabarmati in February 1930 and passed a resolution on Civil Disobedience. It authorised Gandhiji and those working with him, who believed in non-violence as an article of faith to start Civil Disobedience as and when they desired and in the manner and to the extent they decided.⁶ Gandhiji decided to launch the Satyagraha Campaign by manufacturing salt at Dandi to oppose the Salt Law.

Before the Dandi March the people of Kheda invited Sardar Patel to the district to request the Baraiyas to extend their co-operation during the movement. In this connection Sardar Patel was to address a meeting at Kankapura on 7th March, 1930. On his way to Kankapura, Sardar Patel decided to address the people of Ras, at the request of Shri Ashabhai Lallubhai Patel. As soon as he started addressing the people of Ras, he

1. *Jivana Jharana*, P. I., pp. 230-231.

2. *Ibid.*, P. I., p. 234.

3. *Sardar Vallabhbhai*, P. I., p. 307.

4. *History of the Indian National Congress*, Vol. I, p. 244.

5. *Jivana Jharana*, P. I., p. 251.

6. MAJUMDAR R. C. (DR.), *History of Freedom Movement in India*, Vol. III, Firm K. L. Mukhopadhyay, Calcutta, 1963, p. 334.

was arrested. He was tried at Borsad and was sentenced to three months imprisonment.¹

Sarvashri Ravjibhai Nathabhai Patel, Madhavlal B. Shah, Tansukhbhai Pranshanker Bhatt and Shivabhai Gokaldas Patel of the Kheda district were amongst those who had accompanied Gandhiji in his memorable Dandi March, which he started from Sabarmati Ashram, Ahmadabad on 12th March, 1930. Sarvashri Khadag Bahadur Singh of Calcutta and Shanker (Satish) D. Kalelkar joined them at Matar raising their number to eighty one.² Shri Chhotabhai Bhajibhai Shah of Petlad joined Dandi Kuch from Borsad.³ Gandhiji and his party passed through Nawagam, Vasna, Dabhan, Nadiad, Uttarsanda, Boriavi, Napa, Borsad, Ras and then entered the limits of Bharuch district after crossing the Mahi by boats kept ready by Shri Raghunathjibhai at Kankapura.⁴

The Satyagraha was offered at Badalpur and Lasundra in the district on 6th April, 1930 the day on which Gandhiji violated the Salt Law at Dandi. At Badalpur the police arrested Sarvashri Gokaldas Talati, Darbar Gopaldas Desai, and others. For inciting the people to violate the Salt Law, all of them were sentenced to two years' rigorous imprisonment and a fine of Rs. 100 or in default, further imprisonment for three months.⁵ At Lasundra Sarvashri Ravishanker Maharaj and Chhotalal Anupram Vyas of Umreth were arrested and sentenced to two years' rigorous imprisonment and a fine of Rs. two hundred.⁶

On 21st April, 1930 the people of Ras held a meeting and resolved that as the Government had arrested Sardar Patel, Darbar Gopaldas and other leaders of the district, and had sentenced Shri Ashabhai Lallubhai Patel to two years' rigorous imprisonment on a false charge.⁷ The village would not pay land revenue till all of them were released.⁸

On 28th April, Shri Kakasaheb Kalelkar was arrested at Borsad while distributing the salt manufactured by him and was sentenced to six months' imprisonment and a fine of Rs. 200 or in default imprisonment for a month more.⁹

1. *Jivana Jharana*, P. I., pp. 321-324.

2. JODHANI MANUBHAI AND JODHANI VADILAL, *Strijivan* (Gujarati Monthly), Ahmedabad, August, (1972,) p. 763.

3. *Swantraya Sangramna Ladavaiya*, p. 87.

4. MEHTA BABALBHAI, *Ravishanker Maharaj*, Sanskar Sahitya Mandir, Bhavnagar, (1955,) p. 209.

5. *Jivana Jharana*, P. I., p. 335.

6. *Jivana Jharana* P. I., p. 335

7. For details see *Jivana Jharana*, P. I., p. 355.

8. *Sardar Vallabhbhai*, Part II, (1952,) p. 27.

9. For details see *Madho Prasad*, *Gandhian Patriarch*, Popular Prakashan, Bombay, (1965,) pp. 204-205.

During the course of the salt agitation, Gandhiji before his arrest declared that if the British Government did not concede the Congress demands, it would be necessary to withhold the payment of land revenue dues. By the time this was clarified, a small amount was still outstanding in the district and in order to avoid the payment of land revenue, British subjects migrated with their property to adjoining villages of Petlad and Bhadran talukas of the Baroda State.¹

During Gandhiji's march from Ahmadabad to Dandi about 339 volunteers were enlisted from Petlad taluka but out of these only 162 took active part in the movement. Ten volunteers were convicted for their participation in the picketing of foreign cloth shops or liquor shops.² Picketing in Borsad was carried out solely by four persons from Vaso and Bhadran and they were convicted and sentenced to undergo imprisonment for different terms.³ About 2,000 volunteers from Sunav, Rupiapura, Davalpura, Pahdoli, Amod, Vadala, Virsad, Bochasan, Ras, Dharmaj, Sojitra, Ranoli, Bhadran and Vaso came to Petlad to offer Satyagraha and to procure the resignation of a resident of Petlad, who had accepted Patelship of Dayalpura. After he promised that he would resign within a week, Satyagraha was called off.⁴

Shri Amritlal V. Thakkar, the President of Bhil Seva Mandal, Dohad was arrested on 2nd August, 1930 at Mahemadabad while observing picketing of the liquor shop. He was sentenced to six months' imprisonment, the maximum allowed under the Ordinance No. V of 1930. In the appeal filed in the Sessions Court, the judgment of the lower court was set aside and a retrial was ordered. The case lapsed because of the expiry of the period of Ordinance.⁵

The people of Ras migrated to Zarola and Vasna of Baroda State. To recover land revenue, the police raided Ras and broke open the houses to take away whatever was available there. Grains were sold at three to four annas a maund.⁶ The Government collected Rs. 1200 to 1500 by such actions. All the lands of Ras were confiscated. Out of 2400 acres, 295 acres of land was sold for Rs. 3200 only.⁷

1. BRO., P. D. File No. 38/36, *Note on the Situation in Baroda State in relation to C. D. Campaign in British territory*, pp. 2-3.
2. BRO., P. D. File No. 38/5, Confidential No. 215 of 30th July, 1930 from District Police Naib Suba to Suba, Baroda District.
3. *Ibid.*
4. BRO., P. D. File No. 38/7, From Assistant Police Naib Suba to Suba, Baroda District, 20th August 1930.
5. AMBEKAR D. V., *Story of Thakkar Bapa's Imprisonment, Thakkar Bapa 80th Birthday Commemoration Volume*, Madras, (1949,) pp. 39-42.
6. *Ravishanker Maharaj*, p. 22
7. *Jivanna Jharn* p. 360.

On the New Year Day fourteen persons were arrested at Kapadvanj for offering Satyagraha and each of them was sentenced to three months' imprisonment.¹ On 30th October Shri Motibhai Shankerbhai a volunteer was arrested at Ankav while picketing a liquor shop.² A meeting of twenty-two Patidar villages situated in Petlad and Borsad talukas was convened at Kavitha on 1st November, 1930 and excommunicated those Patidars of Borsad, Davol, Bodal, Dedarda and Surkava who had paid the land revenue.³

To have first hand information about the Borsad taluka and to have thorough knowledge of the sufferings and hardships of the peasantry, a number of persons visited the district, Mr. Barilsford who visited the district wrote in the Manchester Guardian that practically every peasant in the Borsad taluka refused to pay any land revenue from a mixture of motives personal devotion to Gandhi, desire for Swaraj and economic distress due to the terrific fall in agricultural prices.

Some thirteen persons were arrested at Limbasi and were put in the lock-up at Matar. A young woman who came to inquire about the arrested persons was arrested on the spot and put in the lock up by the police.⁴ A party of large police force headed by Deputy Collector raided Vadthal in the early morning on 17th November, 1930 and rounded up the villagers including those who were going out to answer the call of nature, and assembled them in the Chowra. There they were coerced to pay a small amount towards the first instalment of land revenue.⁵ In Navagam on the wall of the temple was written that no official should enter the temple. This showed the strength of the feelings of non-co-operators.⁶ Sardar Gopaldas Viharidas Desai of Nadiad who tried to persuade the *hizartis* to return to their villages was told that the difficulties that might prevent a big *zamindar* like him from sacrificing his wealth, would not prevent them from doing so for the sake of their country.⁷

Out of thirty one villages of Borsad taluka, twenty eight villages had sent their batches for participation in the women procession at Borsad in 1931. Women from Bhadran, Dharmaj, Changa, Kavitha and Zarola-the villages of Baroda State also participated.⁸ Through the processions were

1. *Swatantrya Sangramna Ladvaiya*, pp. 75-94, 230 and 268.
2. *The Free Press Journal*, 7-11-1930.
3. BRO., P. D. File No. 38/5, Confidential letter No.171, Dated 2-11-1930, from Collector Kaira to Resident at Baroda.
4. BRO., P. D. File No. 38/13, Note of Sir Lallubhai Somabhai, p. 3.
5. BRO., P. D. File No. 38/13, Note of Sir Lallubhai Somabhai, p. 5.
6. *Ibid*; p. 2.
7. *Ibid*; p. 8-10.
8. BRO., P. D. File No. 38/39, Confidential Sp. No. 384 of 18-2-1931., from Assistant Police Naib Suba, Petlad to P. N. S., Baroda District.

not banned the police used force, to disperse them. The police gave lathi blows, canned children, pulled women by the hair, delivered fist blows on the breasts and showered abuses on them, a repetition of Dharasana atrocities.¹

The Resident at Vadodara requested the Baroda Government to take action against Shri Vallabhbhai and Vithalbhai of Mahelav in whose field it was alleged the Samiti of Sunav was established.² However the Baroda authorities found nothing incriminating as the *mandwa* was simply used for a charkha class.³ The Sangram Samitis of the Kheda district and Nadiad Taluka were removed to Pij. Shri Ishvarbhai Jethabhai Patel was responsible for printing and distributing the Patrikas from there.⁴ Shri Jayshanker Jayaram Trivedi who worked for the Kapadvanj Taluka Samiti published cyclostyled 'PADKAR' a patrika of the movement.⁵ Between January 6th and 30th September, 1930 sixty five lathi charges were made in the district and 1084 persons were arrested while 150 were severely beaten in the lock up.⁶

The Gandhi-Irwin Pact was signed on 5th March, 1931, and as a result of it, the movement was called off. The confiscated lands were returned to their owners. The Talatis and Police Patels who had resigned were reinstated. Gandhiji visited those villages of the district which had participated in the no-tax campaign. The *hizaratis* of Ras re-entered the village after-Sarvashri Morarji Desai and Ravishanker Maharaj accompanied by Shri Khan Abdul Gaffar Khan had gone to their *mandwas* to invite them to do so.⁷

Civil Disobedience, 1932

Immediately after his return to India on 28th January, 1931, Gandhiji was apprised of the tense political situation in the country. Repressive Ordinances, were in force in Bengal, U. P. and N. W. F. P. After Gandhiji's attempts to have interview with the Viceroy to discuss the situation proved futile, the Working Committee of Congress called upon the nation to resume Civil Disobedience movement including non-payment of taxes.

1. *The Bombay Chronicle*, 30-1-1931.
2. BRO., P. D. File No. 38/41, Confidential D. O. of 7-2-1931, from Resident to Dewan, Baroda State.
3. *Ibid.*, Confidential No. 208, dated 16-3-1931 from Suba, Baroda District to Manager, Huzur Political Office, Baroda.
4. *Swatantrya Sangramna Ladvaiya*, p. 17.
5. *Ibid.*, p. 94.
6. *Condition of India*, India League Delegation Report, Appendix II., p. 523.
7. *Jivanna Jharana*, P. I., pp. 364-365.

Gandhiji and Sardar Patel were arrested in Bombay on 4th January, 1932 in the early hours of the morning. Students of Petlad Schools observed strikes on 4th January to protest against the arrest of Gandhiji.¹ Darbar Gopaldas was arrested at Borsad.² Shri Ravishanker Maharaj was arrested from Bochasan and was sentenced to two months' imprisonment. After his release from Jail he was served with a notice at Kheda directing him not to leave the limits of Mahemadabad and to report daily at the police station. On his disobeying the said notice, he was arrested and sentenced to imprisonment for nine months and a fine of Rs. 50 or in default further imprisonment of two months.³ Shri Abbas Taiyabi was arrested 'and kept as a detenu for for two months in Sabarmati Jail.⁴ On his release from jail, he was served a notice by the Collector, Kheda, directing him not to enter the district.⁵ Prabhat Pheries were taken out at Petlad on 16th, 17th and 19th January.⁶ A procession of men released from the police custody was beaten up at Anand. The police entered the premises of Charotar Education Society and beat the inmates there.⁷ At Umreth, after a non-political meeting was over, the people were, lathi charged.⁸ In the district besides Ras, Tranja, Limbasi, Khandeli, Isnav, Amod, Vadala, Kathana, Golel, Palaj, Surkuva, Borsad, Anklav-Piplav, Sunav, Saijpur, Gana, Vehera and Bochasan had joined the no-tax campaign.⁹

On February 4, 1932, 'Gandhi Day' was observed and processions were organised at several villages of Borsad taluka. In Ras, the police lathi charged a procession. At Virol, Saijpur Rupiapura, Vasna and Jantral meeting and processions were organised.¹⁰ At Sunav, the police lathi charged a procession causing injuries to about fifty persons. Even the Red Cross volunteers were not spared by the police.¹¹

Shri Ravjibhai Manibhai Patel who toured the district after the start of Civil Disobedience Movement for about two months for propogating the ideals of Congress, was arrested at Pansora. He was kept for ten days,

1. BRO., P. D. File No. 38/50, Letter No. 458, of 7-1-1932 from Commissioner of Police, Baroda State to Dewan, Baroda State.
2. *Jivanna Jharana* P. I. p. 370.
3. *Ravishanker Maharaj*, p. 233.
4. *Swatantrya Sangramna Ladvaiya*, p. 1.
5. *The Bombay Samachar*, 11-3-1932.
6. BRO., P. D. File No. 38/50 Confidential letter No. 574, of 22-1-1932. from Commissioner of Police, Baroda to Dewan, Baroda State.
7. *Condition of India*, Appendix-III, p. 525.
8. *Ibid.*
9. *Condition of India*, See Map of Kaira facing, p. 364.
10. *The Bombay Samachar*, 8-2-1932.
11. *Ibid.*

in Anand lock-up and later on was sentenced to fifteen months' imprisonment.¹ In the district sixty three persons were arrested while picketing at the time of auction for a liquor licence.²

On 22nd July, 1932, at Ahmadabad the volunteers from all over Gujarat attempted to occupy the headquarters of the Gujarat Congress Committee, which was seized by the Government in January, 1932 under the Ordinance.³ Shri Fulsinhji Dabhi who led a batch of volunteers of Kheda was arrested and sentenced to six months' imprisonment.⁴ In the district about eight hundred attachments were made during the first seven months of 1932.⁵

The tempo and the spirit of the people of the district during the movement could be gauged from what the women of Ras told the members of the India League Delegation "Every house is a Congress House". They also asserted with emphasis that they would not 'give in' till the freedom of India was won.⁶

While the movement was in full swing in the country, Gandhiji suddenly queered the pitch of the whole campaign on the issue of Communal Award. Shri Aney, President of the Congress in deference to Gandhiji's request suspended the movement. Thus the mass Civil Disobedience movement came to a sudden halt in May, 1933. However, those who were able and willing were advised to offer Individual Civil Disobedience.

From Sabarmati Ashram on 1st August, 1933, Gandhiji was to commence his march to Ras to start individual civil disobedience and to pay homage to the cultivators of Kheda who had very boldly participated in the no-tax campaign. Gandhiji announced that after the commencement of the said march, the Sabarmati Ashram would be dissolved. On 31st July, 1933, Gandhiji was arrested at 1-30 a. m. and thirty four inmates including Mahadev Desai, Ravjibhai Nathabhai Patel, Kasturba Gandhi, and others were arrested at 6-0 a. m. and sent to prison.⁷ The Working Committee which met at Patna in May, 1934 called off the movement and thus the movement was officially terminated on May, 20, 1934.⁸

1. *Jinanna Jharana*, P. I., pp. 405-406.

2. *The Bombay Samachar*, 11-3-1932.

3. *Panchmahals Satyagraha Patrika*, 20th July, 1932.

4. *Swatantrya Sangramna Ladaiya*, p. 160.

5. *Condition of India*, p. 363.

6. *Ibid.*, p. 357.

7. *Ashramni Ohhlei Rat Ek Kumari Kuch*, An article of Shri Nirubhai B. Desai, in *Gujarat Samachar*, 11-3-1973.

8. *History of Freedom Movement in India*, Vol. III., p. 533.

Entry into Legislature

Under the Act of 1935, the provincial autonomy was to be introduced in 1937. The elections for the Bombay Legislature were held on 17th February, 1937. All the four seats allotted to the Kheda district were secured by the Congress nominees.

World War II

The proclamation issued by the Viceroy of India, regarding the outbreak of Second World War virtually made India a party to War against Germany. In protest the Congress ministers in the province resigned. The Ramgarh Congress of March, 1940 protested against the declaration of India as a 'Belligerent Country' without any reference to the people of India. Hence the movement for civil liberty and freedom of speech was launched throughout the country.

For participating in the movement of individual satyagraha by shouting anti-war slogans or addressing the meetings, a number of persons were arrested in the district.

Sardar Patel visited a number of places in Gujarat during March, 1942. Addressing a meeting at Anand on March 7, 1942, he asked the people not to act like a coward and urged them to be prepared to face bullets either non-violently or violently. He also addressed a meeting at Karamsad.

THE QUIT INDIA MOVEMENT

The entry of Japan into the Second World War on the side of the Axis Powers (Germany and Italy) against British alarmed the British Government. Their advance upto Burma brought India within the vortex of the War. This compelled British to rally all the forces of Indian life to guard their land from menace of the invader. Hence the British Government sent a Mission headed by Sir Stafford Cripps to settle matters with India. As it was feared that the Cripps Proposals would lead to partition of India, they were rejected.¹

On July 14, 1942, the Working Committee of the Congress passed a resolution at Wardha demanding that 'British Rule in India must end immediately.' The A. I. C. C. which met at Bombay passed the Quit India resolution and then the meeting terminated late at night on 8th August, 1942. Soon after midnight the police swooped upon leaders and arrested Gandhiji and other prominent leaders of the Congress.²

1. For details See "*Struggle for Freedom*", pp. 637-641.

2. *Struggle for Freedom*, p. 649.

The agitation began with the general strike at several places in the district. Nadiad observed strike for a month. Mills at Nadiad and Petlad remained closed. Leaders of this district were arrested and were kept as detenus in Jail.¹ Because of ill-health, Shri Babubhai Jashbhai Patel was released from Nasik Jail in 1943.²

On August 11, 1942, police opened fire at Nadiad on the people demonstrating against the British Rule, as a result of which a man lost his life.³ At Borsad and Anand Police resorted to lathi charges and firings. The telephone wires between Anand and Nadiad were cut down⁴ due to police firing seven persons died at Dakor.⁵ At Anand and Borsad the military marched through the bazaars.⁶ There were firings at Chaklasi, Bhadran and Karamsad.⁷ On August 15, 1942 the police opened fire on a procession at Nadiad near Pij Bhagol. Shri Bhavanbhai Hathibhai Patel was seriously wounded and died on the next day.⁸ Shri Manubhai Ishvarbhai Patel who participated in a procession at Chaklasi carrying tricolour in his hand received bullet wound in firing by the police and died.⁹ On 16th August, 1942, at Dakor procession led by Shri Chhaganbhai Becharbhai Patel refused to disperse, whereupon police fired causing death of three persons.¹⁰ At Borsad, Chaklasi and Uttarsanda police resorted to lathi charges on the meetings and processions organised to condole the death of Shri Mahadev Desai.¹¹ At Nadiad about 1200 youths participated in procession.¹²

On 18th August, 1942, a batch of thirty-four students, after finishing the propaganda work reached Adas railway station. They were asked to sit down and were shot at by the policemen.¹³ An armed party of five policemen fired in all seven rounds, causing immediate death of three and serious injuries to six. Eleven other persons received minor injuries.¹⁴ Sarvashri Ratilal Gordhanbhai Patel, Ramanlal Purshottamdas Patel and Mohanlal Maganlal Patel died on the spot. While Tulsidas S. Modi and

1. *Swatantraya Sangramna Ladvaiya*, pp. 57, 100 and 241.
2. BABUBHAI JASHBHAI PATEL, *Abhinandan Granth*, p. 17.
3. *Azad, Patrika*, No. 2.
4. *Ibid.*, No. 3.
5. *Ibid.*, No. 5.
6. *Ibid.*, No. 6.
7. *Struggle for Freedom*, p. 661.
8. *Who's who of Indian Martyrs*, Vol. II, edited by Dr. P. N. Chopra, Government of India, Delhi, 1972, p. 237.
9. *Who's who of Indian Martyrs*, Vol. I, 1960, p. 268.
10. *Swatantraya Sangramana Ladvaiya*, p. 88.
11. *Azad Patrika*, No. 6.
12. *Ibid.*
13. *Swatantraya Sangram ana Gujarat*, p. 310.
14. Hutchines Francis G. *Spontaneous Revolution. The Quit India Movement*, Manohar Book Services, Delhi, (1971), p. 283.

Manilal P. Shah succumbed to the injuries on the next day at Anand.¹ A student named Shankerbhai Dahyabhai Dhobhi who participated in a demonstration against the British Rule was killed at Kheda, when police opened fire.²

Shri Vithal Kanya Vidyalaya of Nadiad was closed down and its teachers actively participated in the movement. Shri Umedbhai Narayanbhai Patel directed the movement from Nadiad, Pij. Bochasan, Bhadran and Anand for about four years.³ The Bar Councils of Nadiad and Anand resolved not to take new cases and decided to get the old ones settled by arbitration.⁴ On 8th April, 1943 flag hoisting ceremonies were performed at Panchkui, Patel Maidan, Kakakhad and Sindushi Pole in Nadiad inspite of the strict police vigilance. Programme of mass spinning was organised in Dave's pole and students took out a huge procession.⁵ On 9th April, Nadiad observed strike to celebrate the Azadi day. Programmes of spinning were organised. Flag hoisting ceremony was preformed at Kapadvanj in Rabarivad, and programmes of Prabhat Phery and mass spinning were arranged.⁶ For the Prabhat Phery taken out at Nadiad on 12th April Sarvashri Sarlaben M. and others were arrested near Dabhan Bhagol and the Prabhat Phery was dispersed by the police.⁷ On 13th April Martyrs' Day was observed. A flame was lighted and flowers were placed at the spot where Shri Bhavanbhai Patel was hit by the bullet in police firing at Nadiad on 15th August, 1942.⁸ The police lathi charged a procession at Kheda causing injuries to six students.⁹ Shri Shankerlal Khushaldas Purohit who was exonerated by the court on 21st April, 1943 in the Mahemadabad Bomb case, was arrested immediately after his acquittal and was kept as detenu under the Defence of India Act.¹⁰ Shri Ishvarbhai J. Patel, Principal D. N. High School, Anand, resigned his post to participate in the movement. He was arrested on 4th May, 1943 and was kept as a detenu for one year in the Sabarmati Jail.¹¹ Twenty seven persons led by Shri Babalbhai Mehta went to Adas to pay homage to the Martyrs.¹²

1. RAVAL PRABODH, ; *Gujaratnu Nankdu Jallianwala* Published in Gujarat Samachar Ahmadabad, 18th August, 1972.
2. *Who's who of Indian Martyrs*, Vol. II, p. 81.
3. *Swatantra Sangramna Ladvaiya*, p. 24.
4. PURANI C. B. AND BHATT C. M., *Inquilab*, No. 1.
5. *Swaraj Sangram*, Published by Gujarat Prantik Sangram Samiti, 30th April, 1943
6. *Ibid.*
7. *Ibid.*
8. *Ibid.*
9. *Ibid.*
10. *Ibid.*
11. *Swatantraya Sangramana Ladvaiya*, p. 17.
12. MEHTA BABALBHAI, 'Maro Jail Nivas', *Swarajna Sambharna* published by Swaraj Rajat Jayanti Mahotsava Samiti, Ahmadabad, 1972, p. 16.

While they were offering prayers on 18th May, 1943, police beat them with hunters. All of them were taken to the police station. Sarvashri Babalbhai Mehta was detained while the others were forced to stand in the scorching heat from 9 to 2-00 p. m.¹ Shri Jayantkumar Patel was sentenced to imprisonment for six months.² In Kheda district and other areas of Gujarat in order "to render the movement abortive" the Government carried out its policy of arresting competent persons capable of organising and launching a mass movement, of detaining the leaders and of using force to deal with the widespread demonstrations and disorders during the course of the movement.³

After the end of the Second World War the Cabinet Mission was sent to India by Mr. Attlee, Prime Minister of England to seek an agreement with Indian leaders on the principles and procedures relating to constitutional issue.⁴ The British Prime Minister announced that the British Rule in India would end in June, 1948. The Congress and Muslim League accepted the partition of the Country. On 15th August, 1947, the Britishers transferred power to India and Pakistan and India became free from foreign rule.

1. *Swaraj Sangram*, 4th June, 1943.
2. *Swatantraya Sangramna Ladvaiya*, p. 96.
3. NICHOLAS MANSERGH, *The Transfer of Power*, Vol. II, Vikas Publications, Delhi, (1971,) Document No. 454 p. 609.
4. *Struggle for Freedom*, p. 727.

PART III

CHAPTER III

PEOPLE

POPULATION¹

Growth of Population—The population of the areas now comprising Kheda district was 1,037,249 in 1901. In 1971 it rose to 2,451,387 (rural 1,962,357 and urban 489,030) recording a rise of 157.69 per cent during the last seventy years. The decrease in the population of the district between 1901-1911 was due to the out-break of plague in 1901-1904. In 1971, the population increased by 473,847 or 23.96 per cent over the population in 1961 (1,977,540). The larger increase in population in recent times may be attributed mainly to the general improvement in medical and public health services available to the people after Independence. It is partly due to migration of the East African Gujaratis who had to settle in their home land. The educational facilities available at the Sardar Vallabhbhai Patel University also attracted professors and students from different parts of the country. The decenninal growth of the population between 1901 and 1917 is given below :

STATEMENT III-1

Decadal Variation in Population During Seventy Years

Year		Persons	Decade Variation	Percentage Decade Variation	Males	Females
1		2	3	4	5	6
1901	.. ..	1,037,249	..	..	546,909	490,340
1911	.. ..	1,016,501	-20,748	-2.00	544,964	471,537
1921	.. ..	1,032,490	+15,989	+1.57	551,574	480,916
1931	.. ..	1,123,196	+90,706	+8.79	599,040	524,156
1941	.. ..	1,336,297	+213,101	+18.97	704,922	631,375
1951	.. ..	1,612,426	+276,129	+20.66	843,250	769,176
1961	.. ..	1,977,540	+365,114	+22.64	1,039,720	937,820
1971	.. ..	2,451,387	+473,847	+23.96	1,294,271	1,157,116

Source : *District Census Handbook 1971, Kheda, Part X-C-I, p. 71.*

Density—According to the figures supplied by the Surveyor General of India, the area of the district was 7,194.0 km. or 3.67 per cent of the total area of the State. The density of the population thus comes to

1. The statistics given in this section are collected generally from 1971 Census Reports but in cases where the figures are not available we have given the figures from 1961 Census Reports.

341 persons per sq. km. (urban 1,490 and rural 286), as against 136 per sq. km. for the whole State. The urban density is naturally higher than the rural as the pressure of population in rural areas is comparatively less and the average density is worked out on the basis of the entire area within the revenue limits of the village and not of the village site. The rural and urban densities differ for different parts of the district as also for its rural and urban areas as will be seen from the statement that follows:—

STATEMENT III-2
Density of Population, 1971

State/District/ Taluka/Mahal	1	Total/Rural/ Urban	2	Population per sq. km.	
				1961	1971
				3	4
State		T		105	136
		R		85	N.A.
		U		2,799	N.A.
District		T		286	341
		R		236	286
		U		2,081	1,490
Mahomedabad		T		271	348
		R		225	303
		U		4,087	917
Nadiad		T		428	568
		R		322	414
		U		2,155	2,962
Pottlad		T		405	541
		R		317	446
		U		2,240	3,155
Anand		T		461	590
		R		383	474
		U		1,670	1,852
Borsad		T		457	494
		R		427	462
		U		907	1,235
Khambhat		T		152	185
		R		106	141
		U		12,822	897
Matar		R		170	229
Kapadvanj		T		222	274
		R		196	248
		U		6,763	1,016
Vadasinor		T		187	238
		R		159	212
		U		7,784	888
Thasra		T		231	188
		R		210	251
		U		691	808

N. A. = Not available.

Source : District Census Handbook 1971, Kheda, Part X-C-I pp., 68-69.

The highest average density (590) is found in the Anand taluka as it is an important commercial, agricultural and educational centre. The lowest (185) density is in the Khambhat taluka, which is comparatively less developed. In the urban areas, the Petlad taluka has the highest density (3,155) while the Thasra taluka has the lowest (808). In the rural areas, the Anand taluka has the highest density (474) while the Khambhat taluka has the lowest (141).

Rural-Urban Distribution—The population figures for the last seventy years indicate a comparatively greater increase in urban population as compared to the rural.

STATEMENT III-3

Rural and Urban Population of the District from 1901 to 1971

Census Year	1	Rural Population			Urban Population		
		Total	Males	Females	Total	Males	Females
		2	3	4	5	6	7
1901		848,858	450,567	398,291	188,391	96,342	92,049
1911		851,125	459,568	391,557	165,376	85,396	79,980
1921		860,355	461,541	398,814	172,135	90,033	82,102
1931		928,317	496,577	431,740	194,879	102,463	92,416
1941		1,101,759	582,303	519,456	234,538	122,619	111,919
1951		1,324,488	692,604	631,884	287,938	150,646	137,292
1961		1,609,538	844,279	765,259	368,002	195,441	172,561
1971		1,962,357	1,034,923	927,434	489,030	259,348	229,682

Source :

District Census Handbook 1971, Kheda, Part X-C-I, p. 74.

From the above statement, it is clear that during the period from 1901-71, the urban population has increased from 188,391 to 489,030, i. e., 159.58 per cent. and the rural population rose from 848,858 to 1,962,357, i. e., 131.18 per cent. The major increase in rural population may be due to more lands having been brought under cultivation and provision of greater medical facilities brought about by the development programmes under the Five Year Plans.

Rural Population There were 962 villages in the district, of which 5 were uninhabited. The total rural population of the district was 1,962,357 giving an average of 2,039 persons per inhabited village, as against 422 in the State. Villages classified by population are given below :

STATEMENT III-4

Percentage distribution of rural population by size group of Villages, 1971

Size group 1	No. of Villages 2	Percentage to total No. of villages 3	Rural population 4	Percentage to total rural population 5
Less than 200	39	4.07	4,824	0.25
200-499	87	9.09	31,674	1.61
500-999	195	20.38	1,426,37	7.27
1,000-1,999	298	31.14	428,015	21.86
2,000-4,999	264	27.59	813,691	41.47
5,000-9,999	65	6.79	424,559	21.63
10,000 and above	9	0.94	116,057	5.91

Source :

Based on District Census Handbook 1971, Kheda, Part XC-I, pp, 72-73.

Of the 957 inhabited villages, 126 or 13.16 per cent fall in the size groups of population below 500, 51.52 per cent in the size groups of 500-1,999 and 338 or 35.32 per cent are large size villages with a population of 2,000 and above. The concentration of population in rural area is found in medium and large size villages. It can be observed from the statistics that general tendency of villages is to grow in size.

Urban Population—Statement III-5 that follows gives the number of towns classified by population.

STATEMENT III-5

Number of towns classified by size groups during 1901 to 1971

Year 1	I		II		III		IV		V		VI	
	No. of towns 2	Population 3	No. of towns 4	Population 5	No. of towns 6	Population 7	No. of towns 8	Population 9	No. of towns 10	Population 11	No. of towns 12	Population 13
1971 ..	1	108,269	2	121,252	4	125,246	7	107,252	3	27,011	..	..
1961 ..	..	..	2	130,243	5	148,698	5	64,772	5	40,058	..	..
1951 ..	..	..	1	62,645	5	137,428	7	89,421	22	156,118	3	9,923
1941 ..	..	..	..	..	4	125,454	6	84,372	9	60,683	2	6,597
1931 ..	..	..	..	..	2	66,461	6	86,071	10	73,253	4	14,994
1921 ..	..	..	..	..	2	59,190	5	67,147	8	58,238	7	27,142
1911 ..	..	..	..	..	2	55,243	5	63,639	8	59,031	4	14,998
1901 ..	..	..	..	..	2	63,215	7	90,217	8	61,382	6	25,120

Source :

- (1) District Census Handbook 1961, Kaira, p. 14.
- (2) District Census Handbook 1971, Kheda, Part X-C-I, pp. 74-77.

Displaced Persons—As a result of the partition of the country in 1947, some Muslim families migrated to Pakistan and some Hindu families migrated to this district. The total number of such migrants to this district according to the 1961 Census was 1,389 (785 males, 604 females), of whom 1,099 have settled in urban areas and 290 in rural areas. The Government extended various facilities which included technical and vocational training, special priorities in recruitment to public services and loans to settle down in petty business or trade.

Sex-ratio—According to the 1961 Census, the number of females per 1,000 males was 902 which was lower than the similar ratio of 940 for the State. The proportion of females was comparatively higher in the villages (906) than in the towns (886). The sex-ratio for Anand (809), Vallabh Vidyanagar (820), Dakor (883), Pali (860) and Nadiad (885) was lower than the district average of (886). The sex-ratio in respect of these urban areas appears to be lower as the male population is concentrated here either for business or educational purpose.

The higher female ratio in Sojitra and Dharmaj is mainly due to the absence of male members who have migrated to towns and cities and even to foreign countries like East Africa and England for business or service.

Birth Place and Migration—The 1961 Census recorded that 454,648 persons (22.99 per cent of the population) were born elsewhere within the district, 158,799 persons (8.03 per cent) outside the district but in the State and 32,464 persons (1.64 per cent) outside the State. There has been a general tendency among the village people to go to nearby towns to earn their livelihood. Sexwise distribution of migrants shows that 9.43 per cent of the male population and 38.02 per cent of the female population were born elsewhere but within the district and 5.33 per cent of the male and 11.02 per cent of the female population were born outside the district. The high percentage of female migrants is due to marriages resulting in girls leaving their parental homes, mostly within the district. The proportion of females born outside the place of enumeration but within the district is as high as 38.02 per cent as compared to those born outside the district but within the State which account for 11.02 per cent and those outside the State which account for 1.49 per cent only. The persons who migrated from Pakistan numbered 4,634.

A special study of migrants to Ahmadabad City undertaken in the 1961 Census has revealed some interesting features. Ahmadabad city had 393,384 migrants from the various districts of Gujarat State. Migrants from Kheda district numbered 49,353 due to its proximity to this highly industrialized city where potentialities of trade and employment are greater.

STATEMENT III-7
Population by place of birth, 1961

Persons/Males/ Females 1	Total population 2	Born in			
		Place of enumeration 3	Elsewhere in the district 4	Outside the district but in the State 5	Outside the State 6
Persons	1,977,540	1,331,629	454,648	158,799	32,464
Males	1,039,720	867,722	98,030	55,482	8,486
Females	937,820	463,907	356,618	103,317	13,978
<i>Percentages</i>					
Persons	100.00	67.34	22.99	8.03	1.64
Males	100.00	83.46	9.43	5.33	1.78
Females	100.00	49.47	38.02	11.02	1.49

Source :

District Census Handbook, 1961, Kaira, p. 15.

Marital Status—According to the 1961 Census, 45.27 per cent in the district were married, 42.98 per cent males and 47.80 per cent females. Persons who were never married accounted for 47.71 per cent of the total population, males being 52.74 per cent and females 42.14 per cent of their respective population. The widowed were 6.76 per cent and divorced or separated constituted 0.27 per cent only. The following statement gives the percentage distribution of males and females by age and marital status.

STATEMENT III-8
Percentage Distribution of Population by Age, Sex and Marital Status

Age-groups 1	Never		Married		Widowed/divorced separated and others	
	Percentage of males to total males 2	Percentage of females to total females 3	Percentage of males to total males 4	Percentage of females to total females 5	Percentage of males to total males 6	Percentage of females to total females 7
Total	52.74	42.14	42.98	47.80	4.28	10.06
0—9	100.00	100.00	..	..	..	..
10—14	91.56	80.38	8.39	19.51	0.05	0.11
15—19	69.40	33.52	30.20	65.81	0.40	0.67
20—24	34.27	4.70	64.24	93.88	1.49	1.42
25—29	11.77	0.79	85.63	96.28	2.60	2.93
30+	4.35	0.30	83.65	70.64	12.00	29.06

Source :

District Census Handbook, 1961, Kaira, p. 17.

The statement given above reveals that infant marriages have almost disappeared in the district as no one in the age group 0-9 has been reported married. But the child marriages still persist in the age group 10-14 to the extent of 8.39 per cent for males and 19.51 per cent for females. Among males, the age of marriage has shifted and risen to 20 years and above, and only 30.20 per cent of males in the age group 15-19 years were returned as married. In the case of females, the marriageable age has gone well over 15 as disclosed by the fact that in 1961, 65.81 per cent of females in the age group 15-19 years and 93.88 per cent in the age group of 20-24 years were married. While 29.06 per cent of females of more than 30 years were widowed, divorced or separated, the similar percentage for males was 12.00 per cent only. These figures reveal greater tendency towards remarriage on the part of widowers than widows.

LANGUAGE

Gujarati is the mother-tongue of 94.45 per cent of the population of the district. The 1961 Census recorded 1,867,735 persons as speaking Gujarati. Speakers of other major languages included Urdu (86,435), Hindi (7,746), Sindhi (4,334), Marathi (4,052), Marwari (2,712) and Punjabi (1,312). The number of speakers of other languages is insignificant. The Gujarati script used universally by the speakers of that tongue is very much akin to the *devnagari* script but unlike the *devnagari* script, it is written without the line overhead.

BILINGUALISM

As stated before in the district 94.45 per cent have been returned as persons with Gujarati as their mother-tongue. As such, it naturally claims the highest number also among its speakers as a subsidiary language. It is the medium of communication with the local people by those whose mother-tongue is not Gujarati.

According to the 1961 Census, the total number of persons speaking languages subsidiary to their mother-tongue was 109,105 or 5.52 per cent, who have returned between themselves as many as 28 subsidiary languages. The most important language among them are Hindi (47,160), Gujarati (28,847), English (27,894), and Urdu (3,512) followed by Sanskrit (574), Marathi (432) and Arabic/Arbi (358). Among the Gujarati speakers (75,244), the general order of preference was Hindi, English and Urdu. For persons with Urdu, Hindi, Marathi and Sindhi as their mother tongue, the most important subsidiary language was Gujarati.

Language and script

As stated earlier, 94.45 per cent of the district population had Gujarati as their mother-tongue according to the 1961 Census.

Gujarati is one of the major languages of the Indo-Aryan family, and is derived, like other languages of the group, from Sanskrit. Its history dates back to about one thousand years. The great scholar, Acharya Hemchandra (1087-1174 A. D.), who was a distinguished member of the court of the Chaulukya kings, Siddhraj and Kumarpal of Patan, has in his *Prakrit Grammar* given numerous quotation from contemporary literature which can easily be regarded as specimen of the oldest Gujarati literature.¹

The progress of the Gujarati language since the time of Acharya Hemchandra to the present day can be divided according to Prof. Keshavlal Dhruva into three periods, viz., the first period from the tenth or eleventh century to the fourteenth century, the second period from the fifteenth century to the seventeenth century and the third period from the eighteenth century to the present times. The language of the first period may be called *Apabhramsa* or the "ancient Gujarati" that of the second period which is generally known as "the old Gujarati" may be called "mediaeval Gujarati", and that of the third period may be obviously called the modern Gujarati.²

The Gujarati vocabulary consists mostly of Sanskrit *totsama* or *tadbhava* words. However, on account of the historical and social reasons, and contacts with foreigners due to its extensive seacoast and commercial relations, it has absorbed words not only from the Persian, the Arabic, the Turkish, the Portuguese, the English and other foreign languages, but also occasionally from the Dravidian languages of the South India. There are in the Gujarati language, hundreds of archaic words of unknown origin called *deshya* which suggest interactions and contacts with diverse cultures of many races. But all these contacts reflected in the vocabulary have had no appreciable impact on the formation of the Gujarati language, which has developed its size and structure from Sanskrit through Prakrit and Apabhramsa. In the course of its historical development, its structure had already taken a definite shape, form and content before the commencement of the modern period. Having regard to the distribution of the different linguistic features, it appears that the innovating areas in the last two or three hundred years have been the regions round about Ahmadabad which was the centre of socio economic growth and political capital, whereas the earlier innovating areas were in Saurashtra which was then the focal point of culture. Some earlier innova-

1. SANDESARA, B. J. (Dr.), Article on *Origin and Evolution of language* published in the Souvenir of the 66th Sessions of the Indian National Congress, held at Bhavnagar in 1961, p. 191.

2. Presidential address by Dhruva, Shri Keshavlal, in the second session of Gujarati Sahitya Parishad, held at Bombay, in 1907.

tions from Saurashtra spread over the whole Gujarati-speaking community, which indicate that some dialect of Saurashtra was at one time a prestigious or standard dialect.¹

The Gujarati language has dialects or "*bolis*" which are only the spoken variants of speech, which include Charotari, Surati and Kathiawadi. A slight local variation in speech and accent is, however, found in different parts of the district or in different communities which retain special features of their own. This has been reflected in the proverb "બર ગાઉએ બોલી બદલાય", i. e., the dialect changes every 12 *gauts* (38.62 km.). Beside Gujarati, the other important languages spoken by the people in this district include Urdu (4.37 per cent), Hindi (0.39 per cent), Sindhi (0.22 per cent), Marathi (0.20 per cent), and Marwari (0.14) per cent.

The language spoken by the people of this district does not differ much from the standard Gujarati. Moreover, the facilities for transport, diversification of occupations and urge for advancement in education, business and science have contributed much to stabilise the different dialects in the standard Gujarati. However, a standard language is not a completely stabilised language. It is exposed to the winds of changes in the dialects which contribute to the gradual evolution of the standard language.

Charotari Dialect²

From dialect to language

The Standard language is understood in all parts of a particular land, and used in its literature and governmental works. Its different dialects are only spoken in different parts. In fact, dialect which overcomes the surrounding dialects become a standard language in course of time.

Origin of Gujarati

Looking to the origin of Gujarati language, it is derived from the old Indian language whose oldest literary form is found in the Rigveda. This language, Indo-Aryan, became a big and powerful independent source of development in India. It was divided in western and eastern dialects before 700 B. C. The western form was further split up into three sub-branches : (a) Hilly or the paisachi branch, (b) the central or the Surasena branch, (c) the Southern or the Vidarbha or the Maharashtra branch. This happened between before 200 B. C. A further piece of area covering the Modern Sindhi, Punjabi and Lahonda was cut off from the central block which

1. PANDIT, P. B. (Professor), Article on the *Language and Dialects* published in the Souvenir of the 66th Sessions of the Indian National Congress, held at Bhavnagar in 1961, p. 201.

2. Based on a note received from SHRI B. M. PANDIT.

now consisted only of the Madhyadesha, Rajasthan, Gujarat and country north of Vindhya ranges (about 100 A. D.). This block further split up into the Gujarat, Rajasthani on one hand and the Saurashtri on the other at about 600 A. D. From the Gujarat-Rajasthan block, Jaipur was separated in the 12th century and the remaining Gujarat-Marwar-Malava group finally split in to Gujarat and Mar-Mal in the 13th century.

In the above mentioned Gujarat-Rajasthan areas of 700-1000 A. D. the prevailing language was known as Apabhramsa. Old Gujarati was born from this Apabhramsa immediately in the 11th century.

The linguistic area

The cultural unity of Gujarat is mostly maintained by its language Gujarati, which is spoken all over Gujarat. The linguistic area of Gujarat is wider than its political area. The revised boundry line of the Gujarati language according to Dr. T. N. Dave runs as follows :

From Mitthi in Sind to due east covering portions of Sihrohi and Danta states and reaching the former B. B. C. I. Railway line beyond Abu road ; then touching Jora in Udiapur and including Dungarpur, Banswara, Ali-Rajpur and Barwari states, cutting the Ratlam Railway line between Amargath and Panch Piplye including Jhabna, Chhota-udepur cutting shahda including Nandubari passing through Pimpalner and joining point beyond the Dangs. From there it turns due west where the country is bi-lingual, Marathi and Gujarati spoken by Marathi and Gujarati people respectively making a heterogeneous mixture and near the Arabian sea it fuses with Konkani with which it is more akin.

Beyond this area there are many big towns and cities like Bombay, Calcutta, Madras, Nagpur, Hyderabad in India where Gujarati speaking people are living. Besides, Janjibar, Nairobi, Port Durban, Java, Hongkong, Penang, Paris, London, Amsterdam and New-york are the places of the world where Gujarati is spoken by some people. In all, two crores and four lakhs people are speaking Gujarati.

Dialects of Gujarat

This Gujarati language is singularly fortunate to have many dialects though Sir George Grierson has said that Gujarati has practically no dialects. On deep investigation we have found that there are number of dialects in Gujarat. They are of two types (a) Regional Dialects, that is, dialects spoken uniformly almost by all people of a particular sub-area, e. g., Halari, Charotari, etc., (b) The tribal dialects, i. e., dialects spoken by certain tribes and communities who, coming from out-side, settled here but did not give up their old language e. g. Parsi.

(Bk) H-50—19 (Lino)

Regionally speaking Gujarat is divided in two main natural parts (a) Saurashtra or the Peninsular Gujarat and (b) Gujarat on the main land of India. The main land is further divided into three parts due to its river systems: (1) North Gujarat, up to Ahmadabad district (2) Central Gujarat or Charotar reaching as far as south of Vadodara (3) South Gujarat including Bharuch and Surat districts.

Saurashtra is divided into sub-areas Jhalawar, Gohelwar, Halar, Sorath and Okhamandal.

Place of Charotar

The central area of Gujarat known as Charotar can be easily distinguished from north and south Gujarat. Popularly speaking, Charotar is situated between Mahi river and Vatrak river near Mahamadabad. Geographically it is a land between 22° 7" to 23° 8" North latitudes and between 72° 15" to 73° 37" East longitudes. Its area is 7,194 kilometers and its population is of about 24,51,382 men and women according to recent census. The land is very fertile and most thickly populated.

Charotari dialect

The people of Charotar use Gujarati language but dialect of Gujarati. Historians believe that in olden times the inhabitants of Charotar had close relations with Bhils and other aboriginal tribes. It is because of this that the Charotari dialect is highly saturated with the elements of aboriginal speech. According to Prof. Prabodh Pandit the affricate pronunciation of palatal sounds, the use of 1st person of the verb for the 2nd and the non-Aryan pronunciation of 'h' prove the highly influenced nature of Charotari.

Charotari is not only a dialect but it is a symbol of whole Charotari life. It is a possession of a particular group of people, therefore, it has its own importance in the land of Gujarati speaking people. The dialect of Mahesana, Patan or Kapadvanj of North Gujarat is nearer to Charotari still none of them has got such clear form of dialect because they have not got the force of people behind them.

The rivers as classifying factor

If we divide Gujarati according to its dialects, we get a portion of north-west to Sabarmati river up to Banas Kantha. Down below, we get another portion between Mahi river and Sabarmati. The language for the former is the dialect of north Gujarat while that of the latter is the dialect of central Gujarat. It can be seen that in the classification of dialects, rivers of Gujarat play an important part.

As shown above, the Charotari dialect is the dialect of central Gujarat and it is connected in some respects with the dialect of north and south Gujarat. In the eastern part it is connected with Bhili dialects also.

Main peculiarities of Charotari dialect

(1) Vowel + nasal consonant = open vowel + nasal consonant. This widespread rule is connected with vowel A and vowel I; for example Ani-Oni, Pani-Poni, Dana-Dona, Limado-Lemdo, Nikalyo-Nekalyo, Zini-Zeni, Mithha-Methha, Jan-Jon.

(2) Nasalised vowel + consonant = open nasalised vowel + consonant. This rule is also connected with A and I, e. g., Panch (five)-Pons, Kayan (where) Chayan, Pimpalo-Pemparo, Vinti-Venti, Sonthhi-Honthhi, Chikani-Chekani, Shakani.

(3) Some changes of doubling of vowels coming at the end of the word and of joint letters are common in Charotari and north Gujarati dialects e. g. Ai-ai, Aou-aou, Bhai-Bhai, Makai-Makai, Mithai-Mithai Gaou-Gaou.

(4) The dropping of nasalized vowel I and vowel V at the end of the word is common feature of Charotari dialect, e. g. Gadhedun-Gadhedu, Khavun-Khavu, Ramavun-Ramavu, Danhi-Dahi.

(5) The palatal sounds of Charotari dialect is most peculiar. The Palatal Phonemes c, ch, j and jh are affricated to ts, tsh, dz and dzh respectively, e. g., Veci-vesi, chokro-tshokro.

(6) One another peculiarity of Charotari dialect is its palatalization. When guttural phonemes k, kh, g and gh are followed by palatal vowels A, i and sh, they are turned into palatal phonemes e. g. ketala-cetala, khetar-chetar, Dikro-Decro, Khili-Chili, Geru-Jeru, Gilli-Jilli, Ghee-Jee.

(7) S is pronounced as h (unvoiced), e. g., Saru-Haru, Samo-Hamo, Sara-Hara.

(8) 'R' is pronounced at the place of 'L', e. g., Malish-Marish, Fal-Far.

(9) D is pronounced at the place of 'L' e. g., Vali-Vadi, Holi-Hodi, Malavu-Madavu.

(10) At the beginning of the word 'h' is pronounced as vowel e. g. Hashya-Aise.

(11) 'Re' is used at the place of emphatic 'pan' (but) e. g. Hun re(but) Javano.

(12) 'dhh' in the middle of the word is pronounced as hd e. g. Kadhbi-Khadi, Vadhavu-Vhdavu.

(13) If the word is not foreign, the first letter of the word beginning with 'y' is pronounced as J e. g., Yash-Jash, Yamuna-Jamuna, Yasoda-Jashoda, Yar-Jar.

(14) In grammar of Charotari dialect the post-position 'thi' is pronounced as 'si' e. g. Khusithi-Khusisi.

(15) In the verbs the 2nd person singular present is modelled on the first person. Thus 'Marusu' is both 1st person singular and plural.

(16) In compound verbs, the auxiliary 'che' is often shortened to 'ch' as Mareche Marech. (also in order districts).

(17) In future, the 1st and 2nd person singular show 'e' before the sign 's' as mare-s.

(18) In the 2nd person singular of imperative and in some other words 'y' is added, e. g., Hind-Hendya, Mel-Melya, Kar-Karaya, Vatako-Vadyako.

(19) To make plural of a noun, vowel O is attached; e. g. Ghar-Gharon, Hath-Hathon, Pag-Pagon, Manas-Manahon.

(20) In the continuous past the 'h' of auxiliary form is dropped, e. g., Jato-Hato-Jato-to, Khato-Hato-Khato-to, Ramatun-Hatun-Ramatu-tu.

The above mentioned peculiarities of Charotari dialect makes it most unique in all dialects of Gujarat.

The Proverbs of the Kheda District

Proverbs are the crystalised common sense of the people and are the quintessence of their experience and wisdom. In the nature of things, they are very cryptic, crisp, pointed and effective. Like any other region, Gujarat has a large fund of proverbs. Of these, most are of a general character and are applicable to all districts of Gujarat. However, there are certain proverbs which have their origin in certain districts and are applicable only to the district of their origin. The Kheda district has a number of peculiar proverbs which have their origin in certain villages, castes, communities certain

specialised commodities or important places. An attempt has been made here to collect them after contacting people in the villages. The proverbs so collected are explained below.

Proverbs

“ઓડ ઉમરેકના ઉંડા કૂવા
દિકરી દે તેના બાપ મૂવા”

This saying relates to the difficulties experienced by the womenfolk of Umreth and Ode villages (Thasra taluka). The women of the village find great difficulties in fetching water, because the wells of the villages are very deep. The fathers of these women are tired of complaints received from their daughters. They are worried for their daughters health. It is, therefore, said that those who give their daughter in marriage at village Ode or Umreth are put in troubles.

“નિરમાલીમાં નવ જણા,
દાંડિયા રમે ત્રણ જણા,
પહોળા રહો બાઈ પહોળા રહો”

This saying is used when people exhibit big show for insignificant matter. In Niramali village, Kapadvanj taluka there are only 9 persons, out of them 3 are playing *dandia-ras*; while the remaining shout, “Keep away, keep away”, as if there is so much of crowd.

“વીરપુરની વાયરી, ખેરોલીની ટાઢ,
એથી ના મરે તો ગંધારીમાં કાઢ,”

This couplet indicates the unhealthy climate of three villages Virpur, Kheroli and Gandhari of Vadasinor taluka. It is said that if one does not die by the winds of Virpur, cold of Kheroli he may be sent to the village Gandhari.

“ઠાસરા દો દિનકા આસરા,
રહે જે ઝાઝા દિ તો ખાપ ખાસરા,”

This saying tells about the hospitality of the people of village Thasra. The guests are treated well for two days only but if one stays on for more days, he is kicked out i. e., is given a rough treatment.

“રાસમાં રણકો પડ્યો, અડાસમાં છે વીર
કરમસદે હાકલ પડી, એ છે જિલ્લાનું ખમીર,”

The people of Kheda district are well-known for their freedom loving and courageous spirit. This couplet suggests some of the incidences of their fight for freedom. The bell of freedom-fight rang at Ras village (Petlad taluka). This refers to the Ras-Satyagraha. The brave men live at Adas (Anand taluka) and the call for freedom came from Karamsad village, as it was the native place of late Sardar Vallabhbhai Patel.

“નાડા માટે નડીયાદ જાય”

This saying is commonly used when one spends immoderately. Such people go to Nadiad for buying such a small article like *nada*.

“ ખેડ, ખાટલા ને ખાડા, એ જ્યાં જુઓ ત્યાં ધારવા શેનવાવાડા ”

This couplet indicates the nature of dwelling of Shenva community, one of the Scheduled Castes. Shenva eke-out their livelihood by preparing mats and brooms from the date palms and ropes of bhendi fibre. Their dwellings can be recognized by the existence of the waste land, pits and beds at their door-steps.

RELIGION

The district has a predominantly Hindu population. The 1971 Census shows that as many as 2,165,499 (88.34 per cent) persons in the district were Hindus. The Muslims numbered 223,982 (9.14 per cent), the Christians 43,204 (1.76 per cent), the Jains 17,330 (0.71 per cent) and the Sikhs 853 (0.03 per cent). Among others 25 were Buddhists and 171 followed other religions and persuasions.

The following is the rural-urban distribution of the population under various religions distributed by sex.

STATEMENT III-9

Distribution of Population by Religion

Religion		Rural and Urban	Males	Females
1		2	3	4
Hindus	.. .. .	R	9,042,542	843,781
		U	202,355	176,821
Muslims	.. .. .	R	71,629	64,876
		U	45,715	41,962
Christians	.. .. .	R	17,438	15,798
		U	5,240	4,728
Jains	.. .. .	R	3,103	3,033
		U	5,522	5,672
Sikhs	.. .. .	R	176	113
		U	305	259
Buddhists	.. .. .	R	11	10
		U	3	1
Other Religions and Persuasions	.. .. .	R	18	19
		U	37	97
Religion not stated	.. .. .	R	6	4
		U	171	142

Source :

District Census Handbook 1971, Kheda, Part X-C-I, pp. 104-105.

The Hinduism

Though the caste restrictions have tended to diminish with the spread of modern education and diversification of occupation, the religious life of an orthodox Hindu still continues to be governed by custom and tradition and the particular sect to which he belongs. The Brahmans are the followers of Lord Shiva and it is customary that some members of the family must perform the religious rituals every day. The Brahmans are expected to perform *sandhya* (twilight prayer) at least once a day in the morning, and repeat Gayatri or the Sun hymn. Generally, the Banias are Vaishnavas, staunch adherents of Shri Vallabhacharya who propounded the Bhakti cult, i. e., the worship of Krishna by intense devotion. Instead of the sacred thread, both men and women wear round their neck a *kanthi* or small basil or *tulsi* (*ocimum-basilicum*) beads. The Rajputs, though partial to the worship of Shiva, are equally devoted to Shakti, the mother goddess. The agricultural and artisan castes are all god-fearing people, who worship, some deity or the other of the Hindu pantheon, Rama, Krishna, Mataji or mother goddess in her various forms, Hanuman, etc. Belief in sorcery, witches, an evil eye and bad omens still prevail particularly among the tribal and other backward classes.

The Shaivism

The main doctrine of the Shaivism is the existence of one universal soul or *advaita* and of the individual soul is *jeevatma*. The followers of the Shaivism worship the deity under the name of Rudra, Shiva, Sadashiva, Shankara, Shambhu, Mahadeva, Neelkantha, etc., in their own houses, as also in the temples which are to be found in almost every village, town or city in this district. They use a transversed streak of three lines called *tripunda* on their forehead as a religious mark and *rudraksha* rosary. The Shiva worship has continued from the earliest times to be the cult of the Brahmans, though this deity is equally favourite with all other castes except the staunch Vaishnavas and the Jains. Towards the close of the eighth century, the Shiva worship was extended and popularised by Shri Shankaracharya. He established in India four Mathas¹ or monasteries, where he appointed his four principal disciples as *acharyas* who were in their turn succeeded by their pupils to this day. The first head of this monastery was Mandanmishra, the famous *pundit*, whom Shankaracharya had defeated in philosophical polemics and who had taken *sanyasa* under the name. Sureshwaracharya, the present Shankaracharya, Shri Abhinav Sadchidanand Tirth, is the 77th in the line. The Shankaracharya of Dwarka wields great influence over the Hindus in all parts of the Western India. He goes about from place to place within his jurisdiction, preaching and propagating the doctrines of the Vedic religion. His word is believed as gospel in all religious matters affecting the Shaivism in Gujarat.

1. These four mathas are (i) Badrikedar (U.P.) in the extreme north, (ii) Rameshwar (Tamilnadu) in the extreme south, (iii) Jagannathpuri (Orissa) in the east and (iv) Dwarka (Gujarat) in the west.

The Vaishnavism

Vishnu is the god of preservation and universal prosperity whose various incarnations or *avatars* literally mean his descent on the earth for the good of gods and men. Of these, Rama the seventh incarnation and Krishna the eighth incarnation are most revered. Among the worshippers of Rama, the chief are Ramanadis and Ramasnehis, though he is also worshipped by the followers of other religious creeds. The Vaishnavism prevalent in this district is the *pushti marg* or creed of spiritual nourishment founded by Vishnu Swami and propagated by Shri Vallabhacharya, it is termed *Shuddhadvaita* as distinguished from the *Kevaladvaita* of Shankaracharya and *Vishishtadvaita* of Ramanuj. It teaches that god, though eternal, is endowed with celestial form and power and all visible phenomena emanates from him. Building on this philosophical basis, Shri Vallabhacharya introduced love for god, devotion and an element of pleasure in divine worship, rejecting the austerity and hardship of other sects. Such epicurean principles began to assume unseemly forms which caused comments and criticism from various quarters and gave rise to the reformist religious sect such as the Swaminarayan founded in the early 19th century by Shri Sahjanand Swami (1781-1830 A. D.) which has a large following all over Gujarat and in outside countries such as United States of America, United Kingdom and African countries. The Important Vaishnav seats in the district are at Alina (Nadiad taluka) and Bandhani (Petlad taluka). Besides, there are *havelis* at Vaso (Nadiad taluka) and Bandhani (Petlad taluka) in this district.

The Swaminarayan Sampradaya—The Swaminarayan Sampradaya, which is a pure devotional movement was founded during the early decades of the nineteenth century by Shri Sahajanand Swami, well-known as Shree Swaminarayan, who tried to free Vaishnavism from some of its corrupting influences. The faith is named Swaminarayan after its founder and possesses a large following all over Gujarat drawn from all sections of people irrespective of their original caste or creed. Gadhada (Swamina) in the Bhavnagar district is one of the important centres, where Shri Swaminarayan spent a major portion of his life time and propagated the tenets of his religion.

The founder, Sahajanand Swami, was born at Chhapai, in the Gonda district in 1781 A. D. From infancy, he showed a sort of aversion to leading a worldly life and evinced great regard for the study of the *shastras*. On the passing away of his parents, when he was aged eleven, he renounced the world and left his home in the garb of a boy-ascetic. For nearly seven years, he practised severe penance and visited various places of pilgrimage in India. At that time, he was known as Nilkantha Brahmachari. In 1800 A. D., he arrived at Loj in the Mangrol taluka (Junagadh district) in search of a true *guru*, where he met Swami Ramanand who assisted him in his quest of the Supreme being. By the force of his exemplary character and attainments, and life of

intense asceticism, he endeared himself to his spiritual *guru* who appointed him as *acharya* or the head of his followers before he left his mortal body in 1801 A. D. Nilkantha Brahmachari was then renamed Shri Sahajanand Swami popularly known as Swaminarayan. He made primarily Saurashtra, Kachchh and Gujarat, the field of his religious activities which he carried out with great spiritual verve and vigour. Though the religious doctrines preached by him were in no way different from preached by the Vaishnavite Hinduism, his criticism of the immoral practices of the day and advocacy of a life of purity and piety evoked much opposition from the vested interests. But in the teeth of opposition, Shri Sahajanand Swami carried out his holy mission with unique success, which greatly increased the numerical strength of his followers. He preached the worship of and faith in one god, who was Krishna, who alone could free the soul from the fetters of the flesh. The real value of his work as a spiritual reformer lies in this throwing open the portals of his discipleship to all strata of society irrespective of their caste and creed. Hindus and Muslims, higher and lower castes, all worshipped god under the spiritual guidance of Swaminarayan. The civilizing influence of this religion in reclaiming to the path of virtue, honesty and truth, those turbulent castes like the Kathis, and other down-trodden section and subduing their predatory and blackmailing activities converting them as loyal citizens of the State, was profound and permanent.

Realising the necessity of creating suitable centres from where the preaching could be conveniently carried out, six great temples of beautiful architecture were built on sites that were extremely well-chosen at Ahmadabad, Dholera (Ahmadabad district), Vadtal (Kheda district), Khuj (Kachchh district), Gadhada (Bhavnagar district) and Junagadh. In this district there are four *sikharbandhi* temples at Vadtal, Dabhan, Pij and Khambhat (Cambay) under the *gadi* of Vadtal.

Shri Swaminarayan recognised the stages of spiritual development by creating different orders, viz., (i) for the ecclesiastics and (ii) for laity. He also created a class of nuns who are styled *sankhyayoginis* or female devotees.

Doctrine and Philosophy of the Sampradaya—The first and the foremost amongst the works of the Sampradaya is the Shikshapatri or the Code of Conduct containing two hundred and twelve verses written in Sanskrit for the various classes of devotees. It aims not only at the moral and spiritual uplift of the followers, but also gives practical guidance for the conduct of the individual in his daily life.

On the philosophic side, the Swaminarayan Sampradaya has adopted the Vishishtadvaita or qualified Munism doctrine of Ramanujacharya and on the ritualistic devotional side, it has taken a leaf from the *pushti marg* of Vallabhacharya in the form of the worship of Shri Krishna. The

Vachnamruta which deals with the religious and philosophical talks of Shri Sahajanand Swami to his disciples, is an excellent work in simple Gujarati embodying his holy teachings. He struck at the very root of mixing of sexes by ordering separate *darshan* facilities in temples and religious meetings of males and females, and thus put a wholesome restraint on those immoral practices which had developed on account of free mixing of the sexes.

After achieving such a marvellous spiritual work within a short span of thirty years, he left his mortal body in 1830 A. D. at the age of 49 leaving a vast and rich heritage of spiritual wealth.

Arya Samaj

Arya Samaj is a form of Theistic Hinduism founded by Swami Dayanand Saraswati about the year 1875 at Bombay. While in this district it was established first in 1912 at Anand by the attempts of Swami Shri Nityanand. Thereafter in 1924 the Charotar Pradesh Arya Samaj was established. Swami Shri Dayanand Saraswati, a diligent student of the Vedas, found that they do not sanction idol worship, child marriage, enforced widowhood, the caste system based on birth, sole monopoly of the Vedic learning by Brahmans, showy and meaningless ceremonials, miracles, *mrityak shraddha*, blind faith and many other superstitions which are generally known among the Hindus by the name of *dharma*. He, therefore, preached the monotheism of the Vedas, taking as his motto "*Ekameva advitiyam*" (there is but one being without a second). He wrote his well-known discourses in a book-form called the "*Satyarth Prakash*" (Light of Truth). To him reason could not be divorced from religion; he felt and taught, that what is irrational cannot be true religion but is merely superstition. He framed the ten principles of Arya Samaj, in which he inculcated on his followers the mental worship of the one All-pervading, the intelligent cause of the universe, and the importance of the study of the Vedas. He made the Arya Samaj the "Vedic Church" not only for the Hindus but for all human beings, as is evident from his fixed principle, that the primary object of the Arya Samaj is to do good to the world. The theology of the Arya Samaj is based on the Vedas and the Upanishads. It upholds the performance of *hom*, on the scientific grounds of the purification of the atmosphere. In their *homs*, Arya Samajists burn in a fire strong sweet-scented vegetable disinfectants with clarified butter and saffron. It preaches the *karmic* theory, Spencer's law of "Action and Reaction", asserting the supremacy of determination and action over fate. *Sanyasis*, *Mahatma sadhus*, preachers, teachers, donors and unselfish workers are held in respect; but it is held that no man can be the special favourite, messenger, or incarnation of god. The Arya Samaj does not believe in caste or its divisions. At present, branches of Arya Samaj are found in Anand Chikhodara, Samarkaha, Navli, Mogar and Bhalej of this district.

Pranami Sect

The Pranami sect is said to have been founded by Shri Devchandra born in 1582 A. D. at Amarkot in Sindh, who was devoted to the study of the Bhagwat Puran. He travelled to Jamnagar where he consecrated a temple to Radha Krishna and died there in 1716 A. D. The sect is also known by various names such as the Nijanand Sampradaya and the Radhakrishna Pranami. The Pranamis are so-called because when they meet each other they do *pranam*. In place of idol the Pranamis used to place a seat and sacred book. In spite of this canon, devout Pranamis now worship Krishna as Bal Gopal. In some temples ornaments are so arranged as to look like an idol from a distance, while in others, images of Radha-Krishna and openly worshipped. The *Lal-Jivan*, the *Seva puja* and the *Swarup Saheb* are the famous religious books of this sect. In this district, the religious seats of this sect are at Kheda, Nadiad, Thamna, etc., while the temples are at Borsad, Ode, Chunel, etc.

Santram Panth

The Santram Panth, founded about a hundred years ago, prescribes no distinctive marks. It admits within its fold people of all castes, creeds and persuasions, who are asked to conform to a few simple rules of every day morality. Its headquarters is at Nadiad in this district, and it has temples at Vadodara and Padra in this State. The devotees hold the *gadi* of the founder in great respect and keep a lamp burning near it. In memory of the founder, a fair is held every year on the full moon of Magh and the day is passed in chanting *Bhajans* or hymns in this praise. Each pontiff nominates his successor from among the *sadhus*.

The Jainism

The Jainism preaches *tapa* or penance, control of the mind and passions, *ahimsa* and renunciation of all worldly pleasures and attachments to attain *moksha* or liberation. The Jains worship the images of all the 24 *tirthankaras* in their temples, wherein are also found images of the Hindu gods and goddesses in some side niches, under different names.

The Jainism has two major divisions, viz., the Shwetambar and the Digambar. The Shwetambar monks put on white cloths and the Digambar monks move in a nude condition, having direction as their clothes. The major point of difference between the two divisions is whether the injunction to renounce all worldly possessions for achieving salvation should be carried to the extreme by dispensing with clothes to the practising nudity.

According to the Charotar Sarvasangraha, Kheda, Khambhat, Kapadvanj, Attarsuba, Agas, Nadiad, etc., are chief centres of Jain religion in Kheda district. Jains are found in almost all the towns and in many villages

of the district. Digambar Jains are very few and most of them have migrated from Mevad. There are some Sthanakvasis also who are not idol-worshippers but they follow the precepts of Agam Books, *i. e.*, scriptures.

The Islam

The chief articles of Islamic faith are belief in the unity of god, in His Angels, in His Books, in His Prophets, in good and evil as coming from Him, and in the day of Resurrection.

The Muslims in the district constitute a little over 9.14 per cent of the total population according to the Census of 1971. The Muslims are divided into two sects, *viz.*, the Sunnis and the Shiahis. The former are more common than the latter. The group of Shiahis known as Ismailis or Agakhanis, whose Imam or religious head is His Highness the Aga Khan, is also found among the Khoja community in the district.

CASTES

The Present Position of Castes :

The main communities in the district are the Hindus and the Muslims. Among the Hindus, mention may be made of Brahmans, Baniyas, Bhatias, Luhanas, Patidars, Rajputs, Kachhias, Malis, Bhavsars, Khattris, Ghanchis, Sonis, Suthars, Kansaras, Kadiyas or Chunaras, Salats, Luhars, Darjis, Kumbhars, Bhats or Barots, Charans or Ghadvis, Bhavaiyas or Targalas, Gandhraps, Vyasdas, Hajams, Dhobis, Bhistis, Bhavads, Rabaris, Bhois, Kharvas, Machhis, Golas, Bhadbhunjas, Marathas, Purabias, Marvadis, Kalals, Ods, Vaghris, Ravalias, Bavchas, Pomlas, Vadis, Vanjaras, Bajaniyas, Brahmacharis, Vairagis, Gosains, Sadhus and Jogis. Among the Muslims, Saiyads, Shaikhs, Pathans and Mughals are the main castes; while the Bohoras, Memons, Molesalams, Maleks or Maliks, Momnas, Chhipas and Tais are converts to Islam.

Among Brahmans there are a number of sub-castes such as the Nagars, Khedawals, Vadadaras, Audichyas, Tapodhans, Bhatt-Mevadas, Valams, Modhs, Unewals, Goswamis, Shrigauds, etc. They are employed in Government services and also act as merchants, money-lenders and pleaders. Some Brahmans live on alms and priestly duties.

Nagar is a Sanskrit word meaning belonging to or residing in a *nagar* or a city. Among them two Sub-castes of Vadnagaras and Sathodaras are found in this district. Vadnagaras are mainly found in Nadiad, Petlad, Mahudha and Khambhat. Sathodaras are found in Nadiad, Kasar, Malataj, Chunel, Asodar, Umreth, Desar, Vadasinor, etc. Vishaldev Vaghela had given Sathod and other villages to Nagar Brahman and so this branch of Nagars was known as Sathodara. They are very intelligent and handsome and many literary men like Govardhanram, Balashanker, Mansukhram

etc., came from this community. Families of this caste are settled in Benares, Hayderabad, Shrirangapattam, and in other parts of India. They are said to have come, about a thousand years ago, from the Deccan and have settled in Gujarat. They are industrious and intelligent. Most of them hold good positions as land owners, money-lenders, traders and Government servants.

The Khedawal Brahmans are also known as the Baj Khedawals. They are mainly found in Nadiad, Anand, Umreth, Dakor, Sojitra, Vaso and Mahudha. They are cultivators and are also employed in services. Some of them have gone to East-Africa for services.

The Audichya Brahmans are so called because they entered Gujarat from the North (Udicha). According to tradition, they were invited to Gujarat by King Mulraj to perform a sacrificial ceremony. When this was over, the king offered them money and grants of lands to induce them to stay in this country. About a thousand (*sahasra*), who readily agreed, came to be known as Audich Sahasra, while the rest who formed a *toli* (band) and refused alms came to be known as Audichya Tolakia. The Audichya Tolakias are spread all over the district but are concentrated in Tranja, Radhu, Adas, Umreth, Ghodasar, Haldharvas, Sarsavani, Dabhau, Napa, Agas and Uttarsanda. They are cultivators and are also engaged in Government or in private firms. Some of them do priestly duties and live on alms also.

The Tapodhans are so called because they consider *tapa* as their wealth. They are Pujaris at Shiv temples and Jain temples. Some of them are cultivators, labourers and are employed in services. They are spread all over the district but are mainly found in Khambhat (Cambay), Sunav, Manaj, Piplav, Dakor, Kapadvanj, Kathalal, Nadiad and Sarsavani.

The Mewada Brahmans originally came from Mewad in Rajasthan. They are divided into four main sub-castes, *viz.*, Bhat, Chorasi, Trivedi and Rahdeshi. They are priests. They also eke out their livelihood by working as teachers, doctors, lawyers and traders. Some of them are employed in Government and private services. They are mainly found in Thasra, Vadasinor and Nadiad talukas of this district.

The Valams take their name from the Sage Valmiki. They are family priests of Lewa Patidars. Some of them are cultivators, traders and are employed in services both private and Government. They are concentrated in Vaso but are also found in Sojitra, Savli, Karamsad, Uttarsanda, Boriyavi, Limbasi, Mogar, Borsad and Vadod of this district. Shri Punit Maharaj, a well-known religious leader of Gujarat and Shri Sitaram Maharaj come from this caste.

The Modh Brahmans are so called as they came from Modhera, once an important place in the Chanasma taluka of Mahesana district. They are sub-divided into six classes, viz., Agiasana, Chaturvedi, Dhinoja, Kanoja Jethimal and Trivedi. The Chaturvedis and the Trivedis were said to be proficient in the four and three Vedas respectively while the Jethis were wrestlers. They are priests, teachers, traders, agriculturists and servicemen. They are spread all over the districts but are mainly concentrated in Kapadvanj, Vadasinor, Thasra, Petlad and Nadiad talukas of this district.

The Unewals are so called because they came from Una of Amreli district. They are cultivators, traders and some are employed in services. They are chiefly found in Bhuvcl, Vatra, Khatnal, Vatadar, Jahaj, Kanzat Daheda, Bhandrej, Sundara, Runaj and Khambhat (Cambay) of this district. Pundit Omkarnathji Thakur, a well-known classical vocalist and Shri Rameshchandra Thakur belonged to this caste.

The Brahmans in the ancient time were lovers of spiritual knowledge. Those who were learned in Brahma Vidya were known as Rushi, Yogi, Muni, Sanyasi and Goswami. Among them those who were married were called Goswamis. In this district, this branch of Brahmans came from Haradwar and Benares (U. P.). They are mainly found in Sarsa Dhumadra, Borsad, Bedhva, Khandivav, Anklav and Bhetasi villages of this district. In a number of villages there are *matha* (monasteries) of this caste. Especially they belonged to the *matha* of Margi village near Anand of this district. They are agriculturists and some of them are employed in services. Formerly they were money-lenders also.

The Shrigauds Brahmans are those Gauda Brahmans who migrated from Shrinagar in Kashmir, became soon known as Shrigaud. There are no illiterates among them and they never beg.¹ They are teachers, lawyers, traders and are employed in the Government services. They are mainly found in Mahemadabad, Mahudha, Umreth, Kapadvanj and Vadasinor of this district.

The Brahmans in general are followers of Shaivism but some of them are followers of Vaishnavism and Swaminarayan sects. They worship various deities viz., Mahakaleshwer, Siddheshwer, Narayan, Adi-Varah, Mahadev, Shri Ranchhod Rai, Kuber, Bhandari etc., and goddesses like Saraswati, Ambaji, Kalika, Mahalakshmi, Vimla, Punyagari, Kamakshi, Vegheshwari, Kankeshwari, etc. In matter of birth, marriage and death they follow other Hindus. They speak Gujarati language.

Among traders the Baniyas and Luhanas are main sub-castes. The Baniyas are mainly divided in two sections, viz., Meshri and Shravak.

1. SHAH P. C., AND SHAH C. F., *Oharotar Sarvasangraha*, Part I, (1954), p. 786.

The Baniyas who are followers of the Vallabhacharya sect, are called Meshri while those who follow Jainism are called Shravak. Among the Meshri Baniyas the Khadayata, Disaval, Lad, Modh, Nagar and Shrimali are the main sub-castes found in this district while among the Shravaks the Visa, Nima, Shrimali-Visa and Dasa, Oswal and Mewada are the chief sub-castes found in this district.

By occupation the Baniyas are shopkeepers, traders, money-lenders and bankers. Among these Meshri Baniyas the Khadayata Baniyas take their name from Khadat, a village near Vijapur. They are divided into Visa and Dasa. They are generally found all over the district but mainly concentrated in Nadiad and Umreth of this district. Their family priests are Khadayata Brahmans and their family deity is Kotyarkji of Khadat and Mahudi near Vijapur. They are Vaishnavas of Vallabhachari sect.

The Disaval or Deshwal Baniyas take their name from Deesa, an ancient town and a cantonment near Palanpur. They are divided into Visa, Dasa and Pancha. The Dasas are further sub-divided into Ahmadabadi, Surti and Goghari. Both Visa and Dasa eat together but do not intermarry. The Panchas form a separate community. Bride and bridegroom go round the *chori* eight times among the Disaval instead of seven times as in other Bania castes. Their family priests are Disaval Brahmans and they are followers of the Vallabhachari sect.

The Lad Baniyas take their name from Lat-*desh*, the old name of South Gujarat, that is the country south of the Mahi river. They are divided into Visa and Dasa. Their family priests are Khedaval Brahmans and their family deity is Ashapuri Mata near Petlad. Their old names ended in *rai* and *pal* instead of *das* or *lal* as at present as Kalyanrai Dhanpal. They are Vallabhachari Vaishnavas.

The Modh Baniyas derive their name from Modhera in the Chanasma taluka of the Mahesana district. They form an important element in the Bania community and are spread all over the district. Their main divisions are Adalja from Adalaj near Ahmadabad; Goghava from Gogha and Mandaliya from Mandali. All these divisions are sub-divided into Visa and Dasa.

The Nagar Baniyas like the Nagar Brahmans claim Vadnagar as their original home. They are divided into Dasa, Visa and Pancha. In religion they are Vallabhachari Vaishnavas. A small sub-division called Bam Nagars wear the sacred thread and are followers of shaivism. They are strict observers of religious ceremonies.

The Shrimali Baniyas like the Shrimali Brahmans, are settlers from Marwar. They are sub-divided into Visa, Dasa and Ladva. Visa and Dasa

Shrimalis eat together but do not intermarry; neither of them eat with the Ladvas. The Visa Shrimalis are mostly Jains. The Dasas are either Jains or Vaishnavas. The Shrimali Sonis are off-springs of Shrimali Baniyas but in course of time a separate caste of theirs came into existence.

Among the Shravaks, the Nima Baniyas are settlers from Shamlaji of the Sabarkantha district. Among the Nima Baniyas those who follow Vaishnavism are called Meshris and those who follow Jainism are called Shravaks. The Nima Baniyas are sub-divided into Dasa and Visa. Among these Dasa and Visa, there are followers of both, viz., Vaishnavism and Jainism. The Visa Nima Baniyas are only found in the Kheda district. They are mainly found in Kapadvanj, Mahudha, Chandel and Virpur of this district. Their family god is Shri Devgadadharrai Shamlaji while family goddess is Sarvamangala. Among the Nima Baniyas, the Meshri Baniyas worship Shrinathji while the Shravak Baniyas worship Shri Kesaryaji and Shri Rushabhadevji.

Among the Shrimali Baniyas, the Shrimali Baniyas of Khambhat are sub-divided into three, viz., the Dasa Shrimali Shravaks, the Visa Shrimali Shravaks and Shri Shrimalis. The fourth sub-caste is derived from this Shrimali Baniyas known as Meshri Shrimali Baniyas. Among these sub-castes, the Dasa Shrimalis and Visa Shrimalis predominate in Khambhat (Cambay). The people of this caste are mainly known through Shah as their surname. It is a customary among this caste that a birth of a child should be entered in the book of their family-priest within two months. Their family goddess is Kansari Ashapuri. They also worship the Sasandevi, the Chakreshwari, the Padmavatidevi, etc. The people of this Shrimali caste observe the Shwetambar Murtipujak Jain religion.

The Oswal Baniyas are said to be descendants of the Solanki Kings of Anhilwada (A. D. 942-1249) according to Tod. (Western India, 465). They have such surnames as Chaudhari of Jala, which supports the theory of their Rajput origin. They are divided into three sub-castes, viz., Visa, Dasa and Pancha or Leta. Among these sub-castes, the Jain Visa Oswal Baniyas are mainly found in Vadasinor, Khambhat, Borsad and Anand of this district. Their main surname is Shah. They worship the first *tirthankar* Shri Rushabhdev and the last *tirthankar* Shri Mahavir Prabhu. Their family goddess is the Ambaji Mata and the Ashapuri Mata.

The Digambar Jain Visa Mewada Baniyas came from Marwar and settled in Gujarat. There are two main divisions among the Jains, viz., the Shwetambar and Digambar. The Shwetambar Jains adore idols with ornaments and clothes while the Digambar Jains do not adore idols with ornaments or clothes. Their surname is Shah. They worship Shri Kesaryaji, Rushabhdev and Shri Mahavir Swami. Their family goddesses are Shri

Sasandevi Mata and Shri Padmadevi Mata. In matter of social customs like birth, marriage and death all these Baniyas do not differ much from rest of the Hindus.

Among traders the Luhanas also stand as a separate caste by itself like the Bhatias. They are said to have derived their name from Lohanpur or Lohokat in Multan in north and were originally Rathod Rajputs. They were driven by the Muslims from the Punjab into Sindh and afterwards in the 13th century found their way through Gujarat. They are Vaishnavas of Vallabhachari and also followers of Ramanandi sects. Their family goddess is Randel Mata, and they are devout worshippers of Darya Pir, the spirit of the Indus, who is said to have saved them when they fled from Multan. They wear the sacred thread. In matters of social customs they now do not differ much from the rest of Hindus.

As the great majority of the people in the district depend either partly or entirely, upon agriculture for their maintenance the number of cultivators is materially large. It includes Patidars (mainly Leva and Kadva), Rajputs, Kachhias and Malis. Of the different classes of cultivators, the most important are Leva and Kadva Patidars. They are good cultivators, sober, quiet, industrious and except on such special occasions as marriages, they are also thrifty. Generally there are three main sub-divisions of the Patidars, viz., the Leva, the Kadva and the Anjana. Among these three sub-divisions, the Leva and the Kadva Patidars are found in this district. The Leva Patidars are spread all over the district while the Kadva Patidars are mainly found in Nadiad, Kapadvanj, Mahemadabad, and Kathalal of this district. They are cultivators, traders, businessmen and servicemen. Many Patidars are settled in foreign countries for business. The Patidars generally follow Vaishnavism especially Swaminarayan sect, but there are some among them who follow various creeds such as Shaivism, Aryasamaj, Shakti sect, Santram Maharaj, Jainism, Radhaswami, Ramanandi, Aurobindo, etc. In matter of the social customs like birth, marriage and death they do not differ much from the rest of Hindus.

The Rajputs were soldiers. There are two classes among them viz., the Thakors, heads of families, who still retain considerable landed property, and the Garasias, descendants of the younger branches of Thakor houses, who in many instances have sunk to the position of ordinary peasant proprietors. They have now given up their fighting disposition but in their dresses the traces of militarism is still retained. The chief social peculiarity of the Rajputs is their division into clans. All classes eat together and intermarry, but the members of a clan are forbidden to marry within that clan, as they are all believed to be the children of one common ancestor. They were great horse lovers, and took pride in them. Their marriage celebration entail heavy expenditure. In marriages, they have a customs to send a sword instead of bridegroom at the bride's place. In other matters

of social customs like birth and death, they do not differ much from other Hindus. In matter of religion they generally follow Shaivism and the Vaishnavism.

The Kachhia is the caste of market growers, from Katchha, a vegetable garden. They are sub-divided into sub-castes such as Ajvalias, Andharias and Khambhatias. In addition to growing garden produce Kachhias are also brick-layers, handloom weavers, carpenters and shop-keepers. They follow the Swaminarayan sect, Vallabhachari sect or are Bijpanthi. The social customs followed by them do not differ much from the rest of the Hindus.

The Mails are gardeners and flower sellers. They mainly grow fruits and flowers. They are ministrants in Jain temples and are domestic servants. In religion, they are Kabirpanthi and Ramanuji. Some of them follow Vallabhachari, Swaminarayan sect and Jainism. They follow the rest of the Hindus in customs regarding birth, marriage, pregnancy and death. Divorce and widow marriage are allowed and common.

Among the manufactures there are three main classes in the district, viz., the Bhavsars, the Khatri and the Ghanchis. The Bhavsars were calico printers, but could not stand on their legs in competition with European goods as such they have now shifted to other occupations such as confectioners, tailors, washermen and seller's of cloth and brass-ware. They are found chiefly in cities and large towns of this district. It is said that they were originally Kshatriyas, who during Parshuram's persecution hid themselves in temple of Mata and for this act of *bhav*, or confidence in the goddess, came to be known as Bhavsar. Besides being divided into Meshri and Jain Bhavsars they have three sub-divisions, viz., Rewakanthia, living on the banks of the Mahi and the Narbada; Ramdeshi, living in Pali and Pratapgadh; and Talabda living in North Gujarat. In matter of social customs they do not differ much from the rest of the Hindus. Their family goddesses are Ambaji and Hingalaj. By religion some are Jain and the rest belong to the Kabirpanthi, Radhavallabhi, Ramanandi, Santrampanthi, Swaminarayan and Vallabhachari sects.

The Khatri are the caste of weavers. They say that they belong to the Brahma Kshatri stock and came into Gujarat from Sindh in the 16th and 17th centuries, tempted by the strong European demand for their cloth. Their regular features and fair complexion and the fact that they wear the sacred thread favour their claim to be of Brahma-Kshatri origin. In matter of social customs they do not differ much from those of other Hindus. By religion they are Vaishnavas. Among Muslims also there are Khatri of handloom weavers. The Muslim Khatri are mainly weavers.

The Ganchis are oilmen, found chiefly in towns and large villages. They have eight sub-divisions, viz., Ahmadabadi, Champaneria, Patani, Modh, Sidhpuria, Surti, Khambhati and Pancholi. They have Rajput surnames such as, Gohel, Jhala, Parmar and Solanki. They are fairly devout and belong to Kabirpanthi, Ramanandi, Swaminarayan and Vallabhachari sects. They are also great worshippers of the goddesses Kalika and Bechara. Hanuman is worshipped by the bride and bridegroom immediately after marriage ceremony. Widow remarriage are allowed. In other social customs they do not differ much from the rest of Hindus.

Among artisans, there are eight classes viz., Sonis, Suthars, Kansaras, Kadiyas, Salats, Luhars, Darjis and Kumbhars. The Sonis are gold and silversmiths. They are found in towns and large villages of this district. They have many sub-castes of which the Tragad or Mastan claims descent from a Bania father and Brahman mother. They wear sacred thread. Among these sub-castes, the Shrimali Sonis, who originally belonged to the Shrimali Bania caste are divided into Ahmadabadi and Charotaria. They follow Vaishnavism and Shaivism, and in matters of social customs they follow rest of the Hindus.

The Suthars are carpenters from the Sanskrit *Sutradhar* (*sutra*, i. e. the thread with which the course of the saw is marked). They are found in all talukas of the district. They are divided into six sub-castes, viz., Pithva, Gujjar, Mewada, Pancholi, Marwadi and Vaishya. Among these sub-castes, the Gujjar, Mewada, Pancholi and Vaishya claim to be descendants of Vishvakarma, the divine world-builder. Both Marwadis and Pithavas claim to be Rajputs who took to carpentry when Parshuram resolved to destroy Kshatriyas. In matter of social customs they do not differ much from the rest of Hindus. In religion, they are followers of Parnamipanthi, Ramanandi, Shaiva, Swaminarayan and Vallabhachari.

The Kansara is the caste of a copper and brass-smith. The name is derived from Kansu (bell-metal). It is said that their original home was Pavagadh and were astute devotees of Kalika Mata, whom they worshipped by beating bell-metal symbols. The goddess was so pleased with their devotion that she told them to make a living by "beating" metal. From beating brass they advanced to making brass copper and bell-metal vessels. They have five sub-divisions, viz., Champaneri, Muru, Shihora, Ahmadabadi and Visnagara. They are found in most of the large towns. In matter of religion, they are Ramanandi, Shaiva and Vallabhachari, but hold their family goddess Kalika Mata in high reverence. In matter of the social customs they do not differ much from the rest of Hindus.

The Salats are masons or stone workers. The word "Salat" is derived from *salya* a stone. They are found in large towns of this district. The leading class of Salats are the Sompura. According to their own story,

the Sompura Salats were originally Brahmans and took to stone-cutting at the desire of Somnath Mahadev in Saurashtra. The Kumbhars and Talbada Salats have formed separate castes. They are, in every respect, like other Kumbhars and Kolis. In matters of social customs they do not differ much from the rest of Hindus. The Sompura Salats wear sacred thread, like Brahmans. In religion, they are generally followers of Swaminarayan or Shiva.

The Luhars or Lavars are (from Sanskrit *lohkar*) blacksmiths. They are found in towns and large villages of this district. It is said that originally they came from North India. Some of their surnames suggest the influence of Rajputs on them. The Luhars are known as Panchal in this district. Due to their occupation they are known as *Chandi ghada* Luhar or Luhar-Suthar. One of their sub-castes the Panchal Luhars claim to be Brahmans, who were degraded owing to their taking to the Blacksmith's profession. The competition of European ironware has forced some Luhars to give up their original calling and become silversmiths, carpenters, watch-repairers and in some cases field labourers. Among the Luhars, the Panchals wear sacred thread like other Brahmans. They generally follow the Hindu social customs. Divorce and remarriage are allowed. They are mainly followers of Shaivism. Some of them are followers of Swaminarayan, the Parnami, the Shakta, the Ramanandi and the Kabirpanthi religion. Their family god is Shri Vishvakarma and family goddess is Chamunda Mata.

The Darjis are also called Merai or Sui, from *sui*, a needle, and live chiefly in towns and big villages. They have many sub-castes. They seem to be of Rajput origin of which a trace remains in the surnames Chavda, Chohan, Gohel, Dabhi, Makvana, Parmar, Rathod, Solanki and Sonara. Their main occupation is tailoring but because of change in economic life due to impact of development programme they are also shifted to varied walks of life utilizing new openings and opportunities. In social customs they do not differ much from the rest of Hindus.

The Kumbhar is the caste of potters. The name is derived from Kumbhkar (*Kumbha*, a water pot and *kar*, maker); they are generally found in all cities and villages of this district. In some places they are called Ojhas and *Prajapatis* (creators). Here, in this district they are known as *prajapatis*. Some of them have Rajput descent. Besides working as potters, many of them are employed now in villages as domestic servants and in towns have become carpenters or bricklayers. With the opening of economic opportunities they have shifted to a number of occupations and services. Among the Kumbhars, those who are bricklayers are called, the Dalwadis while those who are dealing with the occupation of earthen pots are called the *Prajapatis*. Their family god is Shri Nrusinh whose temple is at Nadiad. They follow the Ramanand and the Vaishnav religions. In matter of the social customs they do not differ much from the rest of Hindus.

Among the Bards and Actors there are five classes, viz., Bhats or Barots, Charans or Ghadvis, Bhavaiyas or Targalas, Gandhraps and Vyasdas. The Bhats or Barots were bards. They have given up their traditional occupation though some are still employed as bards or genealogists most of them are employed in various occupations such as cultivators, services, etc. According to their claim Bhats were originally Brahmans from Allahabad and Marwar, who settled here in this district also. Traces of their Brahman origin survive in their wearing the sacred thread. In matters of social customs they do not differ much from the rest of Hindus. Divorce is permissible. They chant verses in a style peculiar as the modulation of the voice and an energetic graceful action given effect to the poetry which is either to praise some renowned warrior to commemorate a victory, or to record a tragic event. The chief patrons of the Bhats are Rajputs, but Kanbis, Kolis and Luhanas also have their Bhats who visit their patrons' houses. His *vahi* (book) is a record of authority by which questions of consanguinity are determined when a marriage or right to ancestral property is in dispute.

According to a bardic account the Charans are the descendants of a son born to an unmarried girl of the Dhadhi clan of the Rajputs. They are spread all over the district. They have left their traditional occupation as genealogists and now are employed in various occupations such as cultivators, traders, shop-keepers, etc., and follow social customs of the Hindus.

The Targalas are also called the Bhavaiyas, that is performers of Bhavai or comedy or folk-dramas. They are mainly found in Kapadvanj and Nadiad talukas of this district. The *bhavai* is derived from the Sanskrit word *bhav* which is one of the names of Lord Shiva. The Targalas have two divisions, the Vyas and the Bhavaiyas. Each company or *toli* has its *naik*. More sophisticated artists among them now take services in professional dramatic companies and films. In matters of social customs they do not differ much from the rest of Hindus. Widow remarriage is allowed. Divorce is granted on the ground of disagreement, the offending party having to pay a fine. They are followers of Shaivism and also worship Becharaji mata.

The Gandhrap is a caste of musicians from "Gandharva", the mythological musician of the gods. They play on various musical instruments and accompany dancing girls in all their performances. They wear the Brahmanic thread and their priests are Audich Brahmans. Divorce and widow remarriages are not allowed. In matter of social customs they do not differ much from rest of Hindus. Some of them are Shaiva and others Vaishnavas.

Among the service clan (shudras) there are three classes, viz., Hajams, Dhobis and Bhistis. The Hajams are found in all towns and villages of the district. The word Hajam is derived from Arabic *hajam*, to cut, and refers his surgical activities in olden times. A Hajam is also called *Valand* from his cutting the hair or *val*; a *gainzo* from his old operation of dressing wounds or *gha*. Of their seven divisions, the Pardeshi and the Limachias

claim descent from a band of Rajputs, who after some defeat fled for protection to their goddess Limacha in Patan, Mahesana district. From Patan they went to Champaner and from Champaner they spread all over Gujarat. Their surnames are Bhati, Chavda, Dabhi, Gohel, Parmar and Rathod suggesting Rajput origin. Their ordinary profession is shaving, but in villages they also cultivate land. Their women act as midwives. In matters of religion they follow Vaishnavism, Bijpanth, Kabirpanth and Ramanandi sect. Their family goddess is Limacha Mata. In matters of social customs they do not differ much from the rest of the Hindus. Divorce and widow remarriage are allowed.

The Dhobis from *dhovan* to wash are washermen and are found in every towns and in all large villages of this district. They allow divorce and widow marriage. They follow Kabirpanth, Ramanandi and Vallabhachari sects.

Among herdsmen there are two classes, viz., the Bharvads and the Rabaris. The Bharvad is a caste of shepherds. They claim Gokul Brindavan as their original home. And also claim to be of the same Meher caste as that to which Shri Krishna's foster father Nand Meher belonged. From Gokul, they are said to have moved to Mewar and from Mewar to have spread into Gujarat, Kathiawad and Kutch. They are closely related to Rabaris with whom they eat but do not intermarry. They wander from place to place living in the meanest huts and with no stock more valuable than sheep and goats. In matter of social customs they do not differ much from the rest of Hindus.

The Rabaris are herdsmen. They are better off. They claim to be Rajputs, who instead of marrying Rajput women married celestial damsels (*apsaras*) that is, perhaps, Charan women (*deviputris*). They are therefore, called Rahabahari, that is going out of the path. Their original home is said to have been the Uttar Pradesh. Some of their surnames are Rajput such as Chohan, Dodiya, Gohel and Jadav. They are found in all talukas of this district. They live in towns and villages in well built houses. They have cows and buffaloes as well as sheep and goats and are hard and very active. They follow Bijmarg and Ramanandi sect. Among them all marriages take place on one and the same day. The Rabaris of one or more villages who wish to have their daughters married meet in temple. Widow remarriage and divorce are allowed. The practice of levirate is an accepted custom among this caste. In matters of social customs they follow the rest of the Hindus.

Among the fishers and sailors, there are three classes, viz., Bhois, Kharvas and Machhis. Besides their employment as fresh-water fishers, the Kheda Bhois are cultivators, farm labourers and domestic servants. In matter of social customs they do not differ much from rest of the Hindus. They worship Meladi Mata but some of them are Bijmargi, Ramanandi, Shaiva or Vallabhachari.

The Kharvas derive their name from Kshar *vaha*, meaning salt carriers. The Kharvas of Gujarat have three sub-castes, viz., Surti, Hansoti and Khambhati. Except those who belong to the Swaminarayan sect, all Kharvas eat fish and flesh and drink liquor. After the closing of salt works on the introduction of the Imperial Salt Duty in 1878, the Khambhat (Cambay) Kharvas have taken to house building and labour. They also make ropes, brooms and mats of coir.

The Machhis (from Sanskrit *matsya*, fish) are Kolis deriving their name from their main occupation as fisherman. They have two divisions, Machhi proper and Koli, who eat together but do not intermarry. Besides catching fish in pools, rivers and sea, the Machhis own river boats, sell vegetables, work as cultivators and labourers.

Among labourers and miscellaneous workers there are many classes, viz., Golas, Bhadbhunjas, Marathas, Purabias, Marvadis, Kalals, Ods, Vaghri, Ravalias, Bavchas and Pomlas, Vadis, Vanjaras and Bajaniyas. The Golas are ricepounders. According to their belief they were originally Rajputs of Rajasthan who called themselves slaves or *golas* to protect themselves from the persecution of Parshuram. In token of a Rajput strain the word Rana is always added to the name Gola. Their tribal surnames are Chohan, Chodhavada, Daladia, Divadia, Hirvana, Pat, Parmar, Solanki, Vaghela, Vaghmar, Varaskia, etc. Some Golas have given up rice pounding and work as sawyers, *gumastas* to grocers and cloth merchants, as sellers of salt and carriers of goods on their shoulders, or on donkey back. In matter of the social customs they do not differ much from the rest of Hindus. They are very devoted to religious preachings of saints. They follow either different sects such as Bijpanthi, Kabirpanthi, Ramanandi or Swaminarayan. Some also belonged to Pirana sect, who, while they worship their saint's tomb, also respect Hindu gods.

The Odes were well diggers. They were originally brought by Siddhraj Jaysinh to dig the Sahasralinga tank at Patan. With the changing economic condition, they are now occupied in various manual labour such as bricklayers, agriculture labourers, etc. In matter of social customs they do not differ much from the rest of the Hindus. They worship Ramdev Pir and mother goddesses like Meldi, Khodiyar and Jasma Oden.

The Vaghri are fowlers, hunters and beggars. They derive their name from Sanskrit, *wagura*, a net and means tribe of netters. They claim to be Chohan Rajputs, but their surnames do not suggest a separate tribal origin. They are divided into four main sub-divisions, viz., Chunara, or lime burners, who are also cultivators and fowlers; Dataniyas who sell *datan* or tooth brushes; Vedu who grow and sell *aria*, a species of gourd and live in towns; and Patanis who trade in wood and bamboos and sell chickens. Their other sub-divisions are Talabda, Champta, Kanakodia, Marwadi and Saraniya. These other sub-divisions eat and drink together but do not intermarry. The Vedus and the Talabdas are predominant in this district.

Before the establishment of Animal Husbandry Department the Vedus were doing the work of castration of domestic animals. Now they are doing miscellaneous work as grinding, stone cutting and masonry work. While the talabda Vaghri consider themselves to be the Vagadi Rajput Kshatriya caste. According to the late Shri Kanaiyalal Munshi, they came first from Marwad to north Gujarat and then they settled in Gujarat. They are mainly found in Nadiad, Thasra, Borsad, Anand and Mahemadabad talukas of this district. They are mainly engaged in cattle-breeding, cultivation, nursery and selling of fruits, vegetables and honey. Some of them are field watchmen and engaged in masonry and carpentry work. In matter of religion they are mainly the worshipper of goddess. Some of them worship Shiva. They follow religious sects, viz., Kabir, Swaminarayan, Pranami and Ramanandi. In matter of social customs they follow rest of the Hindus.

The Ravalias are also called Jogi. They appear to be of Rajput origin and are subdivided into Sakhia (clansmen) and Vahalia (warriors). They are rope and tape makers and beggars. Some of them work as carriers and labourers. They worship lord Shiva and Matas such as Verai, Bechara, Ambaji, Khodiyar, Kalika and Chamunda. In matter of social customs they do not differ much from the rest of Hindus.

The Bajania is a caste of wandering acrobats, deriving their name from *bajavavu*, to play upon a drum. They are also occasionally called Dholis. drummers. The caste has two sections, Parmars and Naghors. They are non-vegetarians. According to *Baroda State Gazetteer* (1923), they hold one Sambhai Naik, a famous acrobat of old, in special veneration as he is said to have lost his life in performing wonderful athletic feat. No ceremonies are performed at a woman's first pregnancy. Widow remarriage and divorce are allowed.

Among devotees and religious mendicants the Brahmacharis, Vairagis, Gosains, Sadhus and Jogis are the main groups in this district. Many Gosains and Sadhus marry and settle down and are known as *gharbari* or family men as opposed to the *nagas* or naked mendicants who have taken vows of celibacy. The Gosains are also called Atits. They are divided into two classes, *mathadhari* (celebrates) and *gharbari* (householders), and ten sects, viz., Gir, Parbat, Sagar, Puri, Bharati, Van, Aram, Saraswati, Tirth and Ashram; all are Shaivas. They add the clan name to the personal name as Karangar, Hirapuri and Chanchalbharati. Among the *mathadharis*, the *guru shishya Sampradaya* or succession from preceptor to disciple obtains. The appointment of a *chela* or pupil is made by tonsure (*mundan*) and covering him with *chadar*, which ceremony is followed by a feast, *bhandaro*, to the members of the caste. They are professional beggars but some of them have become merchants, government servants and soldiers. They do not wear the sacred thread. Widow remarriages are allowed in them. At

Dakor several resident devotees, Sadhus, Vairagis and Gosains support monasteries or *maths*, where large numbers of religious beggars are daily fed.

The Scheduled Castes

According to the 1971 Census, the population of the Scheduled Castes in the district, was 148,198 (77,956 males and 70,242 females) forming 6.05 per cent of the total population of the district. The rural-urban distribution accounted for 124,055 persons in villages as against 24,143 in the towns. The following statement reveals the details of their sex-wise distribution of the population :

STATEMENT III-10

Scheduled Castes distributed into rural and urban areas, 1971

Name of Scheduled Castes 1	Total Population			Sex		Percentage to total Population of the district		
	T 2	R 3	U 4	M 5	F 6	T 7	R 8	U 9
Total	148,198	124,055	24,143	77,956	70,242	6.05	6.32	4.94
Bakad or Bant	1	..	1	1	..	N	..	N
Bhambi, Bhambhi, Asadaru, Asodi, Chamadia, Chamar, Chambhar, Chamgar, Haralayya, Harali, Khalpa, Machigar, Mochigar, Madar, Madig, Telegu, Mochi, Kamati Mochi, Rani-gar, Rohidas, Rohit or Samgar.	34,433	27,638	6,795	18,083	16,350	1.40	1.41	1.39
Bhangi, Mehtar, Olgana, Rakhi, Malkana, Halalkhor, Lalbegi, Balmiki, Korar or Zadmalli.	30,605	24,313	6,292	15,899	14,706	1.25	1.24	1.29
Chalvadi or Channayya	5	5	..	2	3	N	N	
Dhor, Kakkayya or Kankayya.	19	19	..	9	10	N	N	
Garoda or Garo	3,408	2,443	965	1,820	1,588	0.14	0.12	0.20
Mahyavanshi, Dhed, Vankar or Maru Vankar.	59,570	51,512	8,058	31,569	28,001	2.44	2.32	1.65

STATEMENT III-10—(concl'd.)

Name of Scheduled Castes 1	Total Population			Sex		Percentage to total Population of the district		
	T 2	R 3	U 4	M 5	F 6	T 7	R 8	U 9
Mang, Matang or Minimadig.	7	7	..	4	3	N	N	..
Meghval or Menghvar	35	35	..	17	18	N	N	..
Nadia or Hadi	27	27	..	18	9	N	N	..
Shenva, Chenva, Sedma or Rawat. . .	4,077	3,908	169	2,122	1,955	0.17	0.20	0.03
Tirgar or Tirbanda	598	356	242	290	308	0.02	0.02	0.05
Turi	715	509	206	323	392	0.03	0.03	0.04
Unspecified	14,698	13,283	1,415	7,799	6,899	0.60	0.68	0.29

N=Negligible.

Source : District Census Handbook 1971, Kheda, Part-X-C-I, pp. 110-119.

The predominant Scheduled Castes in the district are Mahyavanshi, Dhed, Vankar or Maru Vankar (59,570), Bhambi or Bhambhi, Asadaru, Asodi, Chamadia, Chamar, Rohidas, Rohit or Samgar, etc., (34,433) and Bhangi, Mehtar, Rukhi, Olgana, Malkana, Halakhori Balmiki, etc., (30,605). Besides them other important castes in the district are Shenva, Chenva, Sedma or Rawat (4,077), Garoda or Garo (3,408), Turi (715), and Tirgar or Tirbanda (598). Details of some of the castes having social significance are given below :

Bhambi or Chamar or Khalpa—Among the Scheduled Castes, the Bhambi or Chamar or Khalpa is one of the predominant Scheduled Castes in the district according to 1971 Census. They have various surnames in this district such as, Bhambi or Bhambhi, Asadaru, Asodi, Chamadia, Chamar, Chambhar, Chamgar, Haralayya, Harali, Khalpa, Machigar, Mochigar, Madar, Madig, Telegu Mochi, Kamati Mochi, Ranigar, Rohidas and Rohit or Samgar. They are mainly found in Mahemadabad, Nadiad, Anand, Petlad, Borsad, Khambhat (Cambay) Matar, Kapadvanj, Vadasinor and Thasra talukas of this district. Among their surnames, the Chamars derive their caste name from *charma*, the skin, while the Khalpas from *khal*, outer skin. They are further known as Rohidas as they are considered the original descendants of the saint Rohidas. They claim a mixture of Rajput blood and the proof of their descent bear Rajput names. The appearance of

many of them light in colour, large and with regular features supports their claim. They are mainly tanners and skin-dressers. Their work is the tanning and colouring of leather, the making of leather buckets, bags and ropes and the repairing of old shoes. They are generally vegetarian in practice, but have no objection in eating meat. Their dress neither among the men nor women, differs from the clothes ordinarily worn by the lower classes, short *dhoti*, shirts of coarse cloth. Their ornaments are either of gold, silver or ivoryplated. In matter of social customs they do not differ much from the rest of backward class Hindus. They bury their dead. Their priests are Garodas. They also celebrate Hindu festivals and folk-songs, *dhol*, *garbi* and *dandiya-ras* also play an important role in their communal life. In matter of religion they worship the goddesses like Chamunda, Khodiyar, etc. They also worship gods like Ganesh, Shiv and Ramdev Pir.

Shenva—Among Scheduled Castes, the Shenva Caste claim higher status than the Bhangi and the Nadiya castes. They are also called Sindhva as their occupation has to do with the *bhendi* or wild date. Their surnames suggest Rajput descent. They are found mainly in Thasra, Matar, Petlad and Kapadvanj talukas while scattered over Nadiad, Anand, Borsad, Khambhat (Cambay) and Vadasinor talukas of this district. Most of them earn their livelihood by making mats and brooms from date plams, and ropes of *bhendi* fibre. A few also serve as village servants. In matter of social customs like birth, marriage and death, they follow the customs of other backward class Hindus. The Garoda is their family priest. They bury their dead. Levirate and widow marriage are allowed. Divorce is common among them and are allowed by the caste on liberal terms. Generally, they are vegetarian. They are idol worshippers. Many of them are followers of Bijmarg and Ramanandi sect. Some of them worship Ramdev Pir and Bhildi Mata. They observe the ordinary Hindu fasts and feasts, but the followers of Ramdev Pir fast on each new-moon day.

Garoda—Among the Scheduled Castes, the Garodas are the priests of the Antyajas. They are found every where in the district. Besides priestly duties, they are engaged in cultivation, business and service. Some of them have gone to Africa also for business. They claim to be Brahmins who according to one account, were degraded because the head of their caste married the daughter of his religious teacher or *guru*; according to another story because they agreed to act as priests to the Harijans they are degraded. Their surnames Dave, Joshi, Nagar, Shrimali and Shukla point to the Brahmin origin, but a few bear the Rajput surnames of Gohel and Gandhiya. They are fairer than Dheds and speak correct Gujarati as other Brahmins speak it. They eat with Dheds and join them in any feast. As priests of Bhangis, Dheds, Chamars, Shenvas and Turis, all of whom style them Brahmins they officiate at marriages and death ceremonies receiving on each occasion gifts in cash. Divorce and widow remarriage are allowed among them and their deads are buried. They worship the Hindu gods, especially Ram, the basil plant.

and Devi, and they observe the fasts. Many are Ramanandi Kabirpanthi and followers of Pranami sects. Their family goddesses are Harshad Bhavani, Tulja Bhavani, Saraswati, Gayatri, Sharda, Durga, etc. The Sharda is their main family goddess. They go daily to worship Krishna's crown or *mugat* which is placed on the Bhagvat book in their temples. They also worship the Sun and Moon. They draw up and use horoscopes.

Scheduled Tribes

According to the 1971 Census, the Scheduled Tribes claim 25,275 (13,423 males and 11,852 females) or 1.03 per cent of the total population of the district. The rural-urban distribution accounts for 20,899 persons (82.69 per cent) in villages, as against 4,376 (17.31 per cent) in towns. The following statement reveals the details of their sex-wise distribution of the population.

STATEMENT III-11

Scheduled Tribes Distributed into Rural and Urban Areas, 1971

Name of Scheduled Tribes 1	Total Population			Sex		Percentage to total Population of the district		
	T 2	R 3	U 4	M 5	F 6	T 7	R 8	U 9
Total	25,275	20,899	4,376	13,423	11,852	1.03	1.06	0.89
Bavacha or Bamcha	232	61	171	144	88	0.01	N	0.04
Bhil including Bhil Garasia, Dholi Bhil, Dungri Bhil, Dungri, Garasia, Mewasi Bhil, Rawal Bhil, Tadvi Bhil, Bhagalia, Bhilala, Pawra, Vasava and Vasave	15,308	11,944	3,364	8,179	7,129	0.63	0.61	0.69
Chodhara	9	6	3	9	..	N	N	N
Dhanka including Tadvi, Tetaria and Valvi ..	2,802	2,740	62	1,442	1,360	0.12	0.14	0.01
Dhodia	3	..	3	3	..	N	..	N
Dubla including Talavia or Halpati	383	382	1	199	184	0.02	0.02	N
Gavit or Gamta or Gavit including Mayohi, Padvi, Vasava, Vasave and and Valvi	27	10	17	21	6	N	N	N

STATEMENT III-11—(concl.)

Name of Scheduled Tribes 1	Total Population			Sex		Percentage to total Population of the district		
	T 2	R 3	U 4	M 5	F 6	T 7	R 8	U 9
Gond or Rajgond	12	2	10	9	3	N	N	N
Kathodi or Katkari including Dhor Kathodi or Dhor Katkari and son Kathodi or Son Katkari ...	2	..	2	..	2	N	..	N
Koli Dhor, Tokre Koli, Kolcha or Kogha ..	8	5	3	5	3	N	N	N
Naikda or Nayaka including Choival Nayaka, Kapadia Nayaka, Mota Nayaka and Nana Nayaka ...	2,151	2,080	71	1,137	1,041	0.08	0.11	0.01
Pardhi including Advichincher and Phanse Pardhi ..	70	70	..	44	26	N	N	N
Patelia	423	333	90	242	181	0.02	0.02	0.02
Pomla	71	..	71	36	35	N	..	0.01
Rathawa	79	79	..	45	34	N	N	..
Vitolia, Kotwalia or Barodia	24	22	2	7	17	N	N	N
Unspecified	3,671	3,155	516	1,901	1,770	0.15	0.16	0.11

N = Negligible.

Source :

District Census Handbook 1971, Kheda, Part X-C-I, pp. 124-131.

The predominant Scheduled Tribe in the district is that of Bhil. The Bhils, numbering 15,308 occupies predominant position among the Scheduled Tribes in the district. Next to Bhils, numerically important tribes in the district are Dhanka including Tadvi, Tetaria and Valvi (2,802), Naikda or Nayaka (2,151) Patelia (423) and Dubla including Talavia or Halpati (383). Details about some of the main tribes are given below :

Bhils—This Tribe is believed to derive its name from *billu*, the Dravidian word for a bowl. According to local legends the Bhils of

1. Rev. Dr. J. Wilson's Aboriginal Tribes, 3.

Gujarat are descended from Goho, son of Ajanbahu, son of Kaiy, king of Abul. The Gujarat Bhils belong to two main divisions, one part Rajput the other of pure Bhil descent. The names of many of the part-Rajput clans are the same as certain Rajput names Baria, Dangi, Ganava, Katara, Makvana, Parmar and Rathod. They are mainly found in Thasra, Anand, Nadiad, Matar, Kapadvanj, Petlad and Mahemadabad talukas of this district. They are also seen in Vadasinor, Khambhat (Cambay) and Borsad talukas of this district.

The Bhil is an aboriginal tribe, generally very dark in colour, and very wild in appearance. The men are muscular, sturdy and of a medium height. The women are well built, but have coarse irregular features. The men wear their hair long, while the women fasten it in braids or plaits. Formerly there were almost daily complaints of their daring robberies. Most of them now are gradually becoming quiet and law abiding cultivators. They work as labourers and watchmen also. In a Bhil family, besides attending to the house the women help in the fields.

Generally, the Bhils have two meals, one at about ten in the morning the other after sunset. The morning meal consists of maize bread and in the evening maize gram is boiled in water and eaten with buttermilk. The everyday food of a well-to-do Bhil is rice cooked with salt and mixed in buttermilk, and of an ordinary Bhil, Maize or *bajri rotla* and buttermilk boiled with chillies and sometimes split peas or beans and gram-mixed with vegetables. They eat flesh of animals and birds. The Bhils usual dress is merely a cloth round the loins and long strip twisted round the head. The women usually wear a voluminous *ghaghara* (petticoat), a bodice and a *sari* wrapped round the body and brought over the head. They tattoo their faces and pierce their ears and noses. Bracelets of tin or brass cover the arm from the wrist to the elbow. Bangles of glass and lac are also worn.

Formerly a vagrant people, without settled habitation, they have now, for the most part, settled down in villages. Of household goods, the stock is small. The family of a well-to-do Bhil has generally a pair of bullocks, a cow, some sheep and goats and a number of fowls, a cart and field tools including a plough, a weeder or *kharpi*, and a hoe or *kodali*. But most of the Bhils have no carts and cattle. Under the Tribal Development Block, financial assistance is provided for the purchase of bullocks and carts and several Bhils now own carts and bullocks. In the hut, besides the sleeping mat, they have a grinding stone, and a roll of blanket and a few pots and cups, most of them of clay. Every house has a number of large earthen jars to store grain and at least one brass mug or *lota*; many have one or two brass plates or *thalis* and large circular bamboo baskets or *porsas* to hold grain. The baskets are generally kept outside

1. Ras Mala I, 103.

the hut. Now with gainful employment, their purchasing power has increased and are able to purchase brass or copper vessels, food and clothes. Their social customs are similar to those of other Hindu castes. Widow remarriage and divorce are permitted. A custom of *ghar jamai* or *khandhadia* is in vogue in this community. Their caste *panch* decides the social cases of divorce, kidnapping, etc. The *simant* and *chhathi* ceremonies which were not performed in the past are now practised in imitation of other Hindu castes. Among them the dead are generally burnt.

The regular Hindu festivals which they specially observe are Shimga or Holi at the spring equinox, Dassera the day of the autumn equinox and Diwali in October. They worship Mata or Devi, revere the Moon and believe in witches.

Dhanka—Among the Scheduled Tribes, the Dhankas are agriculture labourers and forest labourers. Their adult women are all earners and not dependent upon the men for living; they also help the husband by adding to the joint income by working as a labourer. About their origin, one popular belief is that the Tadvis (Dhankas) were original inhabitants of Pavagadh areas. They were Chauhan Rajputs. When Muhomad Begda defeated the Rajput Chief Patai Raja, the city lost its prosperity and inhabitants fled to different places in Gujarat. Those who fled and took shelter in the fields and fed themselves on Dhan (uncooked grain) were called Dhankas. The word Dhanka is also derived from Sanskrit Dhanushyakas, meaning holders of bows; the group of Dhanushyakas as a fighting clan has been mentioned in the Mahabharat war as going to Kurukshetra from the western India. They are mainly found in Mahemadabad, Matar, Kapadvanj and Thasra talukas while scattered over Vadasinor, Nadiad and Anand talukas of this district.

Ordinarily, it is possible to distinguish the Dhanka by a light colour and a more intelligent look as compared to a passing Bhil, Naika or a non-tribal farmer in the area. Their face is not flat but somewhat long and roundish. The colour of the skin is light dark and the general impression is that the Dhankas as a group are not backward, and though of tribal origin and with some peculiar habits, they have undergone acculturation to a considerable extent. Their children upto the ages of three to four look more handsome but their colour and figure change as they grow older.

In matter of the social customs like birth, marriage and death, they do not differ much from the rest of the Hindus. The 'brother-in-law' dance is a striking feature of Dhanka marriage. The husband of the sister of the bridegroom (*banevi* or brother-in-law) and the husband of the elder

(a) SHAH, P. G., *Tribal Life In Gujarat*, 1964, Bombay.

(b) Based on District Census Hand book 1971, *Kheda*, Part X-C-I, pp. 128-127.

sister of the bride carry bridegroom and the bride respectively each on his shoulder and dance in a circle for some time. The brother-in-laws are in the centre of the circle, and are surrounded by other relatives on both sides. The whole group moves to the tune of the drum and music. One person holds a dish containing rice and *kumkum* powder in the centre and the bride and bridegroom take the rice and *kumkum* from it and throw on each other. There is practice of Khandhadia marriage among Dhankas, according to which husband stays with his wife's parents. This practice is not considered low by both the parties. This is marriage by contract.

Their main items of food are rice, *jowar* and *bajri*. Rice is the grain next in use, but wheat is used only on festivals and at the entertainment of outsiders as guest. Pulses and vegetables are used, but *ghee* and milk are rare. Eggs, fish and meat are now taken by some of them, though they were prohibited by their *guru Vishvanath*. Their male's dress consists of a loin cloth and a head dress. He may use a waistcoat or a shirt or carry a *dhoti*. Their women wear a petticoat (*ghaghra*) and a *choli* when working in the field but a double up *sari* is used to cover the shoulders and the head. Their child is given the minimum clothing consistent with the means of family. No ornaments are worn by males except finger rings of gold or silver or brass, *kadu* of silver on the elbow and string of silver on the waist. Their women used to wear in the nose, *jad* or *kanto* or pin made of gold or silver or brass but now-a-days the *jad* is not worn. Now instead of *loria*, earrings are worn in the lower lobe of each ear. Their widows are allowed to wear earrings made of lac which may be covered by gold or silver. The *hansadi* or lighter chains of silver or brass are worn round the neck. A *kadu* usually made of silver and rarely of gold is worn on the upper part of the elbow while on the lower parts of the hands bangles of silver, brass or pewter are worn. But these are replaced generally by glass bangles which are cheaper, lighter and preferred on account of their use also by the Hindu women. A single gold bangle is allowed to a Hindu widow but no glass bangle is worn by her. Women also wear finger rings made of gold or silver or brass. They wear silver *kallas* or *hadala* on anklets. While the young girls wear thin chains made of silver called *chhada* and the chains are taking modern shapes as they are now made in the cities. They also wear on the toes of their feet fish shaped rings of silver with joints brought together.

Most of the holidays and social festivals of the tribals are enjoyed by the intense contact with the Hindus. Their folkways and festivals are, therefore, tinged with colour of Hinduism. The most important Hindu holidays such as Makara Sankranti (January), Maha Shivratri (February), Holi (March), Mahalaxmi (April), Gokul Astami (July), Divaso (August), Navaratri, Norta-Dessera (October) and Diwali (November) are observed by the tribals. They worship their own gods and godlings and yet pay homage also to the Hindu gods and goddesses whose number is also a

legion. The common tribal gods of Dhankas whom they worship are Vaghadia Dev, Simadia Dev, Chauhan Dev and Corn god while the goddesses are Uncherimata, Nicherimata, Khappar Jogini, Kalika and Ranikajal. The belief in witches and witchcraft is also prevalent among them.

Naika or Naikda—The Naikas form one of the important tribes of Gujarat. The word Nayak is evidently of Sanskrit origin being derived from नय to lead, to protect. नायक usually means also a leader or a protector. These Sanskrit words naturally reflect a similar leadership even for the Naika tribe; they certainly represent a people, with qualities of leadership, who carved out an independent position of prominence which has been maintained ever since. They are at present divided into their main groups viz., Uncha (high), Nicha (low) and Choliwala. The Choliwalas are lower than the Uncha but higher than Nicha, and though there is a rare exchange of brides among them, whenever a formal marriage takes place, the parents concerned followed the rule of hypergamy. This rule permits Uncha Naika to take brides from Choliwala and the latter from the Nicha but the reverse is not admitted. The prominent endogamous sub-groups, however, among the Unchas are Kapadia, Machhi-Garasia, Dabhadia, Vadvai and Bhatela. The Choliwalas are also divided into such endogamous sub-groups such as Ozaria, Chavaria, Vad. Lim, Warli, Kadhad, Chhapta, etc. Among the Nicha Naikas there are Dikolia, Parsi and Muslim or Voharia Naikas. These three groups are strictly endogamous. They are mainly found in rural areas of Vadasinor, Matar, Kapadvanj, Thasra and Nadiad talukas of this district. They are cultivators, labourers and wood cutters. Their women help them and they seldom leave the district in search of employment. It is a significant feature of life of Naikas that woman occupies a position of superiority atleast in several aspects of the social life of community. In matter of their social customs like birth, Marriage and death they have some significant features. They do not believe that the child is given to them by magic. They are aware of the menstrual function and are aware why the function stops and how the child is born of the mother after about nine months. The Hindu practices of (1) *chhashti puja*—the sixth day worship of the goddess of luck, (2) the tonsure ceremony of the boy in his fourth or fifth year and (3) the puberty ceremony of the girl at 13 or 16—all the three are not observed by them. Among marriage, it is a significant custom that instead of the girl's father going about in search of the groom, it is usually the boy's father that goes about in search of the bride. The offer for marriage generally comes from the boy's party. It is also noteworthy that the girl is given the freedom to talk with the groom and her consent is secured before the transaction is settled. The bride price is fixed fairly high. In ordinary circumstances, the bride price is fixed at the usual scale. It is a significant feature of the custom that it is not the bridegroom that is taken out in procession but the bride. When the bridal procession reaches the groom's village, the latter's parents bring a bullock-cart for the bride. Similarly two maidens with water-pots on their heads come forward to

welcome them with the good luck. It is important to note that the husband of the sister of boy or girl, lifts him or her respectively on his shoulder and dances to tune of the drums. Among them the bride returns to her natal house after the wedding, and has to be formally brought back to the conjugal house after a formal send off ceremony which may be a small one *bethu anu* or *motu anu*. The main burden of expenditure of marriage falls on the groom's party. All these ceremonial practices are not strictly observed. The system of residential son-in-law or *khandhadia* (*ghurjamdi*) is another privilege of Naika woman. After Vastasio assured the contract from the boy and his father, the Kacho Vidhi is prevalent among them in which the girl is given liberty to live with the man she likes without any formal rites. Among them a dead body is disposed off either by cremation or burial. The pyre is lighted from the head side of the corpse and not from the leg-side as it is done among all the Hindus. There is also a custom of playing drums at the time of death and it is continued subsequently during all the important stages of funeral rites, except by the advanced Naikas who do not like too much noise. Burial is not regarded as a complete funerary rite and so it is followed by another symbolic cremation rite which takes place on the eleventh day after the death. The dead is deified on this day and a statuette of stone or wood known as *khatri* is installed with due ceremony in one corner of the house. On the twelfth day after death a funeral feast (*Dahada*) ceremony is performed. As a matter of comparison this ceremony may be said to be tribal *shraddha*. They also follow the custom of propitiating their ancestors by a ceremony known as Mohota Dahada.

In matter of food they take some liquid *ghensh*—a kind of porridge. In the afternoon, as they have to do manual labour, they do not eat heavy food but only take *rotla* (bread) and boiled pulses or *chutney* of red chillies. Sometimes they take porridge and baked *mahuda* flowers in the field itself; they may come home for lunch or the afternoon meal, if it is nearby. At night between eight and nine o'clock, they have their big meals. The poor Naikas can seldom afford delicacy in their daily menu but in some places where contact of urban people is close, they prepare *bhajias* or *bhujalia* or *vada* of *dal* and rice on religious occasions. They also know the preparation of sweets like *shira* or *kansar*. Sometimes the meal may consist of the meat of a sacrificed goat or fowl, while eggs may be used, if poultry is available. They dress like Rajputs or kolis. The men wear a few yards of dirty ragged cloth round the loins and a cloth round the brow showing at the crown the disordered ruffled hair. The women wear over the shoulders a robe or *sari* of a dark blue or red colour, a petticoat, and a bodice. The men wear no ornaments except tin, brass or silver earrings. The women wear tin earrings, necklaces of beads or shells, brass bangles and armlets in shape and make, except that they wear only one instead of many tiers, much like those worn by Bhil women. Their religious life is based mainly on a sense of fear of the unknown and is thus dominated by the offering of sacrifices to those supernatural forces and keeping

them pleased. Their religious life is coloured in three hues. Firstly, there is the traditional tribal life, secondly, the village gods common to the village as a whole and thirdly, the religious practices of the Hindu as the majority of community. They worship gods like Baba Tundavo, Vahevario Dungar, Bakubhai Dev, Nandarvo Dev, Bhenhato Baman, Kuhajo Baman, Hala Pruthaviraj, Kalorana, Torunio Dev, Zamaravo Dev, Zampalio Dev and goddesses like Fenai Mata, Verai Mata, Dhanbai Mata, Khedbai Mata, Khemai Mata, Mata Ahnsuvma, Hajuli Mata and Shipri Mata. They also worship Hindu gods and goddesses. They are fond of games and recreations, especially as they have no regular occupations. The most common recreation is to talk and gossip. The most important Hindu's festivals celebrated by them are Makar Sankranti (January), Maha Shivratri (February), Holi (March), Mahalaxmi (April), Gokul Ashtami (July), Divaso (August), Navaratri or Norta, Dessera (October) and Diwali (November) are followed by them.

The Mortar and the Naikdas—In the thatched and mud floored huts of the Naikda people, the mortar is a small hole dug out in the floor, where corn is dehusked or pounded or beaten into crushed floor. In an agricultural economy, the importance of this mortar has been great. We have not been able to trace any signs of phallic worship among the families and villages. The mortar plays a significant role in their culture. It is perhaps the part of the house next in importance to the kitchen where woman reigns supreme, for most of the pounding is done by woman as also the grinding. The grinding-stone (૧૩૧) and the mortar (૧૩૨) are the common domestic implements of the primitive people in the Gujarat region, and have acquired a traditional importance.

The mortar is used on the following occasions : (1) Betrothal ; When girls' parents go to the boy's house with a coconut and garland and bunch of flowers to present to the prospective groom, the ritual of presentation is performed at the mortar of the groom's house, (ii) In the afternoon at time of ceremonial payment of money, the relatives of the boy and the girl sit near the mortar in the girl's house and hold toddy or liquor in cups of leaves in their hands (*pathara dharavun*). Then follows the ceremony of giving money, which they name as *rupia nakhava*. This money, is first deposited in the metal dish *akhiana* (૧૩૩), (iii) During the wedding rite, the bride and groom are made to sit on a piece of cloth (*pat*) spread over the floor near the mortar. The mother of the groom puts a few coins, one each under the four corners and two sides of the cloth. The most important ceremony takes place in which the groom puts a black bead necklace (*lagan ganthi*) around the neck of the girl. This rite is considered to be the finalisation of matrimonial bonds and it is done while standing near the mortar, (iv) In the case of *khandhadia* marriage also, all the ceremonies are performed at the mortar in the bride's house, (v) In the case of *kacho vidhi* that is partnership before marriage, the girl is taken to the

boy's house by the the principal members of both the parties. They all sit near the mortar of the boy's house and partake liquor or tea and thus permit the boy and the girl to live as husband and wife and (vi) Also in the case of death, as soon as a person dies, the dead body is placed on the ground near the mortar of the house.

An explanation may be offered for the importance of the mortar in the Naika ritual. In an agricultural community, the mortar is the only fixed place in the front portion of their simple hut, which is capable of ceremonial use. Later the tribal ritual was conducted in a formal wedding booth outside the house, and later on by the elaborate Hindu wedding both providing for a fire at the centre and the waterpots in the four pillars called "Chori" Mandap¹.

Muslims

Among the Muslims of this district, in addition to the four main divisions such as Saiyads, Shaikhs, Pathans and Mughals there are several classes almost all of them are converted Hindus. Of these chief are Bohoras, Memons Molesalams, Maleks, Momnas, Chhipas and Tais. Besides these there is a considerable miscellaneous population of Muslims like barbers, butchers, beggars, etc.

Saiyads—The Saiyads can be said to form the highest communal group in the Muslim society. They claim to be descendants from the Prophet through his daughter Fatimah and her husband the Prophet's Cousin Ali.

Scores of Saiyad families entered Gujarat during the reigns of the Sultans of Gujarat (1400-1570) and their successors, the Mughals (1570-1750). The Mirat-i-Ahmadi lists the following important families : (1) The Shirazis, (2) The Bukharis, (3) The Rifais, (4) The Qadiriyyas, (5) The Meshhedis, (6) The Idrusis, (7) The Tirmizis (8) The Bhaktaris, (9) The Arizis, (10) The Zaidis, and (11) The Mahdavis.

Out of them Kadri, Bukhari, Chisti, Shirazi and Urezi families are found in Kheda district.

A branch of Saiyads tracing their origin from Nizari Pirs and having within their ranks the important Imam Shah entered Gujarat as Isma'ili missionaries. At present the Saiyads can hardly be regarded as an affluent section of the Muslim community. There are a number of immigrants who claim to be the Saiyad but they are not so recognised by 'true' Saiyads. The 'true' Saiyads are highly sensitive to marriage connections and those

1. SHAH P. G., *The Naikas Naikdas, (A Gujarat Tribe), Part I, Bombay, (1959), pp. 31,32.*

customs which bespeak or even suggest a Saiyad origin. The fluency in Urdu, unmixed with Gujarati and well-versed in Persian are some traits of genuine Saiyads. Marriage among the Saiyad is arranged as far as possible within the immediate kin group. The Saiyads have absorbed some of the mores of the higher Hindu castes. Among them, widows do not remarry, child marriages used to be frequent and dowries also are high compared to other Muslim communities.

Shaikhs—The Shaikh is one of the four castes into which Muslims are divided. The word Shaikh literally means 'elder'. The word Shaikh is applied to the descendants of the local converts as well as to foreigners. They are mainly found in Vadasinor, Thasra, Khambhat (Cambay), and Mahemadabad talukas of this district. They do not marry their daughters in the families of Pathans or Mughals, but accept daughters of Pathans. They do not accept daughters of Mughals. All of them are Sunni by sect. They are religious minded and keep *badha*, *manta*, etc., during sickness.

Pathans—Pathans are one of those communities which has come and settled in Gujarat since the times of the Sultans of Delhi. It is one of the four classes into which Muslims are divided. They are of Afghan origin. The name probably means people of the uplands. The word is derived from the Arabic word meaning 'Victorious'. It is now generally agreed that the name Pathan is the Indian form of the name 'Pushtun' derived from an old Iranias word Parshti (hill). All are Sunnis by religion. They are generally found in Borsad, Vadasinor and Mahemadabad talukas of this district.

Indigenization has effected the Pathans, settled for generations hereto the extent of making them indistinguishable from other Muslims; moreover, they have been divided into small territorial units within which alone do their marriages take place. There is virtually no link between the numerous Pathan areas in different parts of Gujarat.

There are sub-divisions among them of which Sama Pathan and Babi Pathan are note worthy. The Sama Pathans trace their origin to the village Sama or Samra near Peshawar and they came to Gujarat as soldiers in the employ of the Nawabs of Khambhat (Cambay). From here, they went to Borsad and the nearby area mainly to give protection to the Muslims there during the eighteenth century when Maratha terror was at its height. The Afghans were then led by their progenitor Musa Khan, who settled in Raja Phalia in Borsad and succeeded in warding off the Marathas. The Malek chief in gratitude gave his daughter to Musa Khan and his progeny came to be known as Sama Pathan.

1. MUKERJEE SATYA V., *Census of India 1931, Vol. XIX. Baroda, Part I, Report,* p. 454.

In Borsad, there are about three to four hundred households of Sama Pathans. They have fairly strong *jama'tbandi* with a strong group feeling. This *jama'tbandi* has also been used to ban customs which were felt as undesirable; for instance, marriage where music was played were boycotted. Expensive communal feasts, which were common before, have been curtailed though attendance is necessary on 'occasions of joy or sorrow' like marriage and death.

Marriage is mostly arranged among near relations, cousin marriages are preferred. Divorce and widow remarriage are virtually unknown. The Sama Pathans are aware of the anomaly of banning widow remarriage in an Islamic society.

As stated above, the Sama Pathans claim that many of their former undesirable customs have been given up. These customs resembled those of other Muslims like *satwansa* and the obligation on the girl's parents for bearing the expenses of the first child birth. The last days of pregnancy were first heralded by the distribution of sweets, made of *methi*, in the community. This has now been banned as this kind of publicity of this fact is against the spirit of Islam for even the husband should not be aware of his wife's delicate condition. So also has the marriage ceremony been stripped of the use of turmeric and other elaborate customs.

The funerary expenses are borne by the mothers family. The *ziyarat* is performed in the local graveyard and after the party has returned to the local mosque, betel-nut is distributed. On this occasion the presence of at least one member of every family is necessary.

The Sama Pathan is a localized community found in Borsad only and since it is a fairly small one, reforms have been relatively easy to enforce. Educationally, they are generally progressive. Elementary religious instruction is given out is generally limited to the Quran: among them more common is high school education after which the boy takes to some job.

The community was formerly agrarian but in recent years, it has been inclining more and more towards urban occupations. They speak Urdu with Gujarati inflexions and can read only the Gujarati script, not Arabic. *Purdah* is not common among them though female education has become popular only recently.

The dress patterns are like those of other Gujarati Muslims.

The Babi Pathans were an important force in the period of disintegration which followed the collapse of the Mughal empire in the beginning of the eighteenth century. The Gaekwar-Babi conflict for the mastery of the central and north Gujarat is one of the significant episodes of eighteenth century

history. The Babis finally ended by establishing their ruling houses in Radhanpur, Junagadh, Vadasinor and Mangrol, while the Gaekwars established themselves in Vadodara. The rulers of ex-Vadasinor State were Babis.

They are engaged in minor Government jobs and other services; even when they have land, they do not cultivate it but give others to cultivate. Increasingly, therefore, they are tending to congregate in towns.

As far as possible, the Babi Pathans prefer to marry among themselves but they also give their daughter to behlins and Chauhans. They say that they bring girls from Sheikhs and Sunni Bohoras but do not give their own girls to them. In matters of social customs they do not differ much from the rest of Muslims.

Unlike the Sama Pathans, the Babi Pathans are as yet not very greatly affected by the reforming movement.

Mughals—The Mughals are one of the four foreign Muslim communities. They came to Gujarat during the reign of Humayun and Akbar after having quarrelled with the emperors. They are mainly concentrated in Borsad and in the coastal town Khambhat. Government service is the first preference of the Mughals followed by private service and trade. In matter of religion, they are Sunni by faith.

Bohoras—The Bohoras are divided in three sub-classes, viz., the Daudi, the Sulemani and the Aliya Bohoras. There is one fundamental distinction between the three which arose on the death of the 26th Dai, Dawood Bin Adjab Shah, in 1591 A. D., corresponding Hijri year 969. The Bohoras who accepted Dawood Bin Qutubsha, as the 27th Dai, are called the Daudi Bohoras, and those who supported Suleiman Bin Hasan as their 27th Dai are called Suleimani Bohoras. The Aliya Bohoras are separated after the 28th Dai, Shaikh Adam Safiuddin. They accepted Alli Bin Ibrahim as their 29th Dai, after the death of 28th Dai, mentioned above and they are called Aliya Bohoras. Their present Dai resides at Vadodara. The Bohoras in India accepted Daudis as against the majority of Yemenities who supported Suleiman Bin Hasan, after whom the name has remained as *Suleimanis*. They are concentrated in Kapadvanj, Vadasinor and Nadiad talukas of this district. Formerly, they lagged behind in education. But after 1948, there has been considerable expansion of education among boys and girls with the result that the community now boasts of several doctors, lawyers, engineers and chartered accountants. They are also forest contractors and commission agents. They mainly deal in hardware, foodgrains, timber and *timru* leaves. As a class, they are well-to-do. In matter of social customs regarding birth, they follow some of the Hindu customs. Among them, a child's naming ceremony takes place on the sixth day. An aunt brings a *thali* with a *diya* (lamp), lit with pure *ghee*, a white dress sprinkled with saffron water and

a quill with which the destiny of the child is believed to be written. On the seventh day or the fourteenth day or the twenty-first day from the date of birth of the child, is the *aqeeqa* when the baby's head is shaved and a goat is sacrificed. The circumcision ceremony for boys is celebrated by taking him out on horse-back in a colourful procession. This rite can be performed at any time during childhood and many get it done soon after birth. Mishaq is celebrated when a Bohora child reaches puberty. He or she takes an oath of allegiance to His Holiness, Mullaji Saheb, promising to pray three times a day, to follow the code of conduct laid down by him and never to associate with those who are against him. In the marriage ceremony, there are certain vestiges of the Hindu system such as practising of endogamy, commensality, hereditary occupation and out-casting of rebels. For instance, at the time of wedding reception, the bridegroom breaks a coconut. The bride has to wear a *sari* like a Hindu bride. The marriage is strictly restricted to its own caste, i. e., Daudi Bohoras only.

According to Bohoras, the marriage is a contract between the bridegroom and the bride's father or guardian. The bride and groom have to first get a certificate from the local Aamil stating that they have paid all their dues to the community. The marriage date is then fixed. The marriages are also performed among them. The *Mehr* or dower is fixed at Rs. 101. For marriage, *nikah* (wedding ceremony) is performed either by His Holiness Mullaji Saheb (chief priest) or his representative, the Aamil. A bride enters her new home led by her uncle, who shows the way with a *diya*. Modern Bohoras use battery operated torches or lamps. A *dupatta* is draped and tied around the bride and groom symbolising their eternal union. This ritual is also adopted from the Hindus. At the door, the mother-in-law waves a brass *lata* full of water round the heads of the bridal couple to ward off evil. The bride reverently touches the lady's hand and knee to her eyes, forehead and lips.

At the time of all ceremonial occasions, they eat out of large common *thals*. The *sitabi* is a special meal served in gratitude to prophet Mohammed's daughter, bibi *Fatima*, when a *minnat* (wish) is fulfilled. Eleven or fourteen women pray together and eat from the *sitabi thal*. After the death, the body is bathed and taken to a mosque for the *namaz-e-janaza* (funeral prayer). The relatives and friends take turns at lifting the pier. The body is interred along with a *rakkuchitthi* (note of blessings) obtained from the head Aamil. In ritual matters, the Bohoras have a little difference from standard Muslim practice. They offer prayers three times a day instead of five, by combining the two afternoon and evening prayers. They have no *khutba* (sermon) on Friday because the Imam is absent, i. e., in seclusion. They use the astronomical lunar calendar called the Misri calendar to determine the beginning of each month. The Misri calendar is a device and contribution of the Fatemi Imams who ruled over Egypt for about 200 years. Egypt also now-a-days follows Misri calendar. In common with other

Ismailis like the Khojas, the Bohoras believe in an esoteric interpretation of the Quran behind the manifest meaning. Salvation for them is obtainable only through the intercession of a hierarchy which reaches down from Allah to Prophet Mohammed, to Hazarat Ali to the Imams, to the Hujjats (All in seclusion with the Imam) to the Dai-ul-Mutlaq. The Dai-ul-Mutlaq exercises all powers for and on behalf of the Imam, who is in seclusion. Next to the Dai (called Syedna or Mullaji), are the Mazoon (usually his heir apparent) the Mukasir, the Shaikhs and the Mullas. Aamils or representatives of the Syedna in various cities are chosen from the ranks of the Shaikhs and officiate at ceremonies and collect taxes. The older Daudi women are reputed to be a bulwork of orthodoxy because they have a more active part in the religion than do other Muslim women.

The Suleimani Bohoras follow the same religious tenets and practices or customs. They are extremely enterprising people, mostly traders and businessmen. But they have distinguished themselves in several other fields, including arts, law, medicine and education.

Sunni Bohoras—Sunni Bohoras are converted Hindus. Formerly, they were Shiah Bohoras. They became Sunnis by the efforts of religious leaders (Mulla) who came here during the rule of Sultan Muzfarshah I of Gujarat as reported in the book "Preaching of Islam" by Sir Thomas Arnold. Thereafter they formed a separate community known as the Sunni Bohoras. They are mainly found in Sojitra, Vaso, Petlad, Anand, Sarsa, Khambhoraj, Umreth, Kheda and Mahemadabad towns of this district. They are now engaged in business or employed in Government or semi-Government services. Some of them are lawyers, doctors and engineers also.

Their surnames are connected with the name of towns or villages, viz., Amdavadi, Mahemadavadi, Khambhati, Dholakiya, Borsada, etc. Their customs are influenced by Hindu rites particularly in respect of marriage custom, the influence of Patidar customs is generally visible. Like Hindus the bridegroom is searched by the parents of girls. They also observed Hindu Law of Inheritance in practice. Among them the social organisation is based on classes on hierarchical order like their Hindu ancestors.

The Sunni Bohoras have no particular religious head. Most of them have no *pir* and as such they have no compact communal organisation like Shiah Bohoras, Memons and Khojas. They are comparatively educated among Muslims.

Memons—The Memon is a corruption of *muamin* (believer), a name given to the descendants of Muslims converts from the Hindu castes of Luhanas and Kachhias. The conversion first took place in the middle of the 15th century in Sindh in response to the preaching of Saiyad Esmat-ud-Din Kadri, a descendant of a saint of Bagdad. At that time, Manekji,

the head of the eightyfour *nukas* of the Luhana community, was in favour at Nagarthatha in the court of a Samma ruler named Markat Khan. Markat Khan became a follower of the Saiyad and Manekji, his two sons and 700 other Luhanas followed their ruler's example. On conversion, the saint changed the name of the community to Muamin or believers. Before leaving Sindh, he blessed his people, a blessing to which the memons trace their fruitfulness and success in trade. From Sindh they spread all over India and also in Burma, Thailand, Singapore, Java and East Africa. They are traders, gold-smiths and money-lenders. Some of them are also serving in private or Government organisations. They are mainly found in Petlad and Nadiad while some are scattered all over the district. Both males and females blacken their eyelids with collyrium. Memon women redden their palms, fingers, and finger nails and their soles and toes with Henna. As a class they are fond of display. Contact with Urdu-speaking Muslims has given all Memons a colloquial knowledge of Urdu. They are Sunnis by faith. As a class, they are religious, though some of them, keep to their former non-Islamic social usage. The most notable of these is their refusal to allow their daughters and widows any inheritance. They are very fond of performing pilgrimages to Mecca. Many of them have the honourable prefix of *haji* or pilgrim. They believe in astrology and consult astrologers, a practice condemned by the Prophet.

Molesalam—The Molesalams are converts to Islam, made from among the Rajputs. During the reigns of the early Sultans of Gujarat, a number of Rajputs were converted to Islam. In fact a chain reaction started a process which continued till the end of the Sultanate. They brought into being the Molesalam Girasiah community, one of the important land-owning communities in Gujarat. Their name is derived from Maula-Islam (Arabic) meaning revered persons of Islam. They are mainly found in the Napa, Khadal, Sandhana, Bhalej villages of this district. They dine with other Muslims. Though they sometimes take meat, they are mostly vegetarians like the Hindus. A Molesalam will get his daughter married to a Shaikh, Saiyad, Mughal or Babi, but not, as a rule, with other Muslims who are inferior in social status. The son of a chief may get a Rajput girl in marriage; but other Molesalams marry either among their own people or the poorer classes of Muslims. They employ Kazis or *maulvis*, but also maintain their old Brahman family priests and support Bhats and Charans.

Maleks or Maliks—The Maleks are converted Hindus. They are mainly found in the Thasra taluka and are spread over in Nadiad, Mahamadabad and Borsad talukas of this district. They are landlords, cultivators, cattle breeders and servicemen. The Maleks are organised in *Jamats* and its rules are strictly observed. In Borsad, they have strong influence in a organisation which controls most of the communal activities. This body runs the religious Madrasahs and maintains the mosque and grave yard.

The Maleks prefer to marry among near relatives, the girl being given outside only if a suitable bridegroom is not available among them.

The marriage calls are always initiated by the bridegroom's people by sending a *paigam* to the bride's people. This is confirmed usually by a gift of Rs. 5 from the former to the latter. Subsequently, gifts of eatables are sent to each other by both parties. In matter of social customs they do not differ much from other converted Hindus. They are Sunnis by religion.

Momnas—The Momnas from Momin (believers) are descendants of Hindus of many castes converted to the Shiah form of the faith by different members of the Ismailiya Saiyads of whom Imamshah of Pirana was the most distinguished. They are found in Kheda and Vaso of this district. They are mainly cotton weavers while in Vaso, some of them also weave silk sarees. They also sell cotton rope and tape. Both males and females have Hindu names. Among them circumcision is practised and dead are buried. Like Hindus, women wail and beat the breast at death. Some of them put on Hindu dress while some have Muslim dress. Their women generally put on saree and *chaniya*. They speak Gujarati. The Momnas of Kheda are Sunnis while at Vaso, some are Sunnis and some are Shiahs. There is a separate *jamatkhanu* for Shiah Momina at Vaso, where they gather for prayer. Instead of the Quran, they read Imamshah's book of religious rules and also worship Hindu gods.

Chhipas—The Chhipas are mainly calico-printers. They are found in Kheda and Kapadvanj talukas of this district. It is said that originally they belonged to Bhavsar community. Some of them have migrated from Marwad. They put on Muslim dress. They keep marriage relations among their own community and do not differ much from other Muslims in matter of social customs. They are Sunnis by religion.

Tais—The Tais were originally Khattris and converted during the reign of Mahmud Begada. They work as weavers.

Inter-Caste Relations

As in other parts of the country, inter-caste relations were very rigid a generation ago. The members of different castes and sub-castes lived in close watertight compartments in such matters as inter-dining and inter-castes marriages. The picture has greatly changed especially after Independence and the changes that have occurred in recent times are noteworthy. Inter-dining is no longer looked upon with disapproval by a Hindu any where in the district particularly in towns, though this restriction still persists in a diluted form in rural area. Inter-caste marriages, though not very common, are more frequent than ever

before and many of the traditional restrictions on marriage based on caste are gradually disappearing as a result of the spread of education, influence of western culture, equality of sexes and consequent removal of disabilities from which women suffered in the past.

SAINTS AND PIRS

The Saints and *pirs* played an important role in moulding the life, character and social behaviour of the people. It is through their preachings and practice that some norms are set for social behaviour. They represent what is good and lofty in tradition. It is because of them that religion in its real content is understood by the people. The Kheda district has a number of saints and *pirs* who had influenced the people. The following narration gives some idea about the life, teachings and impact of the saints on the people.

Shastri Shri Yagnapurushdasji—Shri Dungarbhai (*Yagnapurushdasji*) was born at village Mahelav (*Petlad taluka*) in the Vikram Samvat 1921 in the Patidar family. His father's name was Shri Dhoribhai Ajubhai. He took his primary education at the village school. As he had no interest in the worldly pleasure, he, with the consent of his family became *sadhu*. He was initiated into *diksha* by Swami Shri Vignananandji. At Vadtal he came in contact with *sadhus* of the Swaminarayan sect and studied its literature. He had achieved knowledge from many learned *sadhus* and became popular as Yagnapurushdasji. Because of the disputes with traditionalists in matters of worship and certain essential beliefs Shri Yagnapurushdasji and his followers branched off from the main stream of the sect and founded a new branch known as the Bochasan Swaminarayan Sampradaya. According to him, Shri Sahajanand Swami is to be respected as *guru* and divine being but not to be worshipped as god. In their temples they do not keep the idol of Shri Sahajanand Swami with Lord Vishnu. Among their temples in Gujarat, the temple at Bochasan is considered as a main seat of the sect. He died in the Vikram Samvat 2007.

Swami Shri Nirgundasji—Shri Nirgundasji was born in the Patidar family at village Mahelav (*Petlad taluka*) in V. S. 1932 (1876 A. D.). His original name was Shri Jethabhai. He took his early education in the English School of Vaso and thereafter he joined the Kala-bhawan of Vadodara. He went to Vadtal and gained religious knowledge regarding the Swaminarayan sect from Acharya Shri Viharilal. He remained there with Acharyaji and there he was known as Shri Jetha Bhagat. He was respected as one of the great Swamis of the Swaminarayan sect. He was also a good writer. When he went to Africa for preaching his religious discourses he attracted many people towards the Swaminarayan sect. He died on 20th May, 1950 at Anand where a *chotro* is constructed in his memory.

Mithu Maharaj—(V. S. 1795-1847)—Shri Mithu Maharaj was a Modh Brahman of Mahisa village (*Nadiad taluka*). He was a devotee of Mata Vindhyavasini. After completion of education he went to the Vindhyachal and worshipped goddess Vindhyavasini. Thereafter he started a number of Ras Mandals for worship of the mother goddess. He had many devout followers at the villages Pitha, Dadhipur, Vadavpur, Alina, etc. He was known as Mithu Maharaj among his followers. He was also a devout worshipper of the Ardhanarishwer. One of his followers was Janibai. After the death of Mithu Maharaj, she had a vision of Mithu Maharaj in (1857 V. S.), and she was also enthroned on his *gadi*. She also had a vision of 'યુગ્ત દર્શન' and 'બાલ દર્શન'. A number of her poetic works remained unpublished except નવનાયિકાવર્ણન. Shri Mithu Maharaj wrote the following religious books :

Shree ras Bar Ullas, Shree Rasikvrutti Vinod, Shree Lahari (the translation of the Saundarya Lahari of Adya Shri Shankaracharya), Shakti Villas Lahari, Bhakti Tarangini, Rasras, Sitatvam, etc.

Sant Mahatamram—Shri Mahatamram was born in the Brahmbhatt family at village Simarda (*Petlad taluka*) in the Vikram Samvat 1882. From early childhood he had a great aversion towards the worldly pleasure. During his childhood he used to spend his time in worship and serving *sadhus*. The story of his initiation to *diksha* is very interesting. Once Shree Aditramji, a Brahman from Kheda, was going from Kananam to Kheda. On the way he met Shri Devramji Maharaj at Munjpur. He was a disciple of Shri Aditramji Maharaj of Balajidwara seat at Jaipur. Shri Devramji requested Shri Aditramji to stay with him for few days as he was to leave this material world on the fourth day. He requested him to perform his last rites and after completion of it, to go to Simarda village and meet a boy named Mahatamram. He suggested to give his *kamal* and knowledge, so that he would thereafter accept him (Aditramji) as his *guru*. Thus at the age of fourteen Years he met a *guru*. He wrote many devotional songs. The manuscript of his collected devotional songs is worshipped still at village Simarda. His historical life-sketch is published in the form of a book. He died on Magh Sud 5, Vikram Samvat 1945.

Darai Pir—Darai Pir's original name was Kazi Mohammed. He served as *jamadar* in the army of the Sultan Mohammed Begda. It is said that during the seize of Pavagadh there was a wind-storm. At that time in the whole camp, only in his tent a lamp was burning and he was deeply engaged in *ibadat* (prayer) at night. The fort of Pavagadh was won through miracle performed by this saint. About his miracle, it is said that to climb the walls of the Pavagadh fort, the army of Sultan was in need of big rope. The Darai Pir had suggested to get the rope from Pir Alolakashah of Nadiad. Alolakashah instead of doing *vazu* threw a piece of rope in the waterpot and told the messenger to pull it. On doing so the messenger got a long rope sufficient for his need. Thus the fort of Pavagadh was won by the Sultan.

Dariai Pir was the man of miracles. Once he had addressed the well known Pir Shahalam of Ahmadabad as મહાત્માપિર in the fair. At the time Muzzafarshah, the heir of Begda, was present with others. He scolded Dariai Pir for addressing a saint like Shahalam Pir, by such diminutive name. Dariai Pir explained away this by saying that he was man from village (*kasbati*) and he did not know the polished language. Thereafter it was decided that Dariai Pir, and Sultan with others should go to Shahalam's tomb and should address him by their special names. The name accepted by Shahalam should be taken as real name. At the tomb, Pir Shahalam responded only to the name addressed by Dariai Pir. Thereafter Dariai Pir suggested Shahalam to show some miracle so that the persons present there would believe in him. On his request Shahalam got-up from his grave and brought out his right hand and gave hot *halvo*, bread and fish. All of them enjoyed these as *prasad*.

The *mazar* of Dariai Pir is located at Virpur of Vadasinor taluka. Here the Urs of Dariai Pir is held on Rabi-us-Sani 10. During the time of Urs of Dariai Pir, 'his roja' is kept in lock. By the miracle, it is said that this lock is opened automatically on the day of his *urs*. By such miracles he achieved the name of Dariai Pir.

There are many other *pirs* in the district, viz., Alolakshah Pir at Nadiad, Navgaja Pir at Umreth and Kanimshah Pir at Kheda. Because of their miraculous powers, they are considered as *pirs* and remembered by many.

Shri Bhan Saheb—Shri Bhan Saheb was born at the village Kinkhalod of the Borsad taluka on Magh Sud Purnima of Vikram Samvat 1754. He belonged to the Luhana Caste. His father, Shri Kalyan Thakkar, was religious minded. At the time of birth of Bhan Saheb, his father somehow felt that his son was a divine soul and was reincarnation of Kabirji. There was no reference of Guru in the devotional songs of Bhan Saheb. So it is believed that he had no Guru. His disciples considered him as Jagadguru. At the age of twenty-six he married and he had two sons. His first son died at an early age and the second son Shri Khimdas became his disciple. He was called Khalak Dariya Khim. He lived a retired life of a recluse; though he was married. He had established his *gadi* at village Sherghi. His preaching aimed at simple living with good conduct and worship. He was strongly opposed to the superstitions and blind faith. He performed many miracles. As a result of his miraculous power the water of Virda at the Bhanvirdi, Jamkhambhaliya became sweet. He took Samadhi in Vikram Samvat 1811 at the village of Kamijda.

Pujya Shri Mota—Shri Chunilal Asharam Bhavsar, popularly known as Shri Mota, was born in a poor family on 4th September 1898 at the village

Savli of the Vadodara district. Because of poverty and early death of his father, he had to face hardships during his education. When he was in Jr. B. A., he left the college responding to the call of Mahatma Gandhiji for boycotting English education. Thereafter, he joined Gujarat Vidyapith. Here also, he left his study to join Freedom Movement.

Shri Mota was married at the age of 27 years with a girl of 13 years old. His wife died after four months after the marriage. Since then, he remained a celibate throughout his life. He suffered from Hysteria for a long time. Being tired of his suffering, once he tried to commit suicide by jumping into the river Narmada, but he was saved miraculously, by the cyclone. This event inspired him and he thought that his life had a purpose. Another event of his life was a meeting with one Sadhu on the bank of Narmada river. The Sadhu told him to chant 'ॐ नमो भगवते वासुदेवाय' (Hari Home) mantra for 24 hours for a period of six months. This chanting of Mantra, practically cured his disease. These events made him great devotee and believer in god. He used to pass his time singing devotional songs and meditating at night in crematorium. Another noteworthy event of his life is the way by which he got *diksha*. Shri Yogiraj, a disciple of *guru* Keshavanandji, met Chunilal at Ahmadabad and thereafter Yogiraj took him to Nadiad, gave him *diksha* there on the Vasant Panchami.

Shri Mota is an ardent nationalist. He was sentenced to jail for a period of about two years. As a part of national duty, Shri Mota joined the Harijan Movement and served the Harijan Ashram with other constructive workers like Thakker Bapa, Indulal Yagnik. From 1921-1939, he served the Harijan Ashram of Nadiad. On 29th March, 1939, he had a vision of divine spirit at Banaras and achieved Param Pad. Thereafter, he became known as Shri Mota.

Shri Mota, being inspired by Guru Maharaj, had established 4 Hari Om Ashrams attached with place of meditation (*Mawn Mandir*) at Kumbhkonom (South India) in 1950, Nadiad (Kheda district) in 1955, Rander (Surat district) in 1958, at Naroda (Ahmadabad district) in 1961. These Ashrams are for meditation and worship. Besides this activity, Shri Mota is engaged in various social service activities with a view to build a highly disciplined society. In his own words, (*Mare samajne betho karvo chhe.*) "I want to revive the social life". Shri Mota's contribution to literature is as under :

In English—The Life's Struggle, At The Lotus Feet, To The Mind.

In Gujarati—Jivan Sangram, Harijan Santo, Hridayapokar, Karmagatha, Shraddha, Jivanzalak, Jivansmaran, Jivangeeta, Jivanparag, Jivansandesh, Jivanpathiya, Jivanpagaran, Jivanmandan, Narmadapade, etc.

MANNERS AND CUSTOMS

Hindu Customs—Important customs observed by all the Hindus are those relating to *simanta* (pregnancy), *upanayana* (thread-ceremony), *vivaha* (marriage) and death.

Birth-Simantā which corresponds to the Vedic *samskara* of *simanto-nayana* is popularly known as *agharani* or *kholobharvo* (lap-filling and is performed at the husband's house to celebrate the woman's first pregnancy. This ceremony is not as elaborately observed these days as in the past. After the *simanta* ceremony, the expectant woman generally goes to her parent's house for her first confinement. On the birth of a child, the midwife cuts its navel-cord and buries it in a corner of the compound in front of the house. On the night of the sixth day after birth, the *chhatthi puja* is performed, when *vidhata* or the goddess of Destiny writes the child's future. Generally on the twelfth, but sometimes on some other suitable day, the naming ceremony of the child takes place. The *foi* or the sister of the husband performs the naming ceremony. Names are kept according to signs of the *zodiac* for which a Brahman is consulted. On some auspicious day, usually in the third month or after a month and a quarter of the birth, the woman returns to her husband's house along with the child clothes, ornaments and a cradle presented to her by her parents.

The Upanayana or Janoi—The *upanayana* or *janoi* (sacred thread-ceremony) as it is called in Gujarati is Vedic *samskara* involving various acts, one of which is investing the *batuk* (boy) with a *yajnopavita* or *janoi* (sacred thread). For the *Dwijas*, (twice-born) the thread ceremony is an essential *samskara* (purificatory rite) which formally initiates one to *brahmacharyashrama* or the stage of student hood. Besides the Brahmans, the Lohanas and the Bhatias also consider themselves by tradition entitled to the performance of these rites.

Marriage and Morals—The Hindu *shastras* consider marriage as *samskara* or a sacrament which calls for the performance of elaborate rites and ceremonies prescribed in the *Gruhyasutras*, to enable a person to enter *grahasthashrama* or the householder's stage.

Marriage Ceremonies—When betrothal takes place, the proposal usually comes from the girl's side, social prestige, economic condition and education are mainly taken into consideration. In Patidars and Rajputs the father of the girl presents *kandora*, brass vessels, *dhoti* and saree at this time. In Bhoi sweets, coconut, *kandora* and Re. 1 are presented by the father of the girl. Sugar or *gur* is distributed among relatives and neighbours. A match is usually decided by the parents and the boy or the girl has hardly any say in it. But in Patidars, they are allowed to see each other and formal consent is taken. Engagement usually does not take place in the same village but in one of the nearby villages. The marriage ceremonies are

elaborate. Two to three days before the day of the wedding the *mandap muhurta* (erection of the marriage pandal) and the worship of Ganpati and Gotraj (family deity) take place at both the houses. On the day of marriage or on the day previous, bride's maternal uncle and his wife bring presents (*mosalu*) for the bride and her mother, consisting of panetar, her wedding saree, and ornaments especially ivory *chudo* to be worn at the time of the wedding. Similarly, the bridegroom also receives presents from his maternal uncle.

The marriage usually takes place at the bride's place. The *jan* (*barat*) or the bridegroom party starts in procession with a musical band or drummers and pipers in front with the bridegroom and women singing in the rear. If the bride belongs to another place, the further journey to the bride's village or town is completed by any convenient mode of transport such as bus, motor or railways. On their arrival at the destination a warm welcome or *samaiya* ceremony takes place to receive the *jan* party by the parents of the bride accompanied by their male relations. The party is then carried in procession to the place known as *utara*, specially reserved for their halt. Before the wedding procession starts, women of the bride's party go to the *utara* with *kalvo* consisting of *kansar* (sweet wheat preparation).

The wedding procession is usually a very grand affair. The bridegroom, who is called *varraja* receives all the attention as if he were a king for the time being. He rides a horse richly caparisoned or sits in a horse carriage or motor car. Bridegroom is welcomed at the entrance by *ponkhvun* ceremony. When the procession reaches the bride's place, the bride's mother waves four times a miniature plough, a grinding pestle and a churning stick, over the head of the bridegroom and places at the bridegroom's feet a *samput* made of two earthen cups of *kadia* painted white and tied together with a red string so that their edges touch each other. The bridegroom treads on the *samput*, breaks it to pieces, then enters the marriage booth, takes his seat in the *mahyaru*, or booth specially decorated for the occasion.

The marriage rites and ceremonies to be performed at the *vivaha* or wedding are generally the same among all the Hindus, though they may vary in some minor details according to different castes and regions. Generally a Brahman priest officiates at the marriage ceremony. In Sindhva and Bhangi, a Garoda priest officiates. The rites commonly in vogue are in order *kanya-dana*, *vivaha homa*, *panigrahana*, *lajjahoma* and *saptapadi*. These are interspersed by a number of minor ceremonies such as foot-washing, honey-sipping, rice-throwing, present making, oath-taking, etc. Brahmans and Nagars perform the *charubhaksana* or *charubhaksa* ceremony (mutual eating of cooked rice), when the couple sit in the booth called *chori* and the priest lighting the sacred fire performs a sacrifice (*havan*). The couple then feed each other with *kansar*. The bridegroom's people are then presented with cash and clothes by the bride's father. These presents are customary even among castes which do not perform *charubhaksana* ceremony. The communi-

ties which practised dowry had to pay to the bridegroom a very heavy price by way of *paheramni* (dowry). The *jan* or marriage party departs the next morning after performing *Ganesh puja*. In Rajput, on the day of marriage the father of the bridegroom gives dowry which consists of Rs. 20 in cash and four ornaments, namely, *achhoda*, *kadu*, *sankala* and *kalla*, whereas the father of the girl gives *kesar* of Rs. 51 to 200 and *bedu*, *trambankundi* and *thal*. In Bania, the *palla* of Rs. 351 is given to the bride at the time of marriage. In Bhoi, the boy's father pays Rs. 500 or 5 *tolas* of gold and silver *kallas* of about 2 lbs., as *palla* to the father of the girls. Among the Sindhvas boy's father has to pay dowry of Rs. 300 to the girl's father for meeting marriage expenses. The amount of dowry which was Rs. 500 is recently reduced to Rs. 300. In Bhangis the father of the boy has to pay Rs. 300 as *palla* to the father of the girl.

In former times, when child marriage was prevalent, the bride did not accompany the bridegroom when the party returned home. Some near relatives of the bridegroom stay behind to bring her later on any convenient day. The marriage ceremony at the bride's place ends with *kanya viday*, a farewell ceremony, both pleasant and pathetic, when the girl leaves her parents' roof to become for ever a member of the groom's family. When they reach home, the bridal couple is received ceremonially at the groom's house. They then together offer worship to the *matrukas*, *gotraj*, *Rannadevi* or any other nuptial deities installed in the household at the commencement of the marriage ceremony. The bride and bridegroom then untie *mindhal* (*randiadumetorum*) from each other's wrist, feed each other with *kansar* and play with *kodis* (shell-money). With a *vadhamana* or thanks giving at the temple of the village deity, the marriage ceremony ends.

The Hindu *shastras* ordain that a person should not marry in his own *gotraj* and within six degrees of relationship on the father's side and four or five on the mother's side. Usually, the *gotraj* of the father alone and not that of the mother is considered when a marriage alliance is contemplated. Even this restriction has been showing signs of relaxation in recent times.

Moreover, a Hindu is supposed to marry within the same caste or sub-caste as a general rule. Any marriage outside is considered contrary to the caste custom. These restrictions are gradually loosening and marriages outside the caste and sub-caste are on the increase particularly among the advanced and educated classes and also among the economically better off classes.

The Hindu scriptures enjoin that the bride be given as a gift to a suitable bridegroom. This is called *kanyadana*. In course of time, it has come to be associated with the giving of a dowry which causes acute hardship to the poor. In response to a strong agitation against the continuance of this social evil, an Act abolishing the giving or taking of dowry at the

time of marriage was passed by the Indian Parliament in 1960, and any contravention of this law is made penal.

Recent Trends—With the spread of education social legislations and high cost of living, the social out-look of the people on marriage has considerably changed in recent times. A number of undesirable social customs which were strictly observed in the past have lost their significance under the changed circumstances. The practice of child marriages, which was common in former times, has wellnigh disappeared and the age of marriage substantially advanced both in case of males and females. In the case of males, the age has gone normally beyond 20 years and in the case of females beyond 18. Child marriage has been declared unlawful by the Central legislation (the Sarda Act of 1927). Most of the restrictions which were accepted as a matter of course and scrupulously observed in the past, are being relaxed to suit the modern trends of thought and ways of living. Civil marriages, which were unknown in the past, are now-a-days on the increase. Inter-caste marriages have also started taking place among the younger generations especially in the urban areas. Bigamy is prohibited by law and made penal. Widowhood is considered a curse, but restrictions on re-marriage in certain castes continue. Divorce is now permitted under the law, but its extent among the higher castes is comparatively less and resorted to only under special circumstances in the district. In case where divorce is obtained by having recourse to a court of law under the Hindu Marriage Act of 1955, it is easier for the divorced male to remarry than the divorced female. Remarriages are, however, common among the lower castes where the custom known as *natra* is prevalent. Widow re-marriage in the form of *diyarvatu* that is to say levirate is permitted and practised among some of the lower castes, such as Rabari etc., among whom a widow of an elder brother has to marry the younger brother of the deceased husband, irrespective of the difference in their ages.

To sum up, under the pressure of social and economic development and spread of education, the caste constraints are getting gradually loosened. Marriages have begun to take place within prohibited degrees and castes. Cases of civil marriage have recently increased. Time taken by the marriage ceremonies is being curtailed, the accent being on spending more time and money on reception and ostentation. Secondly, the widow re-marriages, which were originally prevalent among the lower castes only, are on the increase among the middle and higher classes, as a result of the permissive divorce law, change in the attitude towards marriage and economic independence due to spread of education. The custom of levirate still continues among the lower castes. Thirdly, the present day youth, though not averse to accepting dowry in marriage, does not insist on the pound of flesh from his in-laws. Fourthly, as regards expenditure, the castes and classes, which have become rich under the Five Year Plans after Independence, indulge in conspicuous consumption, whereas those particularly the middle class

people, restrict expenditure on marriages as far as possible. Lastely, the marriage bonds are loosened not only by the permissive divorce law but by the girls gaining economic independence as a result of spread of education and gainful employment. By and large, the attitude towards marriage is undergoing rapid transformation in the permissive society and a tendency is developing to treat it more as a contract rather than a sacrament.

The following statement gives details about never married, married widowed and divorced persons in the district according to 1961 Census.

STATEMENT III-12

Marital Status

Marital Status 1	Total		Rural		Urban	
	Males 2	Females 3	Males 4	Females 5	Males 6	Females 7
Total Population	1,039,720	937,320	836,230	757,539	203,490	180,281
Never married*	548,371	395,176	432,711	313,010	115,660	82,166
Married	446,841	448,297	366,149	370,415	80,692	77,882
Widowed	41,401	92,203	34,757	72,454	6,644	19,749
Divorced or Sepa- rated.	3,105	2,143	2,611	1,659	494	484
Status unspecified	2	1	2	1	..	..

The figures include persons (1) Who have not reached to age of marriage and (2) Who, though attained the age of marriage, have not married for various reasons.

Source : District Census Handbook, 1961, Kaira, p. 112.

Death Ceremonies—The Hindus consider it necessary to perform certain after-death ceremonies to propitiate the dead. When a person is breathing his last, silver coin and holy water of Ganga is put into his mouth. Religious books are read near the dying person in upper classes. The relatives and neighbours assemble and a pier of bamboo is prepared and the dead body is taken to the cremation ground. Females do not go to the cremation ground but follow the funeral procession up to the corner of the street weeping and beating the breast and return home after taking bath near a well or a pond. Males wait at the cremation ground till the dead body is completely burnt. Ashes or *phul* are collected on the same or the third day. Memorial rites or *shraddha* are performed from the tenth and continued till the thirteenth day after death. On the twelfth day is performed what is called *sapindikarana* whereby the dead severs all earthly

connection and joins the *pitrū* (manes). On the thirteenth day of the *shraddha*, various utility articles in use by the departed soul are gifted to the family priest, so that the deceased may enjoy them in another world. During the first year, *masio* or *masiso* (monthly), *chhamasi* (half yearly) and *varsi* (yearly) *shraddhas* are also performed.

Muslim Customs—The chief Muslim rites and ceremonies relating to pregnancy and birth, initiation, and marriage are described below, as followed by Muslims in general and Sunnis in particular.

Birth—The first pregnancy ceremony is performed in the seventh or ninth month at the husband's house while the first delivery is usually performed at her parental home. The expectant woman goes to her father's house. On the seventh, fourteenth or twenty-first day after child birth, the Muslim rite of *akika* sacrifice is performed in two parts, namely, the shaving of child's head and the killing of one or two goats.

When the child completes four years, four months and four days, the Bismillah ceremony which consists of taking the name of god, is performed. The child is made to repeat, after the priest, the opening chapter of the Quran and the relatives are given a feast to commemorate the occasion. The *khatna* (circumcision) ceremony is performed when the boy becomes six or seven years old. There is rejoicing when a boy or girl observes the first Ramzan fast.

Marriage (Nikah)—Child marriages are not prevalent. Usual age at which marriage takes place is 20-22 years for boys and 15-18 years for girls. Generally the proposal comes from the girl's side and when betrothal is decided the girl's father comes to the boy's place and gives Rs. 5 to the boy in token of engagement. In general, a Muslim marriage ceremony lasts for two or three days. On the day of marriage, the bridegroom's relatives go to the bride's house in a procession called *bari* or *sachak* carrying in trays gifts of sweetmeats, dried fruits, ornaments and articles of dress for the bride. The party comes back with their trays refilled with clothes for the bridegroom. Sometime during the early hours of the night, the groom puts on the wedding clothes and with *sehra* (flower sheet) fastened round his forehead mounts on a horse, and starts in a procession accompanied by friends and relatives with a fanfare of musical band in front. At the bride's house, the bridegroom is led to his seat. Then the Kazi asks the bride's agent whether she accepts so and so as her husband in consideration of *meher* (dower) as decided. If she nods assent he takes the declaration of two other witnesses. He then puts the same question to the bridegroom. The *meher* or bride price varies from Rs. 200 to 500. The amount of *meher* is recorded in a document known as *doriya*. This agreed amount is not paid in cash but is payable on demand only. Similarly there is a custom of *dahej* or *dejdān* wherein different kinds of vessels, cots, mattresses, etc.,

are given to the bride by her parents. The Kazi records these proceedings and showers his blessings on the married couple. The *nikah* or wedding ceremony is followed by an entertainment programme after which the bridegroom returns home with the bride.

Marriages, between cousins, both parallel and cross, are not prohibited among the Muslims, preference being given to the first cousin. However, sister's daughter is under incest taboo. A Muslim cannot marry his foster-mother or foster-sister, unless the foster-brother and sister were nursed by the same woman at intervals widely separated. The Quran permits polygamy which allows four wives. But due to the economic pressure, it is becoming increasingly rare. A man may not marry his wife's sister during his wife's lifetime unless she has been divorced. Widow re-marriage is in vogue but is avoided by many as a mark of social superiority. A widow can marry her deceased husbands' brother or relative and a widower can marry his deceased wife's sister or relative. *Talaq* (divorce) as recognised by Mohammedan Law at the option of the husband, but among higher classes is resorted to only as a last resort, when all attempts at rapprochement fail.

Death Ceremonies—To a person about to die, the sura-e-yasin from the Quran is read out in an undertone. The creed and prayer for forgiveness are recited so that the dying person may also repeat it, and a few drops of honey or sugared water are put into his mouth. After he breathes his last, the dead body is bathed and placed in *janaja* or *coffin*. Flowers are placed on it. A *kafan* (shroud) consisting of three white pieces of cloth to which two more pieces, namely, *simaband* and *odhani* are added in the case of a female, is put on the dead body. Then the pite is lifted on the shoulders of relatives and other Muslims and borne away to the graveyard, where the last prayers are offered. Till the third day, no food is cooked in the house of mourners. But friends or relatives of the deceased send cooked meals or cook them at their expense at the house of mourners. On the third day after death, *jiyarat* ceremony is performed wherein relatives are feasted. On the 40th day *ghadi* ceremony is performed, when relatives and friends are feasted. On this day relatives visit the *kabrasthan* and offer *dhup* or *agarbatti* and put flowers on the tomb. Thereafter they visit the tomb only on religious occasions. The only form of mourning laid down by the Mohammedan Law is the strict seclusion of the widow in the case of the death of head of family. Unless forced to do so, she never leaves the house for four months and ten days. Besides this some of the customs prevalent among the Hindus are also practised. The widow breaks her bangles and never again wears them. She does not put on a nose-ring. If she is young, she wears dark coloured dress; if old, a white one.

Christian Customs

Birth—The *simant* ceremony is performed in the seventh month of the first pregnancy. The girl's parents bring ornaments, valuables, clothes,

etc., for the expectant lady. The relatives assemble and devotional songs or *bhajan*, *kirtans* are sung. There is no belief attached to this ceremony, it is performed as it is customary and traditional. The expectant lady is not permitted to take food containing heavy spices, heavy food, etc., which may affect her health. The first delivery is performed at her parents' home, and the rest are performed either at her husband's home or at her father's place. A village *dai* of the same caste usually attends the delivery. In complicated cases, a doctor is called for.

Chhathi ceremony is not performed. Naming ceremony or baptism ceremony is performed in the Church in the presence of priest. Annual birthdays are usually celebrated.

Marriage—Child marriages are not prevalent, and marriages take place only when a boy and a girl are adult. The usual age at which marriage takes place for the girls is 16-18, while for the boy it is in 18-20 years. Love marriages are rare. But in the selection of a match, choice of the boy or the girl prevails. Widow remarriages are permitted and preferred. Polygamy and polyandry are absent. Instances of separation or divorce are rare. In the case of separation the priest is called and the differences between the couple are usually settled. When marriage day is fixed the priest who is informed of it in advance announces it on three successive Sundays. The marriage ceremony takes place in the morning between 8-30 and 9-00 when relatives and friends are invited to attend. Priest performs the marriage ceremony and reads the Bible. The bridegroom wears coat, pant, tie, etc., while the face of the bride is covered under *sari*. Relatives and friends are feasted on the marriage day. The *hastamelap* takes place after taking consent of the bride and the bridegroom.

Death—The Bible is read near the dead body and when relatives and neighbours assemble, the dead body is taken to the cemetery on a bamboo gier. The dead body is placed in a pit of about four feet deep with the head facing west. A cross is put over the dead body. Females follow the funeral procession up to the street and weeping continues till the males return. No religious ceremony is performed, but the children are feasted. Bereavement or *shok* is observed for ten days during which they do not take sweets or celebrate any festive occasion.

SOCIAL EVILS

The district is free from such social evils as drinking, prostitution, etc., thanks to the enforcement of laws prohibiting them. Sporadic cases of drinking, however, do occur most of which are brought to book. The evil of gambling exists on a very small scale but is mostly confined to urban areas.

SOCIAL LIFE

Property and Inheritance

As regards inheritance and succession, the Hindus are governed by the Hindu Law and the Muslims by the Mohammadan law. The system of the Hindu law, which is followed in Gujarat is Mitakshara system in general and the Vyahara Mayukha system in particular. The main principle of inheritance is that the property of a Hindu is never held in abeyance, but devolves on the sons on the death of the father. Under the coparcenary law in force in Gujarat, the son acquires a right in the ancestral property from the date of his conception. But the self-acquired property can be disposed of by a person as he wills, as the son does not get any inherent right in such property. The disabilities in respect of inheritance and succession from which women suffered in the past have been removed by the legislature by enacting special laws like the Hindu Marriage Act, 1936, Hindu Women's Right to Property Act, 1937, and the Hindu Succession Act, 1956 which have introduced fundamental changes in the status of women.

The Hindu Marriage Act provides for monogamy and makes bigamy penal. The Hindu Succession Act while breaking violently with the past lays down uniform system of inheritance and provides for equal treatment of male and female. Another distinguishing feature of these enactments is that any property held by a Hindu female is her absolute property over which she has full powers of disposal. The former restraints and limitations have been removed by making her a full owner and not a limited heir as in the past. Male and female heirs are treated equal without any distinction. When a Hindu male dies intestate, his property devolves in equal shares on his son, daughter, widow and mother. In actual practice, however, this legal provisions do not appear to be fully implemented. The rights of women have thus been fully recognised in law by ensuring equality of rights in all fields of human activity, social, economic and political, first by granting adult suffrage and later by passing social enactments guaranteeing equality of status before the law.

Joint Family—The Hindu family is from time immemorial joint in food, worship and estate. It consists of the head of the family, his wife, their sons married and unmarried, unmarried daughters and grand children living and working together. It was the responsibility of the head of the family to marry the younger members at the proper time, offer oblations to the dead, and propitiate titular deities. The joint income of the family was spent after all the members according to individual needs. The widowed, the orphaned, the aged and the disable were duly looked after. With the passage of time the bonds of joint family system have begun to loosen and the desire for individual freedom and living has necessitated a change in the concept of the family as an economic unit. The need of getting

higher and specialised education has separated the younger members from their family for studying at high schools and colleges which are located in towns and cities. On the completion of their studies, many of them like to be settled there as villages offer no prospects of their gainful employment. With the spread of industrialisation and the increasing pressure of population on land the village people have moved to large industrial centres to secure gainful employment. A large number of joint families have thus begun to disintegrate and the old social order characterised by the joint family system has been undermined under the stress of modern economic conditions and ways of life. The individualistic tendencies are gaining ground day by day, and the former ties which bound the family together are gradually disintegrating. Younger members of the family prefer to live separate rather than continue joint and are particular about their own needs and comforts in preference to those of other members of the family. Despite these changes, the joint family system still survives though in a diluted form without the former attachment brought about by the spirit of sacrifice and regard for common welfare.

Place of Women in Society—Women occupied a high position in the Hindu society since the ancient times. Lord Manu had declared that gods reside in those households where women are respected (यत्र नार्यस्तु पूज्यन्ते रमन्ते तत्र देवताः) The husband who cast off his innocent wife was punished by the king and vice versa. The wife, likewise, was supposed to worship her husband as god (पतिं देवो भव ।) and to remain faithful to him. The status of women, however, declined after the Mohammadan invasions when seclusion or *pardah* came into vogue as a measure of safety and protection of females. The practice continued there after, particularly among the Rajput chiefs, and the Zamindars as a mark of social status. Their womenfolk remained confined to the four walls of their houses. The seclusion was stricter in villages than in towns, and greater among the Muslims than among the Hindus. But things have changed much in modern times and the former seclusion of women has well-nigh disappeared.

During the second half of the present century, the desire for a rise in the level of living and soaring prices have created problems, unknown in the past. For the most part, it is men, who are engaged in economic activities though in rural areas among the cultivating classes, women give helping hand to their male partners in rearing cattle, looking after crops and assisting them in agricultural operations. It was only in towns that women were completely dependent on men and did not take part in any economic activity. At present, in the urban areas with the spread of education, women have come to their homes for employment in social and economic spheres. Women of the labouring classes have always taken an active part along with males by getting themselves employed in occupations involving manual labour.

HOME LIFE

Housing

In the district, according to the 1971 Census, the total number of houses were 615,880 of which 443,145 (71.95 per cent) were used as residence, shop-cum-residence and workshop-cum-residence, 77,985 (12.66 per cent) were vacant and the rest 100,750 (16.36 per cent) were used for non-residential purposes. Of the total houses, 78.26 per cent of the houses were in rural areas and 21.74 per cent in urban areas. Taking the district as a whole, on an average, out of every thousand census houses, 127 were vacant as against 873 which were occupied.

82.79 per cent of the households lived in owned houses and the rest in rented houses. The proportion of owned houses was comparatively less in towns than that in villages. In urban areas 51.41 per cent of the households lived in their own houses, in rural areas the percentage was as high as 90.87.

Housing facilities in the district appear to be on the whole inadequate. 20 per cent sample housing census conducted during 1971 disclosed that as many as 47.83 per cent of the total sample households in the district lived in single room houses, 34.16 per cent in houses with two rooms and 18.01 per cent in houses with more than two rooms. In comparison to the most of the other districts of the State, the congestion appears to be less in the Kheda district. This will be evident from the fact that as per 1971 Census the State average of persons per room was 3.53 while that for the Kheda district it was only 2.92.

Most of the houses in villages had walls of mud or burnt bricks plastered with clay and cowdung emulsion, though grass, leaves, reeds (wattle and daub) or bamboo were in frequent use in the construction of hutments of those who were poor. According to the Census of 1971, as many as 58.13 per cent of houses in rural areas of the district were built of mud walls and 38.12 per cent of houses were built of burnt bricks. 1.78 per cent of houses had walls of grass, leaves, reeds or bamboos. As regards roofing material, 59.88 per cent of the dwelling had tiled roofs, 33.78 per cent had roofs of corrugated iron, zinc or other metal sheets and 3.55 per cent had concrete, R. B. C./R. C. C. roofs and the rest had roofs of grass, leaves, reeds or bamboos and stone slabs or iron or cement sheets. The roofs were mostly covered with *deshi* or country tiles, though the preference for *vilayati* or Manglore tiles is now-a-days patent in many villages. The flooring in a majority of village houses was of beaten earth covered with cowdung emulsion which is believed to possess certain antiseptic properties. Stone and cement tiles are used in houses of the well-to-do people.

In urban areas, 82.61 and 9.19 per cent of the houses had walls built with burnt bricks and mud respectively. While 3.68 and 1.56 per cent of the houses had wood-walls and walls built with unburnt bricks respectively and 1.32 per cent of houses had walls of grass, leaves, reeds or bamboos. The use of tiles as roofing material was found to be comparatively less in urban areas than in villages. 57.64 per cent of the dwellings in urban areas had roofs of corrugated iron-zinc or other metal sheets, 19.39 per cent had concrete, R. B. C./R. C. C. roofs, 13.04 per cent had tiled roofs, 3.70 per cent had stone slabs, 3.01 per cent had roofs of asbestos and cement sheets and 2.41 per cent had grass, leaves, reeds and thatch wood or bamboos as roofing materials.¹

Layout of Towns and Villages

Towns—The general layout of large-sized villages and towns in this district appears to be essentially the same. The traditional structure of wards according to the castes or occupations still exists. As in the case of the villages, towns are also situated either on the sea-coast or on the river or some elevated grounds or in a hilly tract. For example, **Khambhat** is situated at the head of the gulf named after it, **Dakor** and **Thamna** are situated on the river **Shedhi**, **Kapadvanj** and **Kathlal** are situated on the river **Mahor**, **Matar** and **Mahemadabad** are situated nearly or on the bank of the river **Vatrak**, **Vasad** is situated on the bank of the river **Mahi** or **Mahisagar** over which bridges for the railway and national highway have been constructed, while the village **Shili** of the **Anand** taluka is situated on the fringe of the ravines of the river **Mahi**, **Lasundra** is situated on the river **Luni**, and **Virpur** or **Birpur** in **Vadasinor** taluka is a small town standing on the river **Bavli**. **Kaira** or **Kheda**, the headquarters of **Kheda** district stands on a rising ground near the confluence of the **Vatrak** and **Shedhi** rivers. **Vadasinor** is situated in a hilly tract with the river **Shedhi** flowing about 7 km. away. Most of the towns were in the past, capitals of the Princely States or British taluka headquarters or the seat of some estate-holder and generally they were protected by forts. The towns of **Kheda**, **Mahemadabad**, **Attarsuba**, **Vadasinor**, **Borsad**, **Umreth** and **Khambhat** are still surrounded by walls with gates in ruined condition. In towns, the main roads passing across the central area branches off into minor roads leading to the residential area distributed according to the functional characteristics of castes

1. Statement III. 14 showing Census houses and the uses to which they are put, Statement III. 15 Distribution of Census houses by predominant material of wall and predominant material of roof, Statement III. 16. Households classified by number of members and by number of rooms occupied extracted from the Housing Tables published in the :

(i) Census of India 1961, Gujarat Vol. V, Part-IV-B, *Housing and Establishment Tables*.

(ii) Census of India 1971, Gujarat, Series 5, Part IV A & B, *Housing Report, Housing Tables and Subsidiary Tables* are reproduced at the end of this chapter.

viz., Bhatt Vado, Patel Vado, Brahman Vado, Vaniavad, Ghachivad, Vaghri-vad, Rabarivad, Sonivad, Suthar Vado, Kadia Pole, Mochivad, Vohorvad, etc. Some of the residential areas are known by the prominent persons of the caste, such as Ratanjini Kahdki, Bhula Thakarni Pole, etc. Some of the lanes are named after the temples, gods and goddesses situated in town, viz., Hanumanni Pole, Krushna Pole, Bahucharajini Pole, Bhawani Pado, etc., Recently, the name of the new streets in the towns are so often associated with the names of social and political leaders. Generally in every town, there is a central place known as chowk with public place called town hall and Municipal hall or Panchayat House which serves as a meeting place for elderly persons or a public forum where the common problems are discussed. Though traditional pattern in the construction of the building is very common, the new and modern trends in construction work are also found in towns like Nadiad, Anand, Kapadvanj, Dakor, etc. in the district.

Villages—As regards small sized villages, the old pattern remains generally unchanged. Generally, the villages in this district are situated where the natural resources are available for habitation such as water-supply and cultivable land.

In general, every village has localities earmarked for different caste or occupational groups. They follow the traditional functions. In a good number of villages, there is a central place known as chowk with public place called *chora* or a panchayat house which serves as a meeting place for elderly persons or a public forum where the common village problems are discussed. Close to the village gate, and often outside, is what is known as Harijanvas, where the Scheduled Caste people reside in their mud-walled hutments.

The houses of the higher classes are generally in the centre of the village followed by those of artisan and service classes (the Vasvayas). The integrated lay out of the houses also varies according to the castes. The houses of traders or artisans are usually shop-cum-dwellings or workshop-cum-dwellings. A Brahman's house is usually provided with a separate kitchen and water-room with a corner reserved for worship of the household deity. The houses of the backward classes are mostly single room tenements with a verandah in front. With the increasing efforts now made by Government to improve the living conditions of the backward classes their newly constructed houses are much better planned and provided with greater amenities. A majority of the houses in villages in this district are found to be one room tenements with a *parsal* or *osary* in front. Dwellings with more than one room are mostly found to be occupied by higher and well-to-do classes. Most of the houses have an open courtyard in front or at the back enclosed by a wall where the agriculturists keep their cattle and the village artisans ply their traditional profession.

Separate rooms for storage, living or sleeping are unknown in such dwellings, though separate kitchens are sometimes provided. Formerly, ventilation and sanitation are deliberately kept inadequate because of the fear of thefts and house-breaking. To them, the main use of the house was safety and protection of their scanty belongings and cattle against adverse climatic conditions, wild animals and thieves. But after Independence, the situation has changed and therefore, new structures which have been built provide adequate ventilation facilities. Air and light are provided to a far greater extent than in the past as evidenced by keeping of more windows or ventilators in the walls. In the houses in villages, windows and ventilations are generally kept at a minimum. With the improvement in economic conditions under the Five Year Plans in the rural areas, mud-walls are being gradually replaced by walls of burnt bricks, and the country tiles by the Manglore tiles and corrugated iron sheets. The desire on the part of village people for a better living has made them to construct modern houses. This is evidenced from the new airy and specious structures which are coming up in the rural areas. This trend thus indicates significant changes in the level of living brought about by improvement of economic conditions in the countryside.

Furniture and Decoration—The types of furniture used and decorations made in the household in a way reveal the status, the economic condition and the cultural background of the householders. It is an essential item for comfortable living. In urban households, various types of furniture are usually found. A rich family residing in a spacious residence with separate bed-rooms and drawing-rooms usually has a sofa-set, a few chairs, teapots, dining and study tables, bedsteads and other items of furniture made of wood. A radio-set, wooden or steel cup-boards and decorative mirrors, attractive wall-clocks, etc., are other common items of a well-to-do family. An ordinary educated middle class family too has some pieces of furniture on a moderate scale. Others are satisfied with a simple cot, a chair or two of ordinary type. *Hinchko* or a swing seems to be favourite with all classes of people. The one used by the poorer classes is cheaper because it is made of simple wooden planks.

People in villages are not furniture-oriented. A well-to-do cultivator uses cots or a few chairs, a *pat* or swing, a mirror, a simple wall-clock and a wooden cup-board or a *patara* to store his valuables. Houses of well-to-do families in urban areas are decorated with curtains, flower-pots, table lamps, pictures and delicate pieces of wood-work. The ordinary family generally has a picture or two or a calendar on the wall for decoration. In an orthodox household (both in cities and villages), doorways are decorated with *torans* made of glass beads. The *chaklas* or square pieces of cloth beautifully-embroidered in traditional designs or worked in bead are the popular mode of wall decoration. In the houses walls are also decorated with pictures of gods and goddesses.

FOOD, DRESS AND ORNAMENTS

Food

The caste Hindus are vegetarian in this district. They normally take two meals a day, but those doing physical work including labourers in urban areas, agriculturists, field workers and village artisans in rural areas take three meals a day, the breakfast in the morning between six-thirty and seven, the full meal in the noon between twelve and one, and supper at night after seven or eight. The Jains are only exceptions to this rule because their religious precepts enjoin them to finish their evening meals before sunset.

The food taken by the people in the rural areas is very simple consisting of two or three items per meal. It is mostly confined to *rotla* or loaf of *bajri* with milk or curd or *chhas* (buttermilk). Onion and chillies are popular and common supporting items of food. They are taken with some vegetables or pulses. Rice and dal do not find a place in their daily meals, partly because they cannot afford them and partly they do not need or relish them daily. Only on some special occasions do they have rice, curry, vegetable or some sweet. Otherwise it is the buttermilk which serves the purpose along with *rotla* or *khichadi*, which is also a popular item of food. It is generally taken in the evening. Many people take boiled grains known as *bhadkun* or *ghensh* with *rotla* or bread. On festive or marriage occasions, the village people prefer such items like sweet balls *churma*, *shira-puri*, *lapsi*, *dudhpak* or *khir* and *shrikhand*. The morning meal of ordinary urbanite usually consists of *rotla* or *rotli*, rice, *dal* or curry and vegetable or *kathol* or pulse. The well-to-do have such ancillary items as *kachumbar* (salad) chutneys, pickles, and one or two vegetables. The evening meals are comparatively simple and usually consist of *bhakhari*, milk and vegetable. The use of *dal* and *bhat* is generally dispensed in supper though a few among the well-to-do repeat it also at night. The Rajputs, Baraiyas, Thakors, Vaghri, Dheds Bhangis, Vankars, Chamars, Bhils and Kolis take non-vegetarian items like eggs, chickens, hens, fish and flesh of birds and animals. During the last fifty years, the use of tea has become universal among all classes of people, and is taken twice or thrice a day, morning, afternoon and evening. A few persons have developed a preference for coffee.

Dress

The type of dress varies according to sex, age, marital status, caste and economic condition. The commonest type of dress worn by males in rural areas consists of *dhoti* or *pyjama* covering the lower part of the body, *khamis* or *kafni* or *paheeran* covering the upper part of the body. Most of the people especially agriculturists still continue to put on the typical head dress, a thickly folded, *phento* or turban or *faliyun*. Before the appear-

ance of Mahatma Gandhi on the political scene, the turban or cap was the only headwear. After the arrival of Gandhiji, the white cap made of *khaddar* has become the commonest mode of headwear both in villages and towns. Some old people among the Patidars, the Baniyas and the Brahmins and the Vanjharas, the Bharwads and the Vaghri put on *pagdi* or turban. Persons belonging to the Patidar, the Lohana, the Jain Bania, and the Brahmin castes, generally put on a white cap, but the agriculturists belonging to the Patidar, the Baniya, the Rajput, the Vaghri and the Rabari castes put on a *faliya* or piece of cloth wrapped as a head-dress. The upper garment in case of the adult and the aged male has sartorial varieties according to the caste which vary from *paheeran*, *kediya*, *bandi*, put on by persons belonging to the Bharwad and Koli castes. While shirt, bush-shirt, coat and *bandi*, prepared from mill made cloth are put on by persons belonging to Brahmin, Patidar, Bania, Lohana and Rajput castes. Similar gradations are also noticed in the case of lower garments of adult and aged males. *Dhoti* trousers or *lengho*, pant are put on in the case of Brahmin, Patidar, Bania and Lohana castes, while *surwal* or *pyjama* is put on in the Rajput, Bharwad and Vanjhara castes. The Bharwads keep long bamboo sticks in hand with iron rings known as *kadiyali dang* so useful to them for herding cattle. The upper garment in the case of adult and aged females consists of *sadla* and *kapdu* or *polku* which are generally put on by females of all castes except females from Bharwad caste. The *sadla* or *sari* put on by females of different castes measures 5 yards and varies from coarse variety to cloth of finer counts with different colours and designs. The lower garment in case of females attending to agricultural work consists of *ghaghara* of dark coloured design having a wider circumference and prepared from 4 to 5 yards of cloth, as it is convenient and suitable to their field and household chores. They also put on a *choli* or *polku* (blouse) or *kapdu* along with *sari* or *odhani* (mini sari), a coloured piece of coarse cloth covering the body and the head. The widow as a sign of mourning always put on black coloured *sadla* or *kapdu* in both rural and urban areas. Bharwad women prefer woollen dress of raw wool is readily available from their own flocks. The petticoat of a Bharwad woman is generally not sewn. It is a long woollen or cotton piece wrapped loose around waist, known as *jimi* which is usually of red or black colour. Another peculiarity of the dress put on by Bharwad females is *shisadhari* or *abhlabharat*, which consists of cloth embroidered with pieces of mirrors strewn on the *ghaghara* and blouse.

Elderly males of higher castes put on *dhoti* (waist cloth), a *kafni* or *paheeran* (shirt) or a robe and *safo* (turban) and *topi* (cap), while the younger folk have taken to trousers or *pyjamas* or pants with shirts or bush-shirts. They have practically discarded the headwear. A male child belonging to Brahmin, Patidar, Bania and Lohana puts on *Sadra*, underwear, shirt, bush-shirt, *kediya*, *chaddi*, pant and *lengha* or *surwal* while the dress of a male child belonging to Bharwad caste comprises of *kadiya*, *paheeran*,

bandi and *chorni*. In the case of female children there is no diversity of trait in dress according to caste, as it consists of *zabhla*, *chaddi* in the case of very small children and *ghaghari*, *polku* and *odhani* in the case of young girls of 12 to 15 years age.

As far as the urban areas are concerned, there is no remarkable difference in the dress put on by the people in the district from those in other parts of the State. The traditional type of dress consisting of an *angarkhu* (coat), *jumo* (long robe or vest), *dupatta* or *khes* (shoulder cloth) are no longer in use by the urbanites, who now wear *dhotar* or pant, shirt, underwear, coat or waist coat or *paheeran*. The women folk generally put on *sari* along with blouse and petticoat. The youngsters have commonly adopted shirts or bush-shirts and pants. The head-dress of any kind has gone almost out of fashion among the younger generation and some of the older people except the social workers and merchants. They go bare-headed. To some extent, the turban is replaced by white cap among the higher class people. Women wear cotton saris of finer variety, petticoats and blouse in preference to the older type of bodice which has been given up now. Girls have taken to frocks and shirts and the Punjabi dress. The style of dress of young boys and girls is much affected by sartorial styles of the cinema actors and actresses. Among the Muslims, the males put on *khamis*, *paheeran* or *shervani* or coat to cover the upper part of the body while *lungi*, *lengho* or pant cover the lower part of the body. Their women put on *sari*, *blouse*, *bodice*, *chaniyo*, *chori*, *ijar* or frock and kurta. Their boys put on *khamis*, *chaddi*, *lengho*, pant and *surwal* while the girls put on frock, *pyjamo*, *odhani* and *ijar*. The *chappals* on account of cheapness have become a favourite foot-wear for men, women and children. Shoes put on by the villagers are known as *khalspuri* shoes. They are prepared from buffalo skin. The shoes of the Bharwads are of a peculiar shape and are made from untanned hard country leather when they walk, the shoes create some sound. Majority of the villagers move bare-footed.

During the last three decades, the dress styles have undergone a tremendous change. The change in the pattern of dress is the result of many factors. The earlier factor which was responsible for the change in dress of the people, was the starting of the swadeshi movement by Mahatma Ghandhiji who stressed simplicity in dress and use of *khaddar* by the people of all strata of society. As a result, even the more sophisticated classes of society discarded mostly foreign cloth and some made the bonfire and readily resorted to simple clothing made of *khadi*, which had become an emblem of nationalism. The shortage of cloth during World War II, which continued in the post-war period was one of the other reasons for the change.

Ornaments

To decorate and enhance beauty and forms, ornaments are used both by males and females from time immemorial. Used mainly for

emphasizing one's outward appearance, ornaments have undergone changes from time to time according to the prevailing fashion. They also differ from community to community. The change is effected not only in their style or design but also in their size, shape, weight and contents. While the ornaments used in the past were generally simple, but were solid and heavy. Those in vogue at present are much lighter, refined and sophisticated in design. There is a tendency to use more and more light silver ornaments in preference to heavy gold ornaments due to the high price of gold and as a measure of economy. In the past, ornaments used to serve both as decoration and investment and insurance against economic difficulties.

In the past, there were certain ornaments which were commonly used by both males and females. Those included *kanthi* or *doro* worn round the neck, a *kandora* worn round the waist and a gold or silver *vinti* (ring) worn on one or more fingers. With the passage of time, men in general have ceased using these ornaments except the ring, which is now the only common ornament used by males and females both in rural and urban areas. Due to the influence of the cinema films, the silver *kandora* has now staged a come-back and ladies have begun to wear it on auspicious occasions.

Female Ornaments—Ornaments in regular use by women in rural areas are either of silver or alloy or of ivory, though gold ornaments are no less popular with those who can afford them. These include *chhada*, *sankala*, *kalla* and *zanzar* worn on the feet, *bangadi* or bangles, *patla*, *vank*, *kangan*, *chuda*, or *ponchi* on the wrist; *kadu*, locket, etc., on the arm and *hansadi*, necklace, *achhoda* or *bormala* around the neck. *Marchi*, *butti*, *kap*, *loriya* or *ful* decorate the ear and *chuni*, *vali* or *ravo* decorate the nose. The women of Bania, Patidar and Brahman caste put on ornaments viz., *chhada*, *sankala*, *kada*, and *zanzar* on the feet; *patla*, *ponchi* or bangles on the wrist; *kadu* or locket on the arm; *hansadi*, necklace, *achhoda*, *bormala* and *doro* around the neck, *kap*, *kadi* or earrings on ear and *chuni* or *vali* in the nose. Among the Rajputs, their women put on *chhada*, *sankala*, *zanzar* or *kalla* on the feet; *bangadi* or bangles on the wrist, *kadu* on the arm, *hansadi* around the neck; *marchi* on ear and *kandoro* on waist. The Christian women put on *chhada*, *sankala* or *zanzar* on the feet; bangles or *patla* on the wrist; *kadu*, locket on the arm, *hansadi*, *achhoda* or *bormala* around the neck; earring on ear and *vali* or *chuni* in the nose. The common ornaments put on by the Bharwad and Rabari women are *zanzar*, *chuda*, *balaiya*, *chudis*, *kanthlo* and *hansadi*, while the Baraiya women put on bangles, *hansadi* and *kadu*. The Muslim women put on *chhada*, *sankala* or *zanzar* on the feet; bangles or *patla* on the wrist; *kadu* or locket on the arm, necklace, *doro* or *bormala* around the neck; *kap* or *kadi* or earring on ear and *vali* or *chuni* in nose. The ring is also a common and popular ornament among many village women.

Fashions in women's ornaments in urban areas are changing rapidly. They are much influenced by the size and shape of ornaments used by the

film actresses. A general tendency appears to avoid heavy ornaments in preference to finer and lighter ones on account of their tender health. Jewellery is worn by those who can afford it. In general, women in urban areas deck their ears with attractive earrings or *butti* made of gold or pearls or precious stones set in gold. Round their neck, they put on a gold necklace or a light golden chain with a pendant attached in the middle or a *mangal sutra*, if married. Thick golden necklace known as *hansadi* is put on at special occasions. *Nath*, or *chunk* in the nose which had gone out of fashion during the last decade, has now staged a come-back. As a result, even a small school-going girl is seen wearing a *chuni* now-a-days. Bangles of gold glass or plastic are the most common ornaments used by women. Gold rings of simple design or set with precious or imitation stones are also popular. Large sized stones are preferred in the rings. There is a growing tendency to imitate the hair-styles or coiffure of film actresses and also because of improved means of communication, influences of regional and international fashions are also felt. Many girls and women use hair-pins, ribbons and rings to fix up their hair in different styles. Silver *zanjar* or *sankala* worn on the anklets are used by many. A wrist watch is a recent addition and is gradually becoming popular among the younger generation.

Male Ornaments—The males in rural areas, particularly agriculturists, adorn their ears with *butiya* or *marchi* made of gold or silver, a chain or *har* in the neck made of gold or silver, a gold or silver ring on their finger and silver *kada* on the arm. They also use a gold or silver chain on buttons on their upper garments. The ornaments worn by males among the Patidar, Bania and Brahman are a chain or *doro* around the neck, a ring or two on the fingers and buttons. The Rajput males put on a ring on finger, a *kandoro* on waist, *marchi*, on ears and *kalla* on feet. The Christian males put on a ring on a finger, a *kandoro* on waist and *marchi* or *kadi* on ears. The Bharwads put on *kanthi* around the neck, *kandoro* on the waist and *tholiya* on ears. The Baraiyas put on *marchi* on ears and a *kanthi* around the neck. The Muslims put on a ring on a finger.

Ring is the most common ornament in the urban areas. A wrist-watch is a recent addition which is highly popular not only in towns but also in villages. Those who can afford put on jewelled rings. A few persons put on *kanthi* or gold chain round their necks.

Ornaments for children—Ornaments for children among all castes are light in weight and simple in design. The bangles are the most common ornament for girls both in rural and urban areas. The practice of wearing simple earrings (either of gold or rolled gold) and silver *zanjar* or *kada* on anklets is common. While the boys put on *ponchis* on the wrists, a ring on the finger, *doro* (chain) round the neck and silver *kandoro* on waist. Among the Bharwads, the girls wear silver *zanjari* and silver rings, while

the boys put on silver *toda* or anklet. For boys, the popular ornament in village is *madaliyu* or *dokiyu*, while in urban areas, they do not generally use any ornament.

COMMUNAL LIFE

The Garba and Ras

Folk-dance called *garba* or *rasda* is very interesting and important form of cultural activity. Its origin can be traced to the religious celebrations of the people. It forms now a part of cultural programme in social functions as a form of recreation and merriment. *Garba* and *ras* are generally performed both by men and women especially during the Navratri festival (The first nine days of the Hindu month of Ashvin) and are the commonest form of celebrations in Gujarat. *Garbi*, is generally played by males and is more vigorous and quicker in rhythm as compared with the *garba*, which is played by women.

Bhavai

Bhavai is another traditional mode of entertainment. It is a folk-drama performed at night, and having as its themes, some religious or social anecdotes which are didactic and entertaining.

Ram-lila

A type of folk-drama, it depicts the life of Lord Rama, and is played in the villages. It gives entertainment with religious teachings and substituted the theatre, when there was no organised theatre in villages. The *bhavai* provided good diversion to village-folk. Its usefulness still lies in its spontaneity, its folk-lore and entertainment to the villager who easily follow and enjoy it. It brings entertainment cheaply to their door-steps. After Independence, efforts are, therefore, being made to revive the folk-art, *bhavai*, by the State as a form of popular entertainment. The *bhavai* is one of the important items in annual drama festival organised by the Gujarat State.

Public Games and Recreation

Public games provide one of the ways in which people like to pass their leisure time. It is a past-time and helps build up some of the good traits of character such as spirit of co-operation, discipline and well-balanced physique. It aims at creating community consciousness and enthusiasm amongst people with pleasure. The people play a number of indigenous outdoor games such as *hu-tu-tu* (*kabaddi*), *kho-kho*, *langadi*, *gedi-dada*,

atapata, *chor-police*, *sat-tali*, etc., which develop strength, ability and endurance. They are still played both in towns and villages but not with the same interest as in the past. At the same time, games like *gedi-dada*, *atapata*, *chor-police*, etc., have practically disappeared in urban areas and their place has been taken up by the western games such as cricket, basket-ball, foot-ball, volley-ball, table-tennis, badminton, hockey, etc. Facilities for playing modern games are provided in schools, colleges, sports clubs and gymnasias. When the taluka and district sports are held, a large number of young boys and girls participate in the games very enthusiastically. As an indoor game, the carrom has gained popularity among the youngsters. Playing cards is a favourite past-time with adults. In rural areas generally, the Indian games are favoured because of their cheapness.

The elderly people among the higher and middle classes in the towns prefer to go to clubs and gymkhanas in the evening, whereas the younger people studying in high schools and colleges have their own sports clubs and associations. At sports clubs, the games usually played by the adults are the table-tennis, carrom and the badminton. The district has a number of sports clubs and recreation centres such as the Rotary Club, the Junior Chamber, the Lions Club, etc. But for a majority of people who have hardly time and money to spend after such clubs and also have little interest in them, an occasional visit to the cinema theatre is the only form of common entertainment. There are 70 cinema theatres in the district of which 34 are touring cinemas. Old men and women and some of the adults rest content with visiting some temples or *ashrams* either to hear *katha*, *kirtan*, *bhajan* or religious discourses or have *darshan* of the deity.

For the adults, *bhajan mandalis* and *ras mandalis* provide rest and recreation at night, when males assemble at the village *chora* or any public place in the village they pass their time in singing devotional songs, *bhajans* and *kirtans*. The *garbas* are organised by the *mahila mandals* for the young ladies; while the small girls play the game of *kuka* or *kodio*. The tribal people revel in folk-dances, when they find themselves free from manual work. Community Development Programme for the tribal and rural welfare has sustained and revived the old traditional forms of entertainment which are still popular with the people at large. New centres of activities are the youth clubs and the *mahila mandals* which provide the younger generation with entertainment coupled with constructive activities connected with rural welfare.

CALENDAR

The Hindu Calendar

According to the Indian tradition, significant activities, celebrations of festivals and auspicious days are associated closely with the different

systems of time-reckoning or the Calendars in vogue in different parts of the country. The various systems of time-reckoning which regulate the celebration of festivals in the district even to this day are the Vikram era and the Hijri era.

The people in general in this district follow the Vikram Samvat (era) which precedes the Christian era by fifty-six years. The year begins with the month of Kartik and is divided into three seasons, namely, the winter consisting of the months of Kartik, Margashirsh, Paush and Magha, the summer extending over the months of Phalgun, Chaitra, Vaishakha and Jyeshtha and the monsoon over the months of Ashadh, Shravan, Bhadrapad and Ashvin. Each month is divided into two fortnights, the *shukla paksha*, the bright fortnight, when the moon is waxing and the *krishna paksha*, the dark fortnight, when the moon is waning. Dates are reckoned by the day of the fortnight of each month.

The Jain Calendar

Jain for the observance of their religious practices and events specially follow Vir (*nirvan*) Samvatsara which commenced in 527 B. C. from the day when Mahavir, the last of the twenty-four Jain Tirthankars, attained *nirvan*.

The Muslim Calendar

The Muslims in the district follow the Vikram era for accounting and commercial purposes. For their religious and social purposes, they, however, follow the Hijri era. The Hijri era is Arabic in origin. It came into being from 15th July, 622 A. D., in the 42nd year of the life of prophet Mohammed to commemorate his migration (*hijrat*) from Mecca to Madina. A year according to this era is divided into the following twelve months :

1. Muharram, 2. Safar, 3. Rabi-ul-Awwal, 4. Rabi-us-Sani, 5. Jamadi-ul-Awwal, 6. Jamadi-us-Sani, 7. Rajab, 8. Shaaban, 9. Ramzan, 10. Shawwal, 11. Zilqaad, 12. Zilhijja.

FESTIVALS

Festivals as they are celebrated in this country symbolise people's cultural, social and religious aspirations which, besides, helping them to lead a fuller and better life, also mitigate its monotony by providing physical diversion and mental recreation. Though principally associated with religion, there are a number of occasions wherein the social aspect assumes prominence. In fact, festivals are special days, periods of time and season, which are so designed as to ensure individual joy by practising religion coupled with social joy and domestic happiness. They are primarily connected with religious days and agricultural operations.

The Hindu Festivals

The Hindus have a number of festivals all the year round. The principal festivals which are observed by almost all castes and classes in the district include the Diwali and the New Year's Day, the Makara Sankranti, the Holi, the Balev, the Navratri and the Dassera, besides the Mahashivratri, the Ram Navami and the Janmashtami, which are mainly observed by the followers of the respective sects. There are a number of other festivals such as the Bhai-Bij, the Dev Diwali, the Vasant Panchami, the Nag Panchami, the Rushi Panchami, the Shitla Satam, the Ganesh Chaturthi, etc., which are also popular in the district. The Akhatrij or Akshya Trutiya falling on Vaishakh Sud 3 and the Bhadarvi Amas occurring on the *amavasya* of shravan have special significance for agriculturists. The Akhatrij is considered auspicious for commencing agricultural operations. The agriculturists perform certain rites before their bullocks and implements and apply *kumkum* and adorn them with flowers. On Bhadarvi Amas, which is considered to be the holiest among *amavasyas*, the farmers worship their bullocks and feed them.

To devout Hindus, every *ekadashi* is a sacred festival to be celebrated by observing fast and performing *kirtan*. Of all the *ekadashis*, those falling on Kartik Sud 11 (Dev-Uthi or Prabodhini Ekadashi) and Jyeshtha Sud 11 (Dev-Podhi Ekadashi) are specially sacred. There are certain religious festivals, which have special significance for ladies. These includes Aluna Vrata, during the month of Chaitra, when women take *aluna* or saltless diet the Vat-Savitri Purnima (Jyeshtha Sud 15) when married women worship a banyan tree and keep awake the whole night for nuptial bliss and long life for their husbands, the Gauri Vrata or Jaya-Parvati Vrata observed for five days from Ashadh Sud 11 to 15, both by married women and unmarried girls in dedication to the worship of goddess Gauri or Parvati, and Divaso (falling on the last day of Ashadh), when the Hindu women observed fast and keep awake the whole night to please goddess Parvati for marital bliss. The Randhan Chhath (Sharvan Vad 6) is an important day for ladies, which is devoted to cooking food for the day following sacred to the Shitla Mata. As the goddess Shitla is supposed to move about among the hearths, artificial heat by kindling the fire in the oven or hearth is, therefore, eschewed on that day for fear of annoying the goddess. In the morning of Shitla Satam, the lady of the house worships the goddess under a pipal tree (*ficus religiosa*) whereafter the food cooked on the previous day is taken by the members of the household. Some of the festivals which are important and popular in the district are described below in brief.

The Diwali—Of all the numerous festivals celebrated in the district, the most important and most popular among the people is the Diwali, appropriately known as the festival of lamps. It is both the climax and commencement of the yearly cycle of festivals, marking the close of the old

year and ushering of the new year. Its celebration is therefore, spread over six consecutive days starting from Ashvin Vad 12, (Vagh Barash) and extending upto Kartik Sud 5 (Labh Pancham).

On the Vagh Barash, also known as Govatsa, Dwadashi, a cow with a calf is worshipped in the evening on its return from grazing and fed with a preparation of *udid*. The Dhan Terash is dedicated to the worship of Laxmi, goddess of wealth. In rural areas, cows are adorned their horns and hoofs are painted and their necks decorated with necklace of bronze bells. The Kali Chaudash also known as Narak Chaturdasi is dedicated to goddess Mahakali. It derives its name from the demon king Narakasur, who was killed on this day. The day is also important for the worship of Hanuman, who killed the demons Ahi Ravan and Mahi Ravan on this day and was, therefore, offered oil and red lead by Ram and Lakshman. Diwali is celebrated by all Hindu on *amavasya* of Ashvin. The day is very important to merchants, who close their annual accounts on this day, and open new account books with a traditional ceremony of Lakshmi and Sharda. This ceremony is called *chopda puja* or *vahi puja* (worship of accounts-books). During the Diwali festival, houses are decorated and made clean and tidy. Lamps (*dipmalas*) are lighted in every house, *rangoli* and *sathiya* designs are drawn near the entrance doors and crackers are fired at night.

The New Year Day is the most important day of the year for the Hindus. They get up unusually very early in the morning. After bath and worship of the household deity, people visit temples and then go to pay respects to their elders and exchange greetings of the New Year with relatives and friends. At every house, dishes of sweet preparations are offered to the visitors. Salt or *sabras* which is the essence of all tastes, is the first thing bought in the morning as an auspicious representing the zest of life. Diwali is also a harvest festival coming at the end of *kharif* season. On the New Year Day, the *annakuta* (offering of all possible varieties of food, sweets fruits and vegetables prepared from fresh arrivals) is arranged for propitiating the gods.

The day following the New Year Day is known as Bhai Bij and is dedicated to the ideal love between brother and sister. Every Hindu house wife invites her brother to her house on this day and feasts him. The brother in return gives her present in cash or in the form of some article of her liking.

The Makar Sankranti—The day on which the Sun enters the orbit of Makara (Capricorn) is called Makara Sankranti. On this day, cows are worshipped in the morning and fed with boiled *bajri* or *jowar* known as *ghughri* or *tethawa*. Food-grains are distributed to the poor and needy. The day has a special significance to the agriculturists, as by Makar Sankranti, the *kharif* crops are harvested and brought home. These are shared with others, as gift of grain is belived to earn great religious merit on this day. Grass is freely distributed to the village cattle. The young and old indulge in their favourite past-time of kite-flying.

The Holi or Hutashani—The Holi or Hutashani is celebrated as a festival of the spring by the young and the old alike. It is an ancient festival held at a time when the *rabi* crops like wheat, gram, cotton, til, etc. are harvested and brought to the market. The Holi fire is lighted at night at every village and in every part of the town or city and worshipped by all, the day after Holi is known as Dhuleti, celebrated by spraying colours and indulging in fun and revelry.

The Balev or the Coconut Day—On Shravan Sud 15, four distinct religious ceremonies, namely (1) Shravani, (2) Rakshabandhan, (3) Balev and (4) Coconut Day are celebrated. The day is known as Shravani, as it falls in the month of Shravan. The Brahmans change their sacred thread. Sisters tie *rakhadi* or *raksha* around the right wrist of their brothers as a charm protecting them from the evils during the ensuing year. The day is also known as Naliyari Punam or the Coconut Day, as in the coastal areas merchants, traders and others offer coconuts to the Sea god, Varun, as it is from this day that the boats are put to sail.

The Janmashtami—The festival to celebrate Shri Krishna's birthday falls on the eighth of the second half of Shravan and is known as Gokulashtami or Janmashtami. This festival has special significance for Dwarka, which was the adopted home and capital of Lord Krishna. Devout Vaishnavas observe fast for the whole day. A good number of fairs are held on this day at various places.

The Navratri—The Navratri, or the festival of nine nights, begins from the first day of Ashvin and spreads over nine days. It is sacred to the mother goddess, whose ten manifestations are described in *Devi Mahatmya* of the Markandeya purana. The goddess is worshipped daily during these days and earthen pots pierced with numerous holes containing a light called *garbo*, are kept near the image or trident of the goddess. The lamp is kept burning throughout the night and during the entire Navratri period. Prayers and *garbas* in praise of the goddess are sung by devotees. On the ninth day of the festival, the *havan* ceremony is performed and *naivedya* (food offering offered to the goddess and its *prasad* distributed).

The Dassera—The Navratri festival is immediately followed by the Dassera festival, so called from *das* (ten) and *ahar* (day). It is also called the Vijayadashmi or the tenth day of victory, as it commemorates the victory of Ram over Ravan. It is also believed that on this day goddess Durga killed the Demon Mahishasur after nine-day battle. Vijayadashmi is thus the day of victory of good over evil and is considered an auspicious day to start any new work. Great importance is attached to the worship of *shami* tree (*prosopis spicigera*) on this day. It is believed that one, who worships *shami* tree on this day, is freed from sins committed by his ten senses. The day is, therefore, called *Dash-hara*.

Over and above the festivals described above, which are observed by the Hindus, such national festivals as the Independence Day, the Republic Day, and the Gandhi Jayanti Day are observed by people belonging to all castes and communities in the district.

The Jain Festivals

The Jain festivals are generally associated with severe austerities, fasting and worship. The devotee is required to avoid, in addition to roots, which are prohibited on ordinary days, leafy vegetables, dry fruits, tasty food preparations, milk and curds and in some cases even water, when severe austerities and penance are enjoined. The Jainism lays great emphasis on *tapa* or penance as a means of earning religious merit. It is, therefore, the religious aspect which is for the most part prominent in Jain festivals.

The principal Jain festivals are the Paryushana, the Oli (Siddhachakra Puja), the Kartik Purnima and the Mahavir Jayanti.

The Kartik Purnima (Kartik Sud 15) makes the close of the austerities of *chaturmas* or the four monsoon months starting from Ashadh Sud 15. Devout Jains who have undertaken the austerities of *chaturmas* end them on this day. The day is also observed as the birthday of Shri Hemchandra-charya, the well-known learned Jain *savant* who was born on this day of Vikram Samvat 1145.

The Paryushana or Pajushan, the most sacred of the Jain festivals is the occasion of continuous religious activities and strict austerities. It is observed by all, high and low. The Shwetambars observe it from Shravan Vad 12 to Bhadrapad Sud 4 and the Digambars from Bhadrapad Sud 5 to Sud 14. Complete fasts are enjoined to be undertaken during the Paryushana. Those, who cannot fast for all the days, should fast atleast for some days during this *parva*. Everybody fasts on the last day popularly known as the Samvatsari, considered to be the most sacred of all the days. The Samvatsari denotes the annual *pratikraman* or expiation of sins. On this day, as an atonement of his sins, every Jain begs forgiveness of others for any offence that he might have committed during the year gone by. This is known as *khamavavun* or begging pardon.

The Oli-Siddhachakra Puja (Chaitra and Ashvin Sud 7 to 15); the Shwetambars consider this festival next in importance only to the Paryushana and celebrate it for nine days from Sud 7 to Purnima, twice a year in Chaitra and Ashvin. During these days, *navpadas*, nine steps represented on the Siddhachakra or Saint's wheel are worshipped in every Shwetambar temple, partial fast is observed on all these days.

The Mahavir Jayanti (Chaitra Sud 13) is the birth anniversary of Mahavir Swami, the 24th and the last Jain *tirthankar* born in 399 B. C.

Besides religious ceremonies at the temple, processions are taken out with the idol of Mahavir. The Digambar Jains also celebrate the Virashasan Jayanti on Shravan Vad 1, the day on which Mahavir after achieving omniscience, delivered his first spiritual sermon.

The Jains also observe the Nirvan Kalyanak or the holy anniversary of the *nirvan* of Mahavir on the Diwali day (Ashwin Vad 30).

The Muslim Festivals

The two sects of the Muslims, Sunnis and Shiahhs, have different holidays except Muharram, Ramzan and Bakri-Id festivals which are common to both. In the beginning of the year comes the month of Muharram, which is held by Shiahhs in special veneration as being the month in which Imam Hussain the son of Ali was killed. His death is the subject of public mourning during the first ten days when fasting and self denial are also enjoined. An interesting religious activity in the Muharram festival is the preparing of *taziahs* or *tabuts*, bamboo and tinsel models of the shrine of the Imam at Karbala. These shrines are taken round in procession on the tenth day and sub-merged into water of a river or lake. Sweet bread and sugared water are distributed among friends in the evening. Shiahhs, unlike Sunnis, keep Muharram for forty days. Of these, the first ten are a time of special mourning.

The thirteenth of safar is known as Tera Tezi or Talan Tezi and kept by Sunnis to commemorate the Prophet's recovery from a severe sickness. Another important day is the twelfth of the month of Rabi-ul-Awwal, the Wafat or day of the Prophet's death. This day is called Id-e-Millad, as it is also the day of the birth of the Prophet. Id meaning happiness and Milad meaning birth. It is celebrated more as the birth anniversary than as the day of death of the Prophet. The *gyarvi* festival falls on the eleventh day of Rabi-us-Sani on which Sunnis celebrate the birth of Saiyad Abdul Kadir Jilani by illuminating their houses and eating *malidah* (powder sugar bread) at night. On the first eleven nights of Rabi-ul-Awwal in honour of Prophet's birth, *waazes* (sermons) are delivered a large number of people attend them and on the eleventh day, charitable people give a morsel of sacred food called *taburruk* to every one present. The Shab-e-Barat which characterised by the preparation of special dishes, which are distributed to the poor after the recitation of *fatiha* (opening chapter of the Quran and by feasting of friends and relations. Greater than this festival is the Id-ul-Fitr commonly known as Ramzan Id which falls on the first day of Shawwal. Throughout the preceding month of Ramzan, a general fast is observed every day, from sunrise to sunset, prayers known as *taraveeh* are offered in the close of the fast and in consequence, Muslims Sunnis and Shiahhs of all ages and both sexes take bath, put on new clothes, apply perfumes, go to the mosque, and thereafter, meet friends and relations and bid them good

luck and god-speed. The Id-e-Baqr falls on the tenth day of Zilhijja and is characterised, like Ramzan Id, by prayers in mosques. The eighteenth of Zilhijja is great Shiah holiday known as Id-e-Ghadir or the lake holiday. On this day, the Prophet seated by a lake proclaimed in a joyous moment that Ali was his own flesh and blood. Shiahhs also observe the twenty-eighth of Zilhijja as a festival of three days in memory of Baba Shuja-ud-din a fire worshipping convert to Islam, who on this day, murdered the Khalifah Umar.

Pilgrim Places

Dakor is one of the holiest places in Gujarat. It is specially a pilgrim place of Vaishnavas in Gujarat. There is a famous temple of Ranchhodji (a form of Shri Krishna). According to legend the original idol of Dwarka is enshrined here. Other important shrines include those of Lakshmiji, Bodano, Danknath Mahadev, Vishvakarma, Kabir, Mota Hanuman and Mahaprabhuji's *bethak*. Pilgrims here still visit the places stated to have been associated with the legend, where the branch of the neem tree under which the god rested turned sweet, where the idol was hidden in the Gomti tank, where the balance was set up, the original temple where Bodano enshrined the idol, etc. The biggest fair held here is Manekthari *Purnima* on which occasion the idol is bedecked with a crown worth Rs. 1.25 lakhs. Thousands of pilgrims from all over the State visit this place on every *purnima* when special train from Ahmadabad and numerous special State Transport buses run to and from Dakor.

Vadtal in the Nadiad taluka is famous for being the principal seat of the Swaminarayan Sampradaya. Here there is a famous Swaminarayan temple. Other religious places in the Vadtal worth visiting for pilgrims are: (1) Narayangiri Bava no Math, (2) Vader Mata, (3) The House of Joban Pagi, (4) Ghela Hanuman, (5) Jnan Baug, (6) Kedareshwer Mahadev, (7) Gomti Talav, (8) Raghuvir Baug, (9) Narayan Baug, the crematorium, (10) Sunder Pagi no Kuvo, (11) Gangajalia well, (12) Chandan Talavadi, (13) Tandon Talav, (14) Sonar Kui and (15) Gopi Talav. The largest Fairs, held on Jal Jhilani Ekadashi, i. e., Bhadrpad Sud 11 (September), is attended by many persons from all over the State.

Bochasan in the Borsad taluka is an important place of pilgrimage for one branch of Swaminarayan sect. A temple of Swaminarayan which has been built by the founder of Bochasan branch of Swaminarayan sect, Shri Yagnapurushdasji or Shri Shastri Maharaj. Many followers visit this place. The festival or Jal-Jhilani Ekadashi at this temple on Bhadrpad Sud 11 (September) is attended by about 10,000 persons.

Fagvel in the Kapadvanj taluka is an important holy place. It has the shrine of Bhathiji Khatri, a local deity widely worshipped by Thakardas,

STATEMENT

Rajputs etc., and held in great sanctity in these parts under the name of Bhathikhatri, to whom people resort for the cure of poisonous snakebites. The fair held in his honour on Kartik Sud 1-2 (November) is attended by many persons.

Piplav in the Petlad taluka is a holy place famous for the temple of Ashapuri Mata. The goddess Ashapuri Mata is the family deity of many people all over Gujarat. Many people come here on pilgrimage, and for the tonsorial ceremony of their children. The temple has the idols of Asha and Puri (Purna), two goddesses who fulfil the desire of their devotees. An annual fair held on Bhadrapad Sud 8 (September) is attended by many persons.

Khambhat is an important centre of Jainism, which has 76 ancient Jain temples chief of which are Shantinath and Parasnath. There is one old temple which is said to have been founded by the well-known Jain saint Acharya Hemchandra Suri of the 12th century who was closely associated with Khambhat.

FAIRS

Fairs are generally associated with deities, religious rituals and agricultural seasons. The following statement gives information about the names of deities to which they are held and the number of persons participating.

STATEMENT III-13—concl'd.

Deity	Month	No. of Congrega- tion fairs														No. of Congrega- tion fairs					
		Total	Below 5,000	5,000 to 9,999	10,000 to 24,999	25,000 to 49,999	50,000 and above	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Hannuman	2																				
	Total		23,700	1	1,200	..	..	2	22,500	..	..	..	..	..	..	..	..	..	..	..	..
	April		1,200	1	1,200	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sea God	2																				
	October		22,500	..	..	..	..	2	22,500	..	..	..	..	..	..	..	..	..	..	..	..
	April		14,000	..	..	..	..	1	14,000	..	..	..	..	..	..	..	..	..	..	..	..
Bhathiji	2																				
	November		13,500	3	8,500	1	5,000	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total		10,250	4	10,250	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Local Heroes	2																				
	August		2,000	1	2,000	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	September		8,250	3	8,250	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Sources : Census of India 1961, Gujarat, Volume V, Part VII-B, Fairs and Festivals, pp. 250-251.

The total number of fairs held in the district is 119. The congregation at these fairs varies according to the season and exigencies of agricultural operations. 40 fairs of the total in the district are held in the month of Shravan (July-August). Among the total fairs, 37 are held in reverence to Lord Krishna. Next in order, 27 fairs are dedicated to Lord Shiva, 16 fairs to Mataji while 11 fairs are dedicated to the Muslim *pirs*, rest of the fairs are dedicated to Shri Swaminarayan, Bhathiji, Hanuman, local heroes and saints, Ganesh, Sea-god, etc.

During the fairs besides the usual religious practices of having a dip in the holy waters of the river and reverence to the deity, cultural activities such as film shows, exhibitions, etc., are also organised by the Taluka Panchayats. The details of these activities are as follows :

(1) *The Manekthari Punam Fair at Dakor* (Thasra taluka)

The biggest fair is held on Manekthari or Sharad Punam, *i. e.*, Ashvin Sud *puṇnima* at the Ranchhodji temple, Dakor. It attracts 1,00,000 to 1,25,000 pilgrims from all over Gujarat and even beyond the State. They begin to arrive from Ashvin Sud 11. The staunch votaries approach Dakor from far and near by *Padyatra*, *i. e.*, on foot. Moreover, special trains from Ahmadabad and numerous special State Transport buses run to and from Dakor.

On this occasion the idol is bedecked with a crown worth Rs. 1.25 lakhs. On this day *darshan* of Ranchhodji is open till midnight when *natvedya* of milk with parched rice and sugar is offered to the god and distributed among the devotees as *prasad*. *Sadhus* and *Sanyasis* give religious discourses at their monasteries and shrines.

The significance of Manekthari Punam in an agricultural economy lies in the fact that it is a post monsoon festival. The agriculturists have sufficient leisure after the busy agricultural season. As the new crops are ready, their minds are contented and they can participate in the festival with care-free enthusiasm. The season is pleasant and the country-side is beautiful with an abundance of verdure. The occasion is, therefore, particularly propitious for the journey to the pilgrim place and enjoyment of the festival.

The temple committee looks after the celebrations at the temple, the nagar panchayat is in charge of the various arrangements that are necessitated by such a vast congregation. Heavy *bundobast* is made by the Police Department.

Other fairs and festivals held at Dakor include, *inter alia*, Annakṇṭa, Dev Diwali, Dolotsav, Rath-Yatra, Janmashtami, etc. Every bright 15th is observed as a festive day in the temple when nearly three to four thousand

people visit the shrine for *darshan*. On every Friday Gopallalji is taken in a procession in a palanquin to the temple of Lakshmi in the evening.

(2) *The Jal-jhilani Ekadshi Fair at Vadtal (Nadiad taluka)*

The fair commonly known as Jal-jhilani fair at Swaminarayan temple of Vadtal is held every year on Bhadrapad Sud 11 (September). The place is connected by Western Railway and State Transport bus services. Nearly 35,000 people congregate to celebrate the festival at Vadtal, and to offer their prayers. They are all cordially received and feasted by the temple committee. Free lodging and boarding facilities are given by the temple to the pilgrims during their halt, this unrestricted hospitality being a speciality of the sect.

About 100 to 150 stalls and 10 to 15 *mandaps* are installed at the site of the fair, where articles of domestic utility and religious worship are offered for sale. Lectures and seminars on religious topics are held in the *sabha-mandap* of the temple, besides *bhajan-kirtan* arranged by *bhajan mandalis* at night. Religious atmosphere is predominant during the course of entire festival. The fair is organised by the temple committee headed by the manager. Police *bandobust* is kept by the State.

On the same style as the Jal-Jhialni fair, four other fairs are also held every year at Vadtal on Dev Divali-Kartik Sud 15, Shravan Punam-Shravan Sud 15, Ramnavami-Chaitra Sud 9 and Janmashtami-Shravan Vad 8. These fairs are also organised by the temple committee of Vadtal and in each fair more than ten thousand people, mainly the followers of the sect congregate. On Ramnavami, Lord Rama and on Janmashtami Lord Krishna are worshipped. Religious discourses are also arranged by learned *sadhus* and *brahmacharis*, on these occasions.

The festivals designed to be celebrated by the founder in the main temples of Gadhadra, Vadtal and Ahmadabad are also observed more or less in a similar manner in all the temples and shrines of the sect.

(3) *The Utkanthesher Mahadev Fair at Vaghjipur (Kapadvanj taluka)*

The fair is held on Mahashivaratri, i. e., Magh Vad 14 on the boundary of village Vaghjipur and Sampa (Dehgam taluka) at the confluence of the rivers Vatrak and Jhanjhari about 13 kms. north-west from Kapadvanj. It is served by State Transport bus services. The well-known ancient temple of Utkanthesher or Untadia Mahadev, as it is locally called, is on a hillock in the north of the confluence amidst picturesque surroundings. Other temples on the hillock are those of Shri Krishna and Amba Mata. There is a temple of Kamnath or Kamesher Mahadev on the hillock known as Shivanand Tekri to the south of the river, a site of great scenic beauty. There is a shrine of Khernath Mahadev in the north-east of Kamesher Mahadev temple.

Shivratri is principal festival dedicated to Lord Shiva. Therefore, it is a special occasion for this shrine. Hindus from different parts of the State visit the place on the occasion of the fair, which attracts about 27,000 pilgrims. A few non-Hindus also attend but only for trade or entertainment. Agricultural exhibition is organised by Block Development authorities which also arrange to show documentary films during the fair. Merry-go-rounds, circus and jugglery shows are some of the items of entertainment in the fair. The fair is organised by the gram panchayats of both the villages of Vaghjipur and Sampa.

There are a number of fairs related to religious groups, social groups or a particular caste. Generally in such fairs a particular social group congregate. The fairs have religious or historical importance or some social significance. In this district, the Rathod, Vaghela, Rajput, Kshatriya, Baraiya and Muslims have such special fairs. Details of them are narrated below :

(4) *Bhathiji or Bhathi Khatri Fairs*

There are four other fairs dedicated to Bhathiji or Bhathi Khatri. They are held at Mahmedpura in Nadiad taluka, Fagvel in Kapadvanj taluka, Kanij in Mahamadabad taluka and Valasan in Anand taluka on Kartik Sud 1 or 2. It is said that Bhathi khatri, local Rajput hero martyred while trying to protect cows from Muslim robbers about 150 years ago. Snakebites are cured in his name. People resort to his shrines in many villages in the country-side for the cure. Many persons from the Rathod, Vaghela, Rajput, Kshatriya, Baraiya and others attend these fairs. These fairs are organised by the descendant of Bhathiji and trustees or *pujari* or gram panchayat.

(5) *The Meladi Mata Fair at Valasan (Anand taluka)*

This fair is held on Bhadrapad Sud 9 at the temple of Meladi Mata Valasan in Anand taluka. It is attended by about 5,000 persons from nearby villages, mostly Garasias and Vaghari. There is a temple of Meladi Mata. It is said that idol of the Mata was left near a *ker* bush long ago by nomedic Vaghari. The deity refused to go with them and temple was erected on this day. The bush is still there. The fair is organised by *pujari* of the temple.

(6) *Darai Pir fair at Birpur (Vadasinor taluka)*

The Darai Pir fair is held on Rabi-us-Sani 10 at the *dargah* of Darai Pir, Birpur. The fair is attended by about 5,000 to 6,000 persons of all communities. The fair is held in honour of his miraculous power against evil spirit. It is organised by the trustee of the *dargah*.

(7) *The Hariyan Pir fair at Hariyan (Khambhat taluka)*

The Hariyan Pir fair is held on Shaaban 14-15 at Hariyan. It is attended by about 6,000 persons of all communities. The fair is held in memory of Hariyan Pir (Dada), who performed miracles. It is organised by the panchayat.

THE NEW TRENDS

The winds of change are blowing all round under the impact of the Five Year Plans. The pattern in dress, ornaments, social customs, food and other habits of the people, their mode of living, their religious beliefs and practices have undergone considerable changes. With the diversification of occupations and spread of education, the social barriers are gradually breaking down, the rigidity of caste-system has lost its former rigours. As a result, cases of inter-caste and inter-provincial marriages have increased. The evil of untouchability persists particularly in the rural areas and is limited among certain classes of people. The social legislation for abolition of untouchability has not made much impact on the rural population. The extension of general and technical education has opened up new avenues of employment on account of the schemes undertaken under the Five Year Plans. Women have shed their shyness and have secured place along with males in the Government offices, public undertakings, private business organisations, and educational and social institutions. They have shown their competence in various fields and as such, they are not confined to the hearth and home as before. Some of them have taken to active politics as legislators and Panchayat members at all levels. By and large, the people have become politically conscious and take intense interest in the elections whether they are of the Panchayats or of the State Legislature or of the Parliament. With the increase in the agricultural prices and due to green revolution the purchasing power of agriculturists has increased tremendously with the result that they spend money lavishly. With the introduction of the Panchayati Raj, the farmers have acquired political power to reckon with, as vote-banks both at the State level and the district level.

After Independence, the entire landscape of agricultural economy has changed under the impact of the Five Year Plans. Government has provided financial and technical assistance in the form of improved variety of seeds, fertilizers, agricultural tools and techniques. There is considerable feather-bedding of agricultural schemes.

Formerly, there prevailed the Bhagdari, Narwadari, Talukdari, Jagirdari, Inamdari, etc., systems in this district. These have been abolished by undertaking various legislative measures from 1947 onwards. The land reform measures cover abolition of intermediaries such as Jagirdars, Talukdars, Narwadars, etc. The tenancy reforms provide for security of tenure and

regulation of rent. The intermediaries between the State and the actual cultivators have now been mostly removed. Before the implementation of these laws there were 93,768 Jamindars in the district. By now there are no Jamindars. As a result of the land reforms 2,23,792 tenants have become owners of the land. The concept of private ownership has given the cultivators incentive for investment of capital and labour in the improvement of lands under their cultivation. After implementation of the land reforms, a few persons remain as landless agricultural labourers. After acquisition of the occupancy rights, cultivators are now able to procure loans from banks and Government, for improvement of their lands and crops. Thus, now the cultivators are in a position to make their lands fit for growing cash crops like cotton, groundnut and tobacco. Formerly Government and *shahukars* alone provided for loans to cultivators. Later on the co-operative credit societies and the Land Mortgage Bank (now the State Land Development Bank) have started grant of loans to cultivators.

Under the Five Year Plans, education has spread even to the farthest backward areas, roads have been constructed, opening the remotest areas and industries are coming up, providing greater employment to the people. The improved condition has resulted in the elevation of cultivators' social status and educational standard. The increase of means of transport and communications has facilitated migration from village to towns and cities. The entire economy of the district has undergone rapid transformation as a result of concerted efforts made by the State and the people in various walks of life.

To sum up, the society which was static before Independence is in a process of continuous change due to the impact of the development programmes under the Five Year Plans. The transition from tradition to modernity is not complete. With the introduction of new tools and techniques of agricultural production and much feather-bedding of agriculture and small scale industries by Government, the employment opportunities have increased and the people have acquired more purchasing power. This change is reflected in their level of living. They now use all modern gimmicks such as motor-cycles, radios, motor-cars, tractors, terelene clothes, better food, and well-built and well furnished houses. On the whole, the people have a better standard of living consequent upon improvement of their economic conditions. Because of growth of facilities in the means of communication, inter-State and international mobility is greatly increased.

STATEMENT III-14

Census houses and the uses to which they are put

Census year	State/District	Total Rural Urban	Total number of Census Houses	Census Houses vacant at the time of House-listing.	Occupied Census Houses used as				
					Residence	Shop-cum residence	Workshop-cum-residence including household industry.	Non-residence	Others
1	2	3	4	5	6	7	8	9	10
1961 Gujarat State	T		5,433,394	599,904	3,823,562	25,527	21,566	324,760	639,075
	R		3,963,807	439,312	2,815,159	18,306	12,350	150,397	528,283
	U		1,469,587	160,592	1,008,403	7,221	9,216	174,363	109,792
1971 Gujarat State	T		6,589,980	676,115	4,382,385	38,205	76,720	436,865	979,690
	R		4,723,105	467,455	3,116,060	30,265	54,930	211,725	842,680
	U		1,866,875	208,660	1,266,335	7,940	21,790	225,140	137,010
1961 Kheda District	T		561,410	95,416	388,947	2,638	2,620	29,529	42,560
	R		444,199	74,901	314,587	2,001	1,388	16,578	34,744
	U		117,211	20,515	74,060	637	1,232	12,951	7,816
1971 Kheda District	T		615,880	77,965	427,180	9,910	6,055	37,030	63,720
	R		481,985	59,070	340,405	3,385	3,945	20,295	54,885
	U		133,895	18,915	86,775	525	2,110	16,735	8,835

Source :

1. Census of India 1961, Gujarat, Vol. V., Part IV-B, *Housing and Establishment Tables*, (E-Series Tables), pp. 2-3 & 20-21.
2. Census of India 1971, Gujarat, Series 5, Part IV A & B, *Housing Report, Housing Tables and Subsidiary Tables*, pp. 102-105.

STATEMENT III-15

Distribution of Census Houses by Predominant Material of Wall and Predominant Material of Roof

Predominant Material of Wall												
State/District 1	Total Rural Urban 2	Total number of Census Houses 3	Grass leaves reeds or bamboo 4	Mud 5	Unburnt bricks 6	Wood 7	Burnt bricks 8	G. I. Sheets or other metal sheets 9	Stone 10	Cement concrete 11	All other material and material not stated 12	
Gujarat State	T	6,589,980	573,910	2,022,730	171,725	76,245	2,347,365	38,965	1,320,455	28,970	9,615	
	R	4,723,105	528,425	1,878,570	127,790	33,480	1,206,230	13,405	920,945	9,915	4,345	
	U	1,866,875	45,485	144,160	43,935	42,765	1,141,135	25,560	399,510	19,055	5,270	
Kheda District	T	615,880	10,340	292,485	5,205	8,750	294,330	1,605	225	1,855	1,085	
	R	481,985	8,570	280,175	3,110	3,820	183,720	590	130	1,220	650	
	U	133,895	1,770	12,310	2,095	4,930	110,610	1,015	95	635	435	

Predominant Material of Roof												
State/District 1	Total Rural Urban 2	Grass, leaves Reeds, Thatch, Wood, Mud, Un- burnt bricks or Bamboo 13	Tiles slate shingle 14	Corrugated iron, Zinc or other metal sheets 15	Asbestos cement sheets 16	Brick lime 17	Stone 18	Concrete R. B. C./ R. C. C. 19	All other material and materials not stated 20			
Gujarat State	T	401,800	4,041,850	1,322,840	111,845	10,600	112,155	578,455	10,435			
	R	296,966	3,382,050	796,590	53,785	4,140	28,565	157,260	3,840			
	U	104,835	659,800	526,340	58,060	6,460	83,590	421,195	6,595			
Kheda District	T	11,230	306,085	240,005	7,820	1,430	5,630	43,055	625			
	R	8,005	288,625	162,830	3,795	690	670	17,090	280			
	U	3,225	17,460	77,175	4,025	740	4,960	25,065	345			

Source : Census of India 1971, Gujarat Series 5, Part IV A and B *Housing Report, Housing Tables and Subsidiary Tables*, pp. 108-111.

STATEMENT III-16

Households Classified by number of Members and by Number of Rooms Occupied

State/District 1	Total/ Rural/ Urban 2	Total No. of Census Households 3	Total No. of members		Total No. of rooms 6	No. of households 7	No. of members	
			Males 4	Females 5			Males 8	Females 9
Gujarat State	T	4,537,140	13,428,900	12,646,980	7,390,340	2,675,925	7,440,480	6,938,550
	R	3,232,985	9,632,760	9,172,195	4,990,960	1,995,725	5,631,645	5,327,540
	U	1,304,155	3,796,140	3,474,785	2,399,380	680,200	1,808,835	1,611,010
Kheda District	T	440,165	1,257,360	1,134,805	802,565	210,515	566,015	507,235
	R	350,025	1,001,955	904,695	617,085	177,385	482,455	434,700
	U	90,140	255,405	230,110	203,480	33,130	83,560	72,535

State/District 1	Total/ Rural/ Urban 2	Households with two rooms			Households with three rooms			Households with four rooms		
		No. of households 10	No. of members		No. of households 13	No. of members		No. of households 16	No. of members	
			Males 11	Females 12		Males 14	Females 15		Males 17	Females 18
Gujarat State	T	1,286,130	3,978,435	3,785,170	343,025	1,139,345	1,090,645	134,545	487,580	468,480
	R	902,895	2,826,920	2,712,135	221,265	747,720	720,695	69,480	258,620	249,630
	U	383,235	1,151,515	1,073,035	121,760	391,625	369,950	65,065	228,960	218,950
Kheda District	T	150,375	435,350	394,395	41,330	128,145	115,745	21,385	68,735	64,175
	R	119,710	350,610	317,025	30,090	93,790	83,720	13,255	42,220	39,035
	U	30,665	84,740	77,370	11,240	34,355	32,025	8,130	26,515	26,140

STATEMENT III-16—concd.

State/District 1	Total/ Rural/ Urban 2	Households with five rooms and above			Households with unspecified number of rooms			No. of households with details unspecified 25
		No. of households 19	No. of members		No. of households 22	No. of members		
			Males 20	Females 21		Males 23	Females 24	
Gujarat								
	T	93,940	382,175	363,535	350	885	600	3,225
	R	41,260	166,980	161,695	340	875	600	2,020
	U	52,680	215,195	201,840	10	10	..	1,205
Kheda District								
	T	16,495	59,075	53,215	15	40	40	50
	R	9,530	32,840	30,175	15	40	40	40
	U	6,965	26,235	23,040	..	..	..	10

Source : Census of India 1971, Gujarat, Series 5, Part IV A and B, Housing Report, Housing Tables and Subsidiary Tables, pp. 114-117.

PART IV—ECONOMIC ORGANISATION

CHAPTER IV

AGRICULTURE AND IRRIGATION

AGRICULTURE

Agriculturally, Kheda is one of the prosperous districts of Gujarat. Its climate is on the whole temperate and the rainfall moderate. Irrigation facilities are fairly, though not wholly, adequate. Wells are numerous. The soils are fertile and the cultivators are progressive. These combinations have brought forth the agricultural prosperity of this district as a result of which it stands first among all districts of Gujarat in many respects. Its area under tobacco one of the most important cash crops, is the highest in Gujarat. The district also ranks amongst the largest producers of cereals.

In regard to animal husbandry, the district has certain distinguishing features. Kheda has the largest number of buffaloes in Gujarat. The Amul Dairy at Anand is the largest of its kind in the whole of Asia. The district has made considerable headway in mechanisation of farming. According to the Live-stock Census of 1966, the number of seed-drills and tractors was the highest in this district.

AGRICULTURAL POPULATION

According to the 1971 Census, 72.18 per cent of the total working population of the district depended on agriculture as against 65.60 per cent in the State. Thus the proportion of agricultural population is higher in Kheda than in most other districts. The persons working as cultivators and agricultural labourers were distributed as follows :

	Males	Females	Total
As cultivators	337,203	8,590	345,793
As agricultural labourers ..	134,480	35,904	170,384
Total ..	471,683	44,494	516,177

Source : Census 1971, District Census Handbook, Kheda District, Part X.C-1, Director of Census Operations, Gujarat, (1972), p. 82.

The statement given above indicates that of the total number of persons engaged in agriculture 345,793 or 67 per cent were cultivators and only 170,384 or 33 per cent were agricultural labourers. It is significant to note that the total number of cultivators is twice as large as the total agricultural labourers. The statement also reveals that, while among males actual cultivators are more, the females mostly work as agricultural labourers.

Besides agriculture, as many as 8,266 persons were engaged in allied occupations of livestock, forestry, fishing, hunting, plantations, orchards and allied activities.

As regards different castes engaged in the agricultural pursuits, the former Gazetteer¹ recorded as follows :

"In the rural parts of the district not only the strictly agricultural classes, Kanbis, Kolis and Musalmans, but the whole population including Brahmans are engaged in cultivation. Only in large towns is there a regular class of artisans, washermen, tailors, blacksmiths and others entirely supported by their callings, and even in towns many artisans are forced to eke out their gains by cultivation. Dheds and other weavers, though engaged at their looms in the fair season, during the rains devote their time to raising grain for the support of their families. The Vantias are, perhaps, the only class not directly engaged in the work of cultivation. By far the greater part of the land is tilled by Kanbis, chiefly of the Leva tribe, the most skilful and thrifty cultivators in Gujarat. Except the *talabda* or local Kolis nearly if not quite as good as Kanbis, Kolis as a class are bad and thriftless cultivators, Rajputs and Musalmans hold a very small proportion of the land. The Rajputs are careless, unskilful and addicted to the use of opium. The Musalmans want energy and perseverance and labour under the special disadvantage that their women do not help in the field".

The classes mentioned above still continue to remain the main agricultural classes in this district.

Land Utilisation

The proper and maximum utilisation of the available land resources can play a crucial role in maximising food production. It therefore, forms a major item in the programme of economic planning especially in an economy like ours which is predominantly agricultural.

Referring to land utilisation, the former Gazetteer² observed as under :

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III. Kaira and Panch Mahals, Bombay, (1879), p. 56.
2. *Ibid*, p. 43.

"The State or *khalsa* villages of the district contain 935,541 acres, of which 345,016 acres or 36.87 per cent are alienated, paying only a quit-rent to the state, and 109,982 acres or 11.75 per cent are unarable waste. The total area of state arable land is therefore 480,543 acres, of which 387,711 acres or 80.68 per cent are occupied; and 92,832 acres or 19.32 per cent are unoccupied. Of this 92,832 acres of unoccupied arable land, 5,665 acres including grazing lands, homesteads, and burial places cannot be taken up for cultivation. The whole available area of unoccupied arable land is, therefore, reduced to 87,167 acres or 18.13 per cent of the total state arable land. Most of the unoccupied arable land consists of the poor tracts in Matar in the west, and in Thasra and Kapadvanj in the east of the district. Of the 387,711 occupied acres, 25,779 or 6.64 per cent consist of garden land; 58,404 or 15.07 per cent of rice land, 303,528 or 78.29 per cent of dry crop land. Of the rice land, 18,658 acres are irrigated, and 39,746 acres unirrigated."

This shows that in the absence of irrigation facilities, farmers had to fall back upon dry cultivation.

The area under cultivation increased steadily thereafter till 1898-99, when famine arrested the development. In 1910-11, the net cropped area was only 608,471 acres which increased gradually in subsequent years. The Statement IV-1 gives detailed particulars of land resources available decennially between 1880-81 and 1940-41. Changes in utilisation of land resources thereafter are given in Statement IV-2.

STATEMENT IV-1

Land Utilisation in Kheda between 1880-81 and 1940-41

(Area in Acres)

Particulars	1880-81*	1890-91*	1900-01*	1910-11*	1921-22*	1930-31†	1940-41†
Total area cultivated and uncultivated	N. A.	934,967	938,773	938,963	961,184	1,036,846	1,034,537
Fallows	..	26,201	44,178	185,690	100,192	64,336	35,639
Culturable Waste	..	92,669	70,626	95,860	107,139	14,686	17,217
Forest	..	N. A.	39	..	..	..	..
Other not available for cultivation	..	N. A.	114,922	116,573	122,298	77,726	161,768
Net cropped area	..	363,424	705,202	540,650	608,471	794,436	822,222
						845,531	
N. A. = Not available							

Source : * *Gazetteer of the Bombay Presidency*, Vol. III-B., Kaira and Panch Mahals, (1926), p. 7.

† *Statistical Atlas of Bombay State*, Bureau of Economics and Statistics, Bombay, (1950), p. 171.

STATEMENT IV-2

Land Utilisation

(AREA IN '00 HECTARES)

Sl. No.	Classification of Area	1949-50*	Per-centage	1959-60*	Per-centage	1969-70†	Per-centage
1	2	3	4	5	6	7	8
	Total reporting area for land utilisation purposes.	6,677	100.00	6,786	100.00	6,797	100.00
1	Forests ..	14	0.21	86	1.28	114	1.68
2	Land put to non-agricultural uses ..	1,197	17.93	9	0.13	753	11.08
3	Barren and unculturable land. ..	..	..	922	13.69	266	3.91
4	Permanent pastures and other grazing lands ..	..	..	299	4.44	271	3.99
5	Land under miscellaneous tree crops and groves not included in net area sown ..	55	0.82	..	..	..	..
6	Culturable Waste ..	8	0.12	69	1.02	73	1.07
7	Fallow lands other than current fallows ..	244	3.65	65	0.97	44	0.65
8	Current fallows ..	..	..	35	0.52	93	1.37
9	Net area sown ..	5,159	77.27	5,251	77.95	5,183	76.26
10	Total cropped area ..	5,258	78.75	5,500	82.54	5,713	84.05
11	Area sown more than once ..	99	1.48	309	4.59	530	7.80

Source :

*Basic Agricultural Statistics, Directorate of Agriculture, Gujarat State, Ahmadabad, (1968), pp. 24-25.

†Directorate of Agriculture, Gujarat State, Ahmadabad.

On analysing of the data it is found that the forest area which was 0.21 per cent in 1949-50 and 1.28 per cent in 1959-60 increased to 1.68 per cent of the total area in 1969-70 under the impact of the various forest development schemes. The increasing non-agricultural activity (construction of houses, factories, commercial houses, etc.) is reflected in the increase of the area under non-agricultural use from 0.13 per cent in 1959-60 to 11.08 per cent in 1969-70. At the same time, barren and unculturable land has been considerably reduced from 13.69 per cent to 3.91 per cent. The total fallow land reported during 1969-70 was 13,700 hectares or 2.02 per cent. To ascertain the extent and causes of fallow land the survey work was carried out during the year 1966-67 which revealed that about 1.72 per cent of the fallow land was kept fallow due to saline nature of the soil.

whereas 5.75 per cent and 17.75 per cent of the fallow areas were due to uneven nature of land and rotational cropping respectively. This area can be easily put to better use by introducing suitable crop rotations. Area sown more than once increased considerably from 1.48 per cent in 1949-50 to 7.80 per cent in 1969-70. As a result, the total area under cultivation increased upto 84.05 per cent in 1969-70.

IRRIGATION

The monsoon generally sets in during the later part of June and lasts upto the end of September. Though the rainfall in the district is normally more than the State average, it is on the whole inadequate and not evenly distributed. As a result, the agriculture has mostly to depend on irrigation.

In former times, the methods of irrigation were simple and easy. In this connection, the earlier Gazetteer¹ stated :

“In the Matar sub-division, except from the Khari of which some account has been given above, irrigation is carried on chiefly from wells and ponds. After the close of the cold season, almost none of the ponds hold any large supply of water. They can therefore be used only for irrigating rice lands. The depth of the water-bearing strata varies much in different parts of the district. Averaging thirty-five feet in the west of Matar sub-division, in some low-lying lands in Nadiad, it is only twenty-five feet from the surface. In the north, it averages about forty-five feet, and in the south, along the Mahi, varies from 70 to 140 feet. In the parts of Anand and Borsad bordering on the Mahi, the heavy cost of wells and a certain brackishness in the water prevent any large amount of well-irrigation. and though in ordinary years the crops are but little less valuable than those of irrigated lands in seasons of scanty or ill-timed rain, the want of water is keenly felt. The chief irrigated crops are rice, tobacco, wheat, sugarcane and garden produce. In 1876-77, of the total cultivated area, 42,585 acres or 12.47 per cent were irrigated. Of the irrigated land, 17,758 acres were under rice. In that year the returns showed 104 wells with steps, 9237 wells without steps. 531 water-lifts of *dhekudis* and 4,600 ponds. The wells most commonly in use in Kaira are *ramia* or deep, the *sundia* or shallow being found only in part of the Matar sub-division. The *ramia* wells yield at one time from two to eight *kos* or leather bags full of water, and the *sundia* from two to four. From most Kaira wells four leather bags can be drawn at a time.”

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency* Vol. III, *Kaira and Panch Mahals*, Bombay, (1879), p. 43.

The district has nine rivers of which two, the Mahi, and the Sabarmati, are the main ones. Of these two, Mahi has proved more useful for irrigation. There is a major irrigation project known as the Mahi Right Bank Canal Project Stage — I near village Vanakbori in Vadasinor taluka which on completion will provide irrigation to over 2 lakh hectares of land. Besides, the Kadana project on the river Mahi in the Panch Mahals will provide irrigation to over 2.7 lakh hectares of land in this district through its left bank canal. Moreover, there are eight irrigation tanks with a total irrigation potential of 4,637 hectares. Thus, the district is fairly adequately served with irrigation facilities. This facility will be further augmented with the completion of the Vanakbori dam. However, the main source of irrigation consists of wells and tube-wells which number about 27,000 in the district.

The net area under irrigation in the district was 1,23,387 hectares in 1969-70 which formed 23.81 per cent of the net cropped area. This percentage was only 7.71 in 1960-61. There is thus an overwhelming increase in the irrigated area after the introduction of Five Year Plans. Moreover, the irrigated area in the district is considerably high as compared to the irrigation potential of the State as a whole.

The Meshwo Canal System constructed in 1950 offtakes from the Raska weir constructed across the Meshwo river near village Raska and irrigates about 18,000 acres of lands of the Kheda district.

The construction of the Meshwo Canal had a very high priority in the Post-War Reconstruction Programme of the erstwhile State of Bombay. The work was accordingly completed in an expeditious manner and the canal started functioning during the monsoon of 1950. It has proved useful in protecting and irrigating areas under its command.

The Meshwo river is a non-perennial one with a catchment area of 670 square-miles at the pick-up-weir site. There is a right bank canal about 9 miles in length and a branch canal about 14 miles in length which brings under its command an area of about 4,000 acres. The Khari-Cut canal system which was completed in 1879-80 irrigates about 16,000 acres of lands in this district and in the adjoining Ahmadabad district.

Besides, there are two important irrigation tanks, viz., Galki and Goblej. Both these tanks are fed by the canal system and provide irrigation to about 2,400 acres of land.

The important irrigation projects in the district are described below :

MAJOR IRRIGATION PROJECTS

The Mahi Right Bank Canal Project, Stage—1

The Mahi Right Bank Canal Project is the only major irrigation project in the district. It has a pick-up-weir at Vanakbori, a village in the Vadasinor taluka of the district. The catchment area of the Mahi river extends from the eastern slope of the Aravali range to the Vindhya covering some districts of Madhya Pradesh, Rajasthan and Gujarat States. The river rises in the Vindhya hills and travels 104 miles in Madhya Pradesh, 108 miles in Rajasthan and 100 miles in Gujarat State before emptying itself into the Gulf of Khambhat.

Originally, the scheme of constructing a pick-up-weir across the river Mahi for irrigation in Kheda district was conceived after the famine of the year 1901. The surveys were undertaken between 1905 and 1908. The project was however shelved. It was again taken up in 1925. The surveys were completed in 1929. The scheme was however again kept in abeyance due to financial stringency. Thereafter, the project was taken up in 1949 after Independence and reviewed in 1954 with a view to reaping the maximum benefit from the discharge from the Mahi river at the weir site. The irrigation potential of the project is 4,60,000 acres in Thasra, Anand, Nadiad, Matar, Petlad, Borsad, and Khambhat talukas. The total estimated cost of the Mahi Right Bank Canal Project Stage-I is Rs. 2462.17 lakhs.

The masonry weir at Vanakbori is 796 metres long and the maximum height from the deepest foundation is 25 metres. The weir is designed for a discharge of 11 lakh cusecs of flood water. The crest of the weir is 220.60 feet at reduced level and 243.50 feet at high flood level.

The construction of head works was completed in the year 1958-59. Similarly, the main canal of 46 miles length, six branches of 140 miles length and a canal system covering command area of 178,705 hectares were completed till September, 1973. At present, the works of canal systems in Petlad and Borsad talukas are in progress. Moreover, the works of modifying the existing irrigation tanks in the command area viz., (1) Salla, (2) Chokadia, (3) Traj, (4) Pariaj, (5) Bhandarej, (6) Gobrapura, (7) Wank-Daloli, and (8) Kanewal have been mostly completed. The total area which benefitted from the project during the last four years i. e., 1969-70, 1970-71, 1971-72, and 1972-73 are respectively 64,656 hectares, 61,699 hectares, 61,728 hectares and 43,077 hectares. The figures of 1972-73 show a fall due to scanty rains and scarcity conditions.

The International Development Association has sanctioned a loan of Rs. 26.25 crores from the World Bank for the Mahi-Kadana Projects.

(Bk) H-50—31 (Lino)

With this loan, the remaining works on Mahi Right Bank Canal Project Stage I and Mahi Stage II i. e., Kadana Reservoir Project can be completed. Besides, the works of constructing field channels, roads and communications, drainage, etc., have also been taken up with the facility of this loan for intensive development of the command area. Most of these works are expected to be completed by 1975-76.

The completion of the Mahi Right Bank Canal Project, Stage I, is expected to help increase production of food crops and cash crops like tobacco, cotton, etc., to the value of about Rs. 6.5 crores.

MINOR IRRIGATION SCHEMES

Minor irrigation projects have an important role to play in the development of agriculture, as they are cheap to construct and easy to maintain. The minor irrigation schemes include tanks, *bandharas*, check dams, percolation tanks, lift irrigation, wells and tube wells.

There are eight first-class minor irrigation tanks in the district, details about which are given below :

(1) *The Savli Irrigation Tank* (Kapadvanj taluka)

The construction of the Savli irrigation tank in the Kapadvanj taluka was started during 1902 which was a year of scarcity and completed in 1910 at a cost of Rs. 2.32 lakhs. It is located on the *Gandiya Vehla* near village Savli of the Kapadvanj taluka. It is 2,301 metres long and 8 metres high having a top width of 3 metres. The irrigation potential of the tank is 934 hectares. Due to the increasing demand for more water for cultivation of fine paddy crops, the scheme of replenishment costing Rs. 7.76 lakh is in progress.

(2) *The Saiyat Irrigation Tank* (Thasra taluka)

The Saiyat irrigation tank was also started during the scarcity year of 1902 and completed in 1912. The tank is situated on the boundaries of the village Saiyat and Bordi of Thasra taluka. The irrigation potential of the tank is 406 hectares. The tank is 2,621 metres long with a maximum height of 7 metres and a top width of 3 metres. The construction cost of tank came to about Rs. 1.34 lakhs.

(3) *The Wanghroli Irrigation Tank* (Thasra taluka)

The Wanghroli irrigation tank in the Thasra taluka was constructed in the year 1912 at an estimated cost of about Rs. 2.87 lakhs. It is situated on a *vehla* at village Wanghroli of the Thasra taluka. The irrigation

potential of the tank is 1,060 hectares. It is 2,124 metres in length with maximum height of 8 metres and a top width of 3 metres.

(4) *The Guhedia Irrigation Tank* (Vadasinor taluka)

The Guhedia irrigation tank in the Vadasinor taluka was originally constructed during the Vadasinor State regime. It was repaired and improved in 1954-55. Situated near village Guhedia, it has irrigation potential of 601 hectares. Its height is 12 metres, while its top width is 3 metres.

(5) *The Bhamaria Irrigation Tank* (Vadasinor taluka)

The Bhamaria irrigation tank was also constructed during the Vadasinor State regime. It was repaired and renovated between 1959 and 1962 at a cost of Rs. 5.69 lakhs. The remodelling of this tank was again taken up in 1967-68 and completed in 1969-70 at a cost of about Rs. 2.19 lakhs. The irrigation potential of the tank is 304 hectares. Its length is 396 metres with a maximum height of 12 metres and a top width of 4 metres.

(6) *The Koyadam Irrigation Tank* (Vadasinor taluka)

The construction work of the Koyadam irrigation tank was started in 1959 and completed in 1962 at a cost of Rs. 6.46 lakhs. The tank is constructed across the river Koyadam between two hillocks near village Koyadam in the Vadasinor taluka. The irrigation potential of the tank is 395 hectares. It is 175 metres long, 19 metres high with a top width of 4 metres. Remodelling of this tank is now being done at an estimated cost of Rs. 4.58 lakhs.

(7) *The Jetholi Irrigation Tank* (Vadasinor taluka)

The Jetholi irrigation tank is located near village Jetholi of the Vadasinor taluka. The construction work of this tank was commenced during the year 1965-66 and completed in 1970-71. The tank is 1,951 metres long, 9 metres high and 4 metres wide at the top. The irrigation potential of the tank is 684 hectares. The tank cost about Rs. 26.47 lakhs.

(8) *The Motewal Irrigation Tank* (Thasra taluka)

The Motewal irrigation tank is an old one located at village Sandheli in the Thasra taluka. Its renovation was started in 1968-69 and completed in 1970-71. The tank is 1,716 metres long, 10 metres high and 3 metres wide at the top, with an irrigation potential of 253 hectares. The total cost of the project amounted to about Rs. 5.93 lakhs.

SOURCES OF WATER SUPPLY

At the time when the former Gazetteer was written (1876-77), 12.47 per cent of the total cultivated area of the district was irrigated. This has now increased to 23.81 per cent (1969-70). Various attempts were made from time to time to increase the sources of water supply for irrigation purposes. In 1901, the Tranga and Nagarama tanks were constructed in Matar taluka. During the same year the Wangroli tank was constructed in Thasra taluka. In 1908, the Savli irrigation tank of Kapadvanj taluka was put into operation to provide irrigation water to the starving land. In 1910, the Saiyat tank was constructed in Thasra taluka.¹ This helped in providing irrigation to the needy areas.

The former Gazetteer noted that there were about 9,300 wells and 4,600 ponds in the district. The number of wells gradually increased to 11,000 in 1910 and further to about 13,000 in the forties just before Independence. The wells, thus, dominated as the most important source of irrigation since olden times. The picture is still the same as there are now about 25,000 wells for irrigation.

After Independence, under the Bombay State regime various schemes were introduced to increase the sources of water supply.

(1) *The Scheme for construction of new wells and repairs to old wells*

With the object of increasing irrigational facilities, a scheme for the construction of new wells and repairs to old wells was started during the First Five Year Plan. To encourage the cultivators to undertake such works subsidies and tagavi loans were paid to them. This scheme was later discontinued.

(2) *The Boring Scheme*

In view of the increasing demand for boring works, a scheme of drilling bores in the wells was undertaken during the First Plan period. Out of the 102 power machines with the Government, 11 power machines were allotted to the district and placed under the charge of the Kheda District Local Board in 1951.

(3) *The Lift Irrigation Scheme*

The object of this scheme was to bring lands under irrigation by installation of pumping sets on perennial rivers. Out of the 14 sets

1. R. D. CHOKSHY, *Economic Life in the Bombay Gujarat*, 1900

installed at different places in the State, one set has been installed at village Ratanpur in Matar taluka on the river Shedhi with a target to bring 1,870 acres under irrigation.

(4) *The Co-operative Lift Irrigation Scheme*

The scheme for executing lift irrigation projects through co-operative societies was approved by the Government in 1949. The scheme was designed to assist the grow more food campaign and to step up food production in the State by making use of modern methods of lifting water to provide irrigation to agriculturists. Originally, the scheme was drawn up as a short-term measure for 1949-50 only, but was later on continued. Under the scheme, the Government provided financial assistance by way of subsidies and loans for installation of lift irrigation machinery.

The following statement shows the gradual increase in the area irrigated by different sources of water supply in the district between 1949-50 and 1969-70.

Area Irrigated by Sources

Source	(AREA IN '00 HECTARES)		
	1949-50*	1959-60*	1969-70†
Government Canals ..	5	78	572
Tanks	4	22	23
Wells	206	321	701
Other Sources	1	1	8
Total	216	422	1,299

Source : * *Basic Agricultural Statistics*, Directorate of Agriculture, Gujarat State, Ahmadabad, (1968), p. 39.

† Directorate of Agriculture, Gujarat State, Ahmadabad.

It will appear from the above statement that irrigation by wells continues to be the most important source of irrigation. It accounted for about 54 per cent of the total irrigated area in 1969-70. After formation of the State of Gujarat irrigation through Government canals increased tremendously as a result of the irrigation projects put into commission. Canals provided irrigation to 44 per cent of the irrigated area. The tanks provided irrigation to only 2 per cent. Increasing use of oil and electric power is being made by cultivators since very long time in the district for lifting and pumping water from the wells for irrigation purposes. These devices have proved more economical and easy to handle in the long run.

Irrigation facilities available in each of the talukas during 1969-70 are given in the following statement.

STATEMENT IV-3

Sources of Water Supply, 1969-70

Sl. No. 1	Taluka 2	(IN NUMBER)					
		Tubewells				Wells	
		Government Canals 3	Government 4	Private 5	Total 6	Government Masonry 7	Non-masonry 8
District Total	..	17	46	37	83	545	152
1 Anand	..	1	..	23	23	30	..
2 Borsad	..	2	9	..	9	..	..
3 Vadasinor	..	..	..	..	..	29	138
4 Khambhat	..	1	2	..	2	..	..
5 Kapadvanj	..	..	9	..	9	10	..
6 Nadiad	..	3	..	..	..	..	..
7 Mahemadabad	..	2	26	12	38	..	..
8 Matar	..	2	..	..	..	..	..
9 Petlad	..	5	..	..	..	188	..
10 Thasra	..	1	..	2	2	282	14

Sl. No.	Taluka	Wells				Total	Tank ^s	Oil- engines and electric motors
		Private		Total				
		Ma- sonry	Non- ma- sonry	Ma- sonry	Non- ma- sonry			
1	2	9	10	11	12	13	14	15
	District Total	24,911	1,166	25,456	1,318	26,774	16	10,479
1	Anand	1,408	16	1,438	16	1,454	..	1,184
2	Borsad ..	1,043	..	1,043	..	1,043	..	965
3	Vadasinor	1,373	138	1,402	276	1,678	2	770
4	Khambhat	721	..	721	..	721	1	593
5	Kapadvanj	5,679	339	5,695	339	6,034	3	2,785
6	Nadiad	4,089	291	4,089	291	4,380	..	1,288
7	Mahemadabad	2,052	32	2,052	32	2,084	4	1,109
8	Matar ..	4,155	35	4,155	35	4,190	3	588
9	Petlad ..	2,656	144	2,844	144	2,988	..	859
10	Thasra ..	1,735	171	2,017	185	2,202	3	338

Source : Directorate of Agriculture, Gujarat State, Ahmadabad.

The statement indicates that out of 17 Government canals, Petlad has the highest number (5), followed by Nadiad (3). Borsad, Matar and Mahemadabad have 2 canals each while Anand, Khambhat and Thasra have only one canal each. The number of tubewells in the district is 83 of which 46 are Government and 37 are Private. Among Government tubewells, Mahemadabad has the highest number (26), followed by Borsad and Kapadvanj having 9 each. Khambhat has only two. Private tubewells are 23 in Anand, 12 in Mahemadabad and 2 in Thasra. There are 26,774 irrigation wells in the district; of them 25,456 are masonry and only 1,318 non-masonry. In the group of masonry wells Kapadvanj taluka claims the highest number (5,695), followed by Matar (4,155) and Nadiad (4,089). Khambhat has the least number of wells. In the case of non-masonry wells, the Kapadvanj taluka claims the highest number (339), followed by Nadiad (291), Vadasinor (276), etc. Borsad and Khambhat have not a single non-masonry well for irrigation. So far as tanks are concerned, out of 16, Mahemadabad claims four, Kapadvanj, Matar and Thasra have three each followed by Vadasinor two and Khambhat one. The district has nearly 10,500 oil-engines and electric motors. Kapadvanj claims the highest number (2,785), followed by Nadiad (1,288), Anand (1,184), Mahemadabad (1,109), etc. This may be attributed to the large number of wells and progressive farmers. The following statement gives details about gross area irrigated by different sources in each taluka of the district.

STATEMENT IV-4

Gross Area Irrigated by Sources, 1969-70

Sl. No. 1	Taluka 2	(AREA IN HECTARES)					
		Government Canals	Tanks	Tube-wells	Wells	Other Sources	Total
		3	4	5	6	7	8
District Total	..	57,194	2,238	6,333	63,797	338	129,900
1 Anand	..	9,386	..	2,648	17,788	..	29,822
2 Borsad	..	6,458	..	1,083	4,420	..	11,961
3 Vadasinor	..	..	629	..	563	..	1,192
4 Khambhat	..	5,271	161	274	8,280	..	13,986
5 Kapadvanj	..	..	300	1,068	5,632	..	6,990
6 Nadiad	..	6,206	..	..	12,204	..	18,410
7 Mahemadabad	..	4,448	223	1,222	4,675	..	10,568
8 Matar	..	13,460	690	..	2,875	338	17,363
9 Petlad	..	8,993	..	..	5,687	..	14,680
10 Thasra	..	2,972	235	48	1,673	..	4,928

Source : Directorate of Agriculture, Gujarat State, Ahmadabad.

The statement shows that of the 1,29,900 hectares of gross area under irrigation wells covered the largest area (63,797 hectares), followed by Government canals (57,194 hectares), tubewells (6,333 hectares), tanks (2,238 hectares), etc. Anand has the maximum area of 29,822 hectares under irrigation followed by Nadiad (18,410 hectares), Matar (17,363 hectares), etc. Vadasinor has the least irrigated area (1,192 hectares) in the district.

Irrigated Area

Of the total irrigated area of 129,900 hectares in 1969-70, 93,787 hectares or 72 per cent was occupied by the food crops and the remainder, i. e., nearly 28 per cent by the non-food or cash crops. The non-food crops which covered only a negligible irrigated area a few years back have gradually extended over larger area especially after the introduction of the Five Year Plans as can be seen from the comparative statement given below.

STATEMENT IV-5

Area Under Irrigated Crops

(AREA IN 00' HECTARES)				
Sl. No. 1	Crops 2	1949-50* 3	1959-60* 4	1969-70† 5
	<i>Total Food Crops</i>	128	314	938
1	Paddy	35	82	367
2	Wheat	44	64	265
3	Jowar	2	6	15
4	Bajri	14	47	178
5	Other cereals	1	..	4
	<i>Total cereals</i>	96	199	829
	<i>Total pulses</i>	..	..	1
	<i>Total food grains</i>	96	199	830
6	Sugar-cane	..	..	3
7	Chillies	..	..	8
8	Ginger	..	..	2
9	Cumin	..	..	4
10	Other condiments and spices	..	..	13

STATEMENT IV-5—concl'd.

Sl. No. 1	Crops 2	1949-50* 4	1959-60* 5	1969-70† 6
	<i>Total condiments and spices..</i>	..	..	27
11	<i>Total Cotton</i>	..	1	41
12	<i>Total Oil seeds</i>	..	..	2
13	Tobacco	..	81	254
14	Fodder Crops	..	..	64
15	Other non-food crops	88	28	..
	<i>Total area under irrigated Crops ..</i>	216	424	1,299

Source : *Basic Agricultural Statistics, Directorate of Agriculture, Gujarat State, Ahmadabad, (1968), pp. 50-53.

†Directorate of Agriculture, Gujarat State, Ahmadabad.

The principal food crops irrigated in the district are paddy, wheat and bajri, which are grown in all the talukas of the district. Among non-food crops, irrigated tobacco covers larger areas in Anand, Petlad and Borsad talukas while in the case of irrigated cotton, variety V-797 is grown only in Khambhat taluka.

SOIL EROSION

The advent of the monsoon is a blessing to the parched earth, but it also brings problems like floods and soil erosion in its wake. Heavy rains erode the top layer of the soil carrying it down to the nearest stream. This erosion of the soil depletes the fields of their fertility, makes them uneven rendering them difficult to irrigate. Worst of all, water is not retained in the soil for future cultivation. Prevention of soil erosion, therefore, assumes top priority. In the kharif campaign organised by the district Panchayat, schemes of soil conservation are therefore assigned due importance.

The soil conservation activities are undertaken by the Department of Agriculture with a view to preserve moisture and fertility of the land. There are different soil conservation schemes such as contour bunding, terracing, nala-plugging, reclamation of land, etc. Recently new schemes of land levelling and field channels have been undertaken in the district.

For an effective programme of soil conservation one sub-division was started in 1963-64 with headquarters at Borsad. A second one was started in March 1968 with headquarters at Thasra.

The Divisional Soil Conservation Officer is responsible for the administration and execution of the programme of soil conservation work carried out by the sub-division under his charge. The Divisional Soil Conservation Officer acts as a secretary of the District Land Improvement Board and arranges to bring all bunding schemes under the purview of the Bombay Land Improvement Schemes Act, 1942. He accords technical sanction to the plans and estimates for new bunding work costing more than Rs. 10,000 and upto Rs. 20,000. Under this work, the slopy and unlevelled field is bunded to retain and conserve rain-water. The contour bunding not only prevents the fine layer or good soils being washed away but also improves the moisture content of the soil by holding and allowing water to sink deep into the ground. By conservation of water and regulation of the run-off, the top soil which is otherwise washed away, is thus retained. Between 1963-64 and 1967-68, 3,249 hectares of land was brought under contour bunding at a cost of Rs. 4.88 lakhs as detailed below :

Year 1					Area of land bunded in hectares 2	Cost incurred in Rs. 3
1963-64	..	..	..	..	70	7,334
1964-65	..	..	..	..	405	46,856
1965-66	..	..	..	..	1,582	249,700
1966-67	..	..	..	..	760	118,035
1967-68	..	..	..	..	432	60,891
Total	..	..	..	..	3,249	488,816

Source :
Superintending Agricultural Officer, Vadodara.

The Agricultural Support Programme for Kadana Command

The Kadana Irrigation Project on the Mahi river envisages development of irrigation potential for about 6.5 lakhs acres of land comprising seven talukas of this district, viz., Thasra, Nadiad, Anand, Borsad, Petlad, Matar and Khambhat. Since irrigated agriculture plays a dominant role in the programme for achievement of higher productivity, it is proposed to have an area development programme for this area known as the Kadana Command.

Under this programme, a training and education centre will be established at Thasra. This centre will impart training in the use and management of irrigation water and in other improved practices. One more irrigation trial-cum-demonstration farm will be started at Jinej in the Khambhat taluka.

In accordance with the agreement with the World Bank, a supervisory staff consisting of a Joint Director of Agriculture and others will look after the organisation and implementation of the existing and proposed programme of agricultural development. This staff will conduct agricultural research and extension activities including training of farmers and construction of field channels and land levelling.

Construction Work of Field Channels

For full utilisation of irrigation potential of Kadana water, it is necessary to take water to the farmers' fields from permanent outlets through a system of field channels in the command area. Of the total command area of 6.5 lakh acres, field channels already exist in about 1.5 lakh acres.

Land Levelling

For efficient irrigation, land levelling is necessary in 12,141 hectares on the right bank canal in the district. This work will be taken up by the staff of the Agriculture Department.

Kyari Making for Rice Cultivation

The Department of Agriculture proposes to take up *Kyari* (bunded field) making programme in the 12,141 hectares of heavy soil area of Matar and Khambhat talukas.

The entire programme of field channel construction and land levelling will be executed under the provisions of the Bombay Land Improvement Schemes Act, 1942. Initially the State Government will bear the expenditure on the programme, but the amount will be reimbursed from the Land Development Bank, which in turn will recover the same in suitable instalments from the beneficiaries.

Reclamation of Khar Lands

Due to the ingress of sea water into agricultural lands along the coast line, these lands have been rendered completely or partially unfit for cultivation. In order to reclaim and improve such lands, the scheme

contemplates construction of embankments where they are not in existence or repairs to those that are in a dilapidated condition. This will prevent sea water from entering such agricultural lands and thus help increase food production.

Under the Khar Lands Act, which has been applied to the merged State of Khambhat, the Government constituted the Khar Lands Development Board with powers to formulate and execute reclamation schemes for individual units. The cost of such reclamation is shared by the Government and the land holders.

In this district, about 40,470 hectares of land is under the effects of salinity, particularly in the talukas of Khambhat, Matar, Mahemadabad and Thasra. Of this, the total area of 283 hectares was reclaimed till 1968-69 at a total cost of Rs. 4.97 lakhs, in the Khambhat taluka.

Kotar Reclamation

Kotars are located on both banks of the Mahi river on deep alluvial soil. So far, there has not been any detailed survey to determine the exact boundaries and areas of these *kotars*. However, as a result of ocular survey carried out from time to time and with the help of aerial and ground surveys the extent of *kotar* lands is roughly estimated at 46,244 hectares. The *kotars* are not stable. They advance in geometrical progression and invade adjoining fertile agricultural lands. If they are not checked in time, they may soon sound the death knell of the nearby fertile fields. Moreover, little precipitation runs rapidly along the slope carrying with it fertile soil, resulting in floods with serious consequences. Soon after the monsoon is over, the *nala* beds become dry and the water level in the wells goes down thus reducing considerably the supply for irrigation and drinking purposes.

The problem of *kotar* menace received recognition for the first time in the early beginning of the present century. However, no one volunteered to solve this problem. In 1955, the Government of India started a Research and Demonstration Centre at Vasad. This centre did an excellent pioneering work and demonstrated that with suitable tools and techniques, it is possible to tackle this difficult problem.

In 1968, the Government introduced the *Kotar* Reclamation and Afforestation Scheme. This scheme aims at stabilizing marginal land by controlling ravine so as to stop further extension of the *kotar* and to conserve good fertile land. The *kotar* lands lying waste and unproductive are reclaimed and made productive for forest, agriculture, horticulture

and grass land. The progress of this scheme is shown in the following statement.

STATEMENT IV-6

Kotar Reclamation

Year 1					Achievement in hectares 2	Expenditure in Rs. 3
1968-69	..	..	..	..	76	150,140
1969-70	..	..	..	..	285	312,980
1970-71	..	..	..	..	723	742,592
1971-72	..	..	..	..	1,289	1,280,509
1972-73	..	..	..	..	1,804	1,386,451
1973-74 (upto August)	..	..	..	..	534	451,126
Total	..	..	..	..	4,711	4,323,798

Source : Divisional Soil Conservation Officer (*Kotar*), Vadodara.

SOILS

The soils of the district can be classified into six main types : the *goradu* (gravelly), black, medium black, black cotton, sandy and rocky types. The *goradu* type is mainly to be found in the *Charotar* tract comprising Anand, Borsad, Nadiad, Petlad and parts of Thasra and Khambhat talukas. The black type of the Bhal tract is mainly to be found in Khambhat and Matar talukas while the medium black type is confined to the Mahemadabad taluka. The rich black type suitable for cotton is found in parts of Kapadvanj, Vadasinor and Thasra talukas. The sandy type is concentrated in the Kapadvanj and Mahemadabad talukas. Finally, the rocky type is to be found in Vadasinor and parts of Kapadvanj taluka.

The Mahi Bhatha Collective Co-operative Farming Society, Gambhira (Borsad taluka)—The river Mahi takes a steep curve and forms a peninsula on the border of the Borsad taluka of the district. This peninsula once contained large areas of fertile *bhatha* land and grew important crops like tobacco, pearl millet, oilseeds and pulses. Part of this area was privately owned by cultivators, and the remainder by the Government. The Government used to auction out its land annually for cultivation and realised about Rs. 175 per acre. However, heavy and repeated floods in the river Mahi during 1927, 1941, 1949 and 1973 washed away *bhatha* land and deposited deep layers of sand thus rendering a large portion of the land useless for cultivation. As a result, a large number of cultivators in this area became landless.

In 1951, to help the distressed cultivators, the Government granted 246 acres of land to 176 cultivators from Gambhira, Kothiakhad, Nanisherdi and other villages situated in the area. This helped them but little since most of the cultivators were poor and resourceless. Moreover, some of the lands were saltish and yielded nothing. The Government efforts to rehabilitate these farmers by giving them land thus failed.

To solve these problems, the Mahi Bhatha Collective Co-operative Farming Society was organised in the year 1953. This society set an example that a co-operative farming brings about prosperity even to economically backward people of the district. The society has 209 members cultivating 82 hectares. For purpose of cultivation the members were grouped into 17 groups each consisting of 5 to 18 members and cultivating a block varying in area from 6 to 19 acres, the average number of members per group being 12. The average area per block also stood at 12 acres. The average area cultivated per member in different groups varies from 0.76 to 1.36 acres with the overall average of 0.97 acre. This variation was due to the difference in soil productivity.

The factors which contributed to the success of this scheme were the foolproof organisation of the society based on group system, the spirit of co-operation and the unflinching urge among the members to improve their lot. Moreover, tobacco crop which the society has been growing from its very inception, is well suited to the soil of the society. It proved to be a very high yielding variety.

CROPPING PATTERN

The total reporting area of the district is 679,700 hectares of which about 518,300 hectares are under cultivation (1969-70). About 53,000 hectares are under multiple cropping. The main crops are paddy, *bajri*, wheat, cotton and tobacco. Of these, the last two are grown for better economic returns.

The cropping pattern, which existed before the turn of the century, has been described in the former Gazetteer¹ as under :

"Of 362,222 acres the total area of occupied land, 20,754 acres or 5.73 per cent were in the year 1876-77 fallow or under grass. Of the 341,468 acres under cultivation, grain crops occupied 301,709 or 88.37 per cent, of which 123,223 acres were under *bajri* *Penicillaria spicata* ;

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*. Vol. III, *Kaira and Panch Mahals*, Bombay, (1879), pp. 45-46.

58,898 under rice, *dangar*, *Oryza sativa* ; 83,845 under *juvar*, *Sorghum vulgare* ; 36,544 under *Kodra* *Paspalum scrobiculatum* ; 29,261 under *bavto*, *Panicum frumentaceum*, 11,251 under wheat, *Ghau* *Triticum aestivum* ; 3,231 under barley *jav*, *Hordeum hexastichon* ; and 456 under miscellaneous cereals comprising maize, *makai*, *Zea mays*, *kang*, *Panicum italicum*, and *rajagro*, *Amarantus paniculatus*. Pulses occupied 27,082 acres or 7.93 per cent, of which 8,255 acres were under *math*, *Phaseolus aconitifolius* ; 6,825 under *tuver*, *Cajanus indicus* ; 5,148 under gram, *Chana*, *Cicer arietinum* ; 2,678 under *mag*, *Phaseolus radiatus* ; 1,933 under *guvar*, *Cyamopsis psoraloides* ; and 2,243 under miscellaneous pulses, comprising *adad*, *phaseolus mungo*, *chola*, *Vigna catieng* and *val*, *Dolichos lablab*. Oil seeds occupied 3,419 acres or one per cent, of which 980 acres were under gingelly oil seed, *tal*, *Sesamum indicum* ; two acres under rape seed, *sarsav*, *Brassica napus* ; and 2,437 under other oil seeds, details of which are not available. Fibres occupied 4,239 or 1.24 per cent, of which 4,122 acres were under cotton, *kapas*, *Gossypium herbaceum* ; and 117 under Bombay hemp, *san*, *Crotalaria juncea*. Miscellaneous crops occupied 19,620 acres or 5.74 per cent, of which 10,161 acres were under tobacco *tambaku*, *Nicotiana tabacum* ; 3,051 under safflower, *kusumbo*, *Carthamus tinctorius* ; 2216 under sugarcane, *serdi*, *Saccharum officinarum* ; 1,305 under cummin seed, *jiru*, *Cuminum cyminum* ; 536 under indigo, *gali*, *Indigofera tinctoria* ; 118 under poppy, *Khaskhas*, *Papaver Somniferum* ; and 2,233 under miscellaneous vegetables and fruits."

The cropping pattern, which existed in the former Khambhat State is described below.

"The crops, the same as those grown in the neighbouring parts of Kaira, are the ordinary millets and pulses, rice, wheat, tobacco and a little indigo. The cultivation of indigo has of late greatly fallen off. Hindu peasants dislike growing it, because in making the dye much insect life is lost while the Muhammadans, with whom this objection has less force, do not till land enough to raise any large quantity. Sown towards the end of the hot season, indigo is harvested in August before coming to flower. After being cut, the crop is stowed in large vats, generally set in a corner of the field. The vats are filled with water and the plants left to soak for one night and in the morning, to draw out any remaining juice, the leaves are beaten with wooden clubs. The water is then drained off, the dye remaining at the bottom of the vat. Green-looking at first, the sediment on exposure soon gains the true indigo hue. Mordants are sometimes used to help to precipitate the dye"¹.

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*. Vol. VI, Rewa Kantha, Narukot, Cambay and Surat States, Bombay, 1880, p. 183.

About four decades later, the *Statistical Atlas of the Bombay Presidency*, (1925) observed as under :

"Bajri is the principal crop and the staple grain food. It occupies an area of nearly one and a half lakhs of acres and is grown in all the lighter soils with a mixture of *math*, *mug* and other pulses. *Jowar* is grown to a much less extent (occupying about forty to fifty thousand acres) but is important as fodder. Rice is comparatively a large crop and covers an area of about sixty thousand acres. The best rice is raised in the Khari villages of Matar where the black soil fields are embanked and mostly irrigated from the Khari Canal. In other parts rice of an inferior quality is, without watering, grown in low lying lands of black or medium *besar* soil. Coarse grains, *Kodra*, and *bavto* are grown chiefly by the poorer cultivators and constitute with *bajri* their staple food. Wheat is not an extensive crop being cultivated only on about ten thousand acres. Tobacco is the most valuable article of produce in the district. In a normal year it occupies nearly thirty thousand acres, mostly in the Charotar tract, the central part of the district. Castor seed and sesamum are the only oil-seeds grown and occupy about ten thousand acres each. The cultivation of cotton has considerably extended recently and the crop now occupies about seventy thousand acres and is one of the most valuable crops of the district. Garden cultivation is extensive."

The following are the figures of area under different crops between the years 1880-81 and 1940-41.

STATEMENT IV-7

Area under Different Crops

(AREA IN ACRES)

Particulars 1	1880-81 ¹ 2	1890-91 ¹ 3	1900-01 ¹ 4	1910-11 ¹ 5	1921-22 ¹ 6	1930-31 ² 7	1940-41 ² 8
Cereals ..	321,334	579,265	466,421	..	840,320	541,048*	454,767
Jowar ..	35,102	55,912	53,966	55,166	48,842	40,535(@)	49,887(@)
Bajri ..	107,043	224,093	240,924	160,523	204,042	137,128	187,128
Paddy ..	66,614	104,779	86,707	75,346	74,409	107,844	73,208
Wheat ..	15,608	12,470	11,431	12,272	16,881	16,241	7,846
Kodra or Maize ..	58,142	111,947	62,788	95,542	76,523	1,565	3,828
Nachni, Nagli or Ragi	30,567	59,100	31,000	58,010	48,197	72,714	51,681
Other cereals ..	8,258	10,964	9,605	7,033	11,426	158,415	81,189

(@) Includes area under fodder *Jowar*.

* Total area under cereals and pulses.

1. *Statistical Atlas of the Bombay Presidency*, Director of Agriculture, Bombay, (1925), p. 51.

STATEMENT IV-7—concl'd.

Particulars 1	1880-81 ¹ 2	1890-91 ¹ 3	1900-01 ¹ 4	1910-11 ¹ 5	1921-22 ¹ 6	1930-31 ² 7	1940-41 ² 8
Pulses ..	36,786	83,774	45,416	..	60,391	..	74,354
Tur ..	11,092	26,330	6,206	17,947	21,896	..	30,406
Gram ..	5,322	4,609	4,918	7,554	15,278	6,606	1,164
Other pulses ..	20,372	52,835	34,292	50,402	23,217	..	42,784
Tobacco ..	10,802	21,561	18,826	23,279	43,960	48,283	87,082
Sugarcane ..	856	449	12	182	119	64	98
Oilseeds (not forest)	3,490	14,610	13,332	..	18,661	43,491	46,164
Sesamum (Til) ..	1,824	7,374	7,860	10,342	7,252	10,010	13,67
Linseed ..	..	325	121	25	23	..	..
Other Oilseeds ..	1,666	6,911	5,351	13,841	11,376	33,481	32,552
Fibres ..	3,729	13,740	2,098	..	45,659	72,454	96,320
Cotton ..	3,041	11,273	1,585	20,356	41,647	68,019	92,518
Other Fibres ..	688	2,467	513	5,227	4,012	4,435	3,802
Orchard and Garden produce. ..	833	6,484	4,599	6,432	84,713	61,155	74,695
Condiments and spices	2,942	3,740	5,924	6,733	2,480	6,264	4,145
Dyes (not forest) ..	1,703	1,128	1,808	615	571	..	..
Starches ..	..	..	325	..	29	..	..
Drugs and Narcotics other than Tobacco..	150	..	..	..	..	..	..
Miscellaneous ..	..	44	37	27	79,300	68,474	27,982
Total crops ..	382,625	724,795	558,798	626,884	816,193	841,233	865,60
Less-area twice cropped	19,201	19,593	18,148	18,413	21,757	17,955	16,870
Actual area cropped	363,424	705,202	540,650	608,471	794,436	823,278	848,737

Source :

1. *Gazetteer of the Bombay Presidency*, Volume III-B, Kaira and Panch Mahals, p. 7.
2. *Statistical Atlas of Bombay State*, Bureau of Economics and Statistics, Bombay, (1950), pp. 173-179.

The above figures relate to the district as it existed before the integration of states. As the statement shows, area under all crops registered a steep increase from 382,625 acres in 1880-81 to 865,607 acres in 1940-41. The area under cereals was fluctuating while that under pulses more than doubled. Among cash crops the area under tobacco increased from 10,000 acres to 87,000 acres during that period. The area under oilseeds increased from 3,000 acres to 46,000 acres. The area, under cotton was only 3,000 acres in 1880-81 which increased to 92,000 acres in 1940-41.

(Bk) H-50—33 (Lino)

The following statement gives figures of area under principal crops for the decennial period 1949-50, 1959-60 and 1969-70.

STATEMENT IV-8

Area under Principal Crops

(In '00 HECTARES)

Sl. No.	Crops	1949-50*	1959-60*	1969-70†
1	2	3	4	5
1	Rice	558	825	817
2	Jowar	171	93	163
3	Bajri	1,298	776	1,704
4	Maize	62	55	106
5	Ragi	272	195	32
6	Wheat	366	487	460
7	Other Cereals	467	348	268
	<i>Total Cereals</i>	<i>3,194</i>	<i>2,779</i>	<i>3,579</i>
8	Gram	10	84	11
9	Tur	155	130	128
10	Other Pulses	226	157	114
	<i>Total Pulses</i>	<i>391</i>	<i>380</i>	<i>253</i>
	<i>Total food grains</i>	<i>3,585</i>	<i>3,159</i>	<i>3,832</i>
11	Sugar-cane	1	..	2
12	Chillies	N. A.	10	8
13	Potatoes	3	6	11
14	Groundnut	103	454	149
15	Sesamum	66	48	116
16	Castor	29	14	14
17	Other oilseeds	..	..	2
	<i>Total oilseeds</i>	<i>288</i>	<i>516</i>	<i>281</i>
18	Cotton	313	496	539
19	Tobacco	318	716	670

N. A. = Not available.

Source : *Statistics of Area, Production and Yield per Acre of Principal Crops in Gujarat State for the period, 1949-50 to 1963-64, Directorate of Agriculture, Ahmadabad, (1965), pp. 26-165.

† Directorate of Agriculture, Gujarat State, Ahmadabad.

The statement shows that the acreage under foodgrains has slightly increased during the over-all two decades of planning. In respect of individual crops, *bajri* has registered the highest increase followed by rice, wheat and maize. However, the area under *jowar* and *ragi* has declined during the same period. Similar is the case with pulses. Cultivation of potatoes increased in recent years from 300 hectares in 1949-50 to 1100 hectares in 1969-70.

There has been a considerable increase in the cultivation of non-food or cash crops, mainly tobacco and cotton. The area under tobacco has more than doubled; that under cotton has also increased, though to a lesser extent, under the impact of intensive programmes implemented in this district. Groundnut which increased from 19,300 hectares to 45,400 hectares between 1949-50 and 1959-60 decreased to 14,900 hectares in 1969-70.

The total cultivated area in 1969-70, was 5,71,300 hectares of which the food crops claimed 69 per cent and the non-food crops 31 per cent. There is thus a preponderance of food crops over the non-food crops.

OUT-TURN OF CROPS

The following statement gives a comparative picture about the out-turn of principal crops in the district in 1949-50, 1959-60 and 1969-70.

STATEMENT IV-9

Out-turn of Principal Crops

(In '00 TONNES)

Sl. No.	Crops	1949-50*	1959-60*	1969-70†
1	2	3	4	5
1	Rice	378	728	998
2	Jowar	32	23	58
3	Bajri	922	312	2,295
4	Maize	52	25	72
5	Ragi	270	198	35
6	Wheat	152	124	725
7	Other Cereals	453	297	203
	<i>Total Cereals</i>	<i>2,259</i>	<i>1,707</i>	<i>4,386</i>
8	Gram	4	41	5
9	Tur	65	68	55
10	Other Pulses	73	30	20

STATEMENT IV-9--concl'd.

Sl. No.	Crops	1949-50*	1959-60*	1969-70†
1	2	3	4	5
	<i>Total Pulses</i>	 142	139	80
	<i>Total Food grains</i>	 2,401	1,846	4,466
11	Sugar-cane	 3	1	15
12	Chillies	 N.A.	4	5
13	Potatoes	 30	28	307
14	Groundnut	 144	349	95
15	Sesamum	 18	10	07
16	Castor	 10	5	5
17	Other oilseeds	.. .. ..	..	1
	<i>Total Oilseeds</i>	 172	364	168
18	Cotton	 292	292	653
19	Tobacco	 257	419	731

N. A.--Not available

Note : 1. Out-turn of sugar-cane is recorded in terms of '00 tonnes of gur.

2. Out-turn of cotton is recorded in terms of bales of 180 kg., each.

Source :

* *Statistics of Area, Production and yield per Acre of Principal Crops in Gujarat State for the Period 1949-50 to 1963-64*, Director of Agriculture, Ahmadabad, (1965), pp. 27-169.

† Directorate of Agriculture, Gujarat State, Ahmadabad.

The principal crops which have registered a note-worthy increase in their out-turn are *bajri*, rice, wheat *jowar* and maize. The out-turn of *ragi* records considerable fall during the last two decades. In the case of pulses, the total out-turn has declined due to the corresponding fall under their acreage. In recent years the out-turn of potatoes has increased tremendously. On the whole the food grains production is nearly doubled between 1949-50 and 1969-70.

Among cash crops, substantial increase has been registered in the out-turn of tobacco and cotton. Oil-seeds have registered a fall in production.

The yield per hectare of the principal crops during 1969-70 is shown in the following statement.

STATEMENT IV-10

Yield per hectare, 1969-70

Sl. No.	Name of Crop	Kg.
1	2	3
1	Paddy	1,121
2	<i>Jowar</i> Kharif	546
3	<i>Jowar</i> Rabi	738
4	<i>Bajri</i>	1,346
5	Maize	682
6	<i>Ragi</i>	684
7	<i>Kodra</i>	763
8	Wheat	1546
9	<i>Banti</i>	408
10	Common millet	834
11	Gram	469
12	<i>Tur</i>	425
13	Groundnut	642
14	Castor	339
15	Sesamum	576
16	Rape and Mustard	500
17	Cotton	218
18	Sugar-cane	6,187
19	Tobacco	1,092
20	Potato	28,608
21	Chillies	661

Source :

Director of Agriculture, Gujarat State, Ahmadabad.

METHODS OF CULTIVATION

As the agricultural land available for cultivation is limited, there is little scope of increasing the net cultivated area. Thus methods of intensive cultivation have assumed greater importance. Intensive cultivation consists of using the agricultural inputs in ideal doses and following scientific methods in sowing, manuring, irrigation, etc. In view of introduction of high yielding varieties programme, there has been considerable increase in the outturn per acre. Use of these varieties has indirectly motivated the farmers to use more fertilisers and pesticides. The following paragraphs describe the methods of cultivation of the important crops in the district.

Cereals

Bajri (*Pennisetum typhoides*) During the time when the former Gazetteer was written, *Bajri* occupied the first place covering 123,223 acres or 36.08 per cent of the total cultivated area in 1876-77. It has retained the same place even now occupying 170,400 hectares or 29.83 per cent of the total area under crops in 1969-70. To obtain higher yields, the cultivators have adopted intensive cultivation in hybrid *Bajri* No. 3 which grows in Kharif as well as in summer. The method of cultivation of this important crop is simple. After harvesting of the previous crop, the land is deeply ploughed 2 to 3 times with 10 cart-loads of farm yard manure. The seed rate is 3½ kg. per hectare. As the seeds are small in size, to facilitate easy sowing, sand is used in sowing operation. The seed is sown at a distance of 45 centimetres between the two rows at the depth of 3 to 4 centimetres. The sowing operation starts after the first rainfall. Chemical fertilisers are applied to this crop whenever required. Generally, irrigation is not required for Kharif crop but if there is no rain in September, irrigation becomes necessary. For the summer crop, first irrigation is given after 21 days of sowing. Thereafter the crop is irrigated 7 to 8 times at an interval of 8 to 10 days. Weeding is done two to three times. Harvesting takes place in September or October.

Paddy or Rice (*Oryza-Sativa*) At the time when the former Gazetteer was written, paddy occupied the third place covering an area of 58,898 acres or 17.24 per cent of the whole tillage area in 1876-77. The best rice was raised in the Matar sub-division.

In 1969-70, nearly 81,700 hectares were covered under this crop. Improved varieties, Sukhvel-20, I. R. 8, Padma and Jaya are suitable for goradu soil while Jirasal-280 is suitable for black soil. The seed rate is 12 kg. per hectare for Sukhvel-20, I. R. 8, Padma and Jaya.

Before the onset of monsoon farm yard manure is applied at the rate of 25 cart-loads per hectare. With the advent of monsoon, the land is deeply ploughed twice or thrice with an iron plough. The seeds grown in the seedbeds are then transplanted. After transplanting, two or three interculturings are done at an interval of 10 days. Weeding is done as and when required. Harvesting is carried out in October-November. Sukhvel-20 becomes ready for harvest after about 110 days, I. R.-8 and Jaya after 128 days, Masuri after 135 days and Padma after 100 days.

Their outturn varies from 4,000 kg. per hectare in case of Sukhvel-20 to about 7,000 kg. per hectare in case of Jaya.

Wheat (*Triticum aestivum*)—Wheat was a crop of little importance in the past when people preferred to eat *Bajri* and *Jowar*. It was

grown in 11,251 acres in 1876. At present it occupies about 1,17,000 acres or 46,900 hectares. It is sown in October-November and reaped in March. In the past, three varieties were grown : *Daudkhani* or *dudhia*, a high quality wheat, smooth-grained and white; *dhola* or *katha* a low quality wheat, hard and brown; and a medium variety *dhalia* or *vajia*. The high class *dudhia* wheat was grown only in black soil. For a good harvest, the field was kept fallow both before and after the wheat crop. The local wheat produce was not enough for the local demand. Supplies were therefore brought from Ahmadabad, Malva and Bombay.

Wheat is now an important crop of the district. Varieties such as Sonalika and Kalyan Sona are grown as irrigated crops while Arnej-206 is grown as a dry crop.

After the Kharif crop is harvested the land is deeply ploughed with Gandhi Alen hoe. In virgin land green manures are applied. The seed rate is 100 kg. per hectare and it is treated with Capton or Thiram at the rate of 250 grams per 100 kg. seeds.

The sowing starts in November keeping a distance of 23 centimetres between the two rows. Before sowing, full doze of phosphoric acid and Potash and half a doze of nitrogen is given. The remaining half of nitrogen is given at the time of the first manuring. In the absence of green manuring, 15 to 20 cart loads of farm yard manure is applied per hectare. After the first irrigation, middle ploughing is done to obtain better growth.

The outturn of wheat was 72,500 tonnes during 1969-70.

Jowar and other cereals—In 1969-70, Jowar was grown in 16,300 hectares, and its outturn was 5,800 tonnes. The method of its cultivation is similar to that of *Bajri*. Kodra, Maize and other cereals are the staple food of the poorer classes. In 1969-70, they occupied 25,600 hectares. 10,600 hectares and 5,200 hectares respectively.

Pulses—Pulses occupied 25,300 hectares, *tur* 12,800 hectares, *math* 4,400 hectares, *mag* 3,200 hectares, *chola* 1,900 hectares, gram 1,100 hectares and black gram 1,000 hectares.

Sugarcane—At the time when the former Gazetteer was written sugarcane, Sherdi (*Saccharum Officinarum*) occupied 2,216 acres. Two varieties of sugarcane were grown, one black or dark-purple and the other white. Grown on light, *gorat* and medium *besar* soils, sugarcane requires abundant manure and good water.

In 1969-70, sugarcane occupied 200 hectares and had an outturn of 1,500 tonnes. Under the impact of the co-operative movement, the Charotar Co-operative Sugar Industries Ltd., was established in 1968 at Palej in

Petlad taluka, at a cost of Rs. 2.11 crores. In 1970-71, it produced 91,672 sacks of sugar.

Condiments and Spices—Of the total area of 2,700 hectares under condiments and spices in 1969-70, fennel occupied 1,200 hectares and chillies 800 hectares.

Fruit Crops—Fruit crops occupied a total of 3,700 hectares in the district. Among citrus fruits, sour lime is the important crop in the district occupying 1,700 hectares in 1969-70. So far as fresh fruits are concerned, banana covered the largest area—700 hectares, followed by mango and *Papaya* which covered 400 hectares each and guava which accounted for 300 hectares.

Vegetables—Vegetables occupied 4,500 hectares in 1969-70. The main vegetables grown are potatoes, brinjals and sweet potatoes.

Potato—During 1969-70, potato cultivation was recorded in 1,100 hectares with an outturn of 30,700 tonnes. Sandy, *goradu* and alluvial types of soils are suitable for this crop. The improved varieties grown in the district are *kufri sinduri*, *kufri chatkari*, *kufri chandramukhi* and *kufri jyoti*.

Potatoes are sown in Rabi season. Fertiliser comprising 375 kg. of Ammonium Sulphate, or Calcium Ammonium Nitrate. 325 kg. of Super Phosphate and 250 to 300 kg. of Sulphate of Potash are applied as a primary doze. Germination starts after 21 days when the first irrigation is given. The crop is irrigated four times thereafter at an interval of 8 to 10 days. The remaining doze of 375 kg. Ammonium Sulphate is then applied. Interculturing is done to remove the weeds during the initial period of 45 days. The production is usually of the order of 20 to 25 tonnes per hectare.

Oilseeds—Oilseeds were grown in 28,100 hectares in 1969-70; of these edibles oils covered 26,700 hectares while the non edibles accounted for 1,400 hectares. Among edibles, groundnut and sesamum covered 14,900 and 11,600 hectares respectively. Among non-edibles, castor was cultivated in 1,400 hectares in 1969-70.

Cash Crops

Emergence of cash or money crops on extensive area is a recent phenomenon. In the Survey Report on the Thasra Taluka, the Superintendent of Survey wrote in 1942 :

“The striking feature of the present distribution is the great increase in the area under cotton and tobacco and the appearance of

groundnuts. These three crops which are important money crops cover nearly 34 per cent of the total cropped area now while the total area under these crops at the last revision was hardly 2 per cent. The extension of money crops has led to the reduction in the area under rice and *bajri* which covered about 50 per cent of the cropped area at the last revision but now cover only 29 per cent of the total cropped area. The change is partly due to the greater profits realised from cotton, tobacco and groundnuts and partly due to irregular rainfall in recent years which has led to extension of cotton to paddy areas where the storm water could be easily drained off. The area under money crops (tobacco and groundnuts) has increased at the cost of *bajri* which does not pay well.”

Cotton—The important cash crops of the district are cotton and tobacco. Cotton occupied 53,900 hectares in 1969-70. Digvijay, hybrid-4 and Gujarat-67, the most popular varieties accounted for nearly 85 per cent of the total acreage under cotton. The out-turn of cotton was 65,300 bales, each of 180 kg.

At the time when the old *Gazetteer*¹ was written, cotton was cultivated only to a limited extent *i. e.*, 3,812 acres in 1872. Cotton cultivated in the past was of poor quality. Several attempts were made to improve it. In 1815 under the supervision of the Civil Surgeon Mr. Gilders, about 2,400 acres were sown with a variety called Bourbon seed. But most of the crop failed. The failure was supposed to be mainly due to want of moisture. Some experiments in growing Egyptian cotton were attempted in 1817, 1839 and 1842 with limited results. In the later part of the 19th* century, mostly local shrub was grown.

During the present century, more attention is paid to the improved variety of cotton, namely hybrid-4 which gives better returns to the farmers. It requires high doses of fertilisers and irrigation. Its sowing starts in June and lasts till the middle of July. The seed rate is 2.5 kg., per hectare. Interculturing is done 5 to 6 times. Irrigation is given at an interval of 20 to 25 days in *goradu*, *besar*, medium black and black soil. In other soils the interval is of 12 to 15 days. The crop is harvested in February or March. Cotton is grown in all the talukas but mainly concentrated in Kapadvanj, Borsad, Anand, Thasra and Vadasinor talukas.

Tobacco—Tobacco is another important cash crop since the past, as the Charotar tract is very rich and fertile for its cultivation. *Bidi* tobacco crop is mainly cultivated in Anand, Borsad, Nadiad, Petlad, Thasra and parts of Khamhat, Vadasinor and Kapadvanj talukas. According to the

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol.III, Kaira and PanchMahals, Bombay, (1879) p. 50-52.

former *Gazetteer* (1879), Kheda tobacco was not only the most valuable article of produce in the district, but was the finest tobacco grown in western India. The central part of the Kheda district, the tract known as the *charotar*, was the headquarters of tobacco cultivation.

During the past, only local varieties like Keliu, Dharmajiu, Calcutti, Saijpuria, etc., were grown by cultivators. After the establishment of the Bidi Tobacco Research Station at Anand, the improved varieties like K-20, Anand-2, Anand-119 and Anand-23 are grown.

Marketing of this crop is difficult as compared to other crops. Cultivators are therefore tempted to grow other high-yielding and hybrid varieties of food and non-food crops. Area under this crop has, for this reason, declined from 67,000 hectares in 1969-70 to 60,000 hectares in 1972-73.

Tobacco is grown either with or without water. The water need not be perfectly sweet. In fact, a slight brackishness is said to improve the quality of the crop. When irrigated the crop is called *pit* or *watered*; when not irrigated *korat* or *dry*. A *watered* field yields twice as large a crop as a *dry* field. At the same time the leaf of the irrigated plant is coarser and not more than one-half as valuable. Light or *goradu* soil is best suited for the growth of the irrigated crop.

The seeds are sown during the second fortnight of June. Seed-beds are prepared in July-August. Transplanting is carried out in August-September. The land is ploughed twice or thrice for the seed bed. For sowing the tobacco seed, 15 kg., of farm yard manure is given per bed. Thereafter, water is sprinkled with water can at an interval of every two days. After 30 to 40 days the plants are transplanted in the field.

Deen ploughing is done 5 to 6 times by an iron plough or 2 to 3 times by a tractor. Nitrogenous and Phosphatic fertilisers are applied according to the time schedule. The crop is harvested after about five months. The yield is 2,000 to 2,250 kg., per hectare.

Indigo—At the time when the former *Gazetteer* was written Indigo, *gali* (*Indigo-fera tinctoria*) covered only 536 acres: 513 in Borsad and 23 in Anand.

In the sixteenth and seventeenth centuries, indigo, partly of local growth and partly brought from upper India, was one of the chief exports from Gujarat. During the greater part of the eighteenth century, the indigo of the West-Indian islands gained an almost complete monopoly of the European markets. Towards the close of the century, the East Indian produce again rose to favour. But nearly the whole of it was grown in Bengal. In

Gujarat, in 1777, the cultivation chiefly for local use would seem to have been on a very considerable scale. But in the early part of the 19th century it again fell off, and in 1827 had almost altogether ceased. At that time prices were high and the demand was strong, and Captain Cruikshank, then engaged in surveying northern Gujarat, was of opinion that by the help of a little special encouragement the people of Kheda might, especially in Petlad, be induced to grow indigo. The attempt failed, and indigo has never again become a product of any importance.

KHARIF AND RABI CROPS

Crops grown in the district fall into three main categories, viz., the Kharif, the Rabi and the hot weather. The Kharif or rain-fed crops are grown in monsoon after the first rainfall in June-July and harvested usually in October-November. The Rabi or irrigated crops are usually sown in October while hot weather crop is sown in February-March and harvested in May or June.

The main Kharif crops in the district are paddy, *bajri*, tobacco, cotton, groundnut, etc. The main Rabi crops include wheat, gram and potato, while hot weather crops are *bajri*, *chola*, green gram etc. The acreage under these crops varies from year to year depending upon the season and irrigation facilities.

CROP CALENDAR

The calendar of sowing and harvesting operation in the district is given below :

Name of Crop 1	Sowing Period 2	Harvesting period 3
1. Rice	.. June-July	October-November
2. Wheat	.. November-December	March-April
3. <i>Bajri</i>	.. June-July	September-October
4. Cotton	.. —do—	February-March
5. Groundnut	.. —do—	October-November
6. Gram	.. October-November	February-March
7. Potato	.. —do—	—do—
8. <i>Bajri</i> (Hot Weather)	.. February-March	May-June

CROP ROTATION

After the introduction of high-yielding and hybrid crops, the farmers are able to grow multiple crops where irrigation facilities are available. The rotation of crops followed in this district is as under :

1. *Bajri*-Wheat, 2. *Bajri*-Mustard, 3. Paddy-Wheat, 4. Paddy-Gram,
5. *Bajri*-Wheat-Potato, 6. *Kodra*-Wheat-*Choli*, 7. Tobacco-*Bajri*-Mug,
8. Maize-Gram, 9. Cotton-*Chola*.

PROGRESS OF SCIENTIFIC AGRICULTURE

The provision of irrigation facilities enables the farmers to switch over to a multiple cropping pattern in place of the traditional single cropping method. Modernization of agriculture through improved farm techniques and mechanisation assumes significant importance in the economic conditions prevailing at present. Farm mechanisation helps in accelerating the pace of development of agriculture. The farmer is able to undertake deep ploughing and improved agricultural practices under intensive cultivation.

Scientific methods of farming includes utilisation of improved seeds evolved through agricultural research and use of modern implements, chemical fertilisers, etc.

Agricultural Implements

For agricultural operations like ploughing harrowing and interculturing local indigenous implements were used in the past. These included Charotar plough, Charotar harrow utilised for groundnut harvesting, Charotar seed drill and Charotar hoe.

After the introduction of the high-yielding varieties in the district, cultivators are inclined to adopt modern and improved implements. The implements in use at present are tractors, iron ploughs locally named as Thakor and Jamindar plough, improved Anand hoe, improved Karvan utilised for groundnut harvesting, improved Anand harrow, paddy weeder winnowing fan, etc. The use of electric pumps and oil-engines is also a recent phenomenon.

The following statement compares the important implements in use in the district according to the Livestock Censuses of 1951, 1961 and 1972.

STATEMENT IV-11**Agricultural Implements**

Name of the Implements				1951*	1961*	1972†
1				2	3	4
Ploughs	..	..	..	115,691	134,233	115,843
(i) Wooden	..	..	..	114,998	131,654	108,816
(ii) Iron	..	..	..	693	2,579	7,027
Carts	..	..	..	53,645	58,576	50,827

STATEMENT IV-11—concl'd.

Name of the Implements				1951*	1961*	1972†
1				2	3	4
Sugar-cane crushers	..	..	..	120	527	2,845
(i) Power	..	..	..	4	231	114
(ii) Bullocks	..	..	..	116	296	2,731
Oil-engines	..	..	..	2,055	2,436	8,083
Electric pumps	..	..	..	47	870	3,186
Tractors	..	..	..	117	396	1,760
Oil <i>Ghanis</i>	..	..	..	836	386	N. A.
Persian Wheels or <i>Rahats</i>	..	..	..	N. A.	649	264

Note : (i) N. A. = Not available.

(ii) Data of 1972 are provisional.

Source :

* *District Census Handbook* 1961, Kaira District, p. 199.

† Director, Bureau of Economics and Statistics, Government of Gujarat, Ahmadabad.

It will appear from the statement that the use of improved implements like iron ploughs, oil-engines, electric pumps and tractors has increased steadily and considerably under the impact of the Five Year Plans. Of late, the use of the traditional wooden plough has comparatively declined. The number of wooden plough was reported 5,803 in 1880-81 which increased to 45,613 in 1900-01 and 57,710 in 1919-20. It again increased to 114,998 in 1951 and ultimately to 131,654 in 1961. Due to the introduction of the iron ploughs the use of the wooden ploughs declined to 108,816 in 1972. The iron ploughs have increased very rapidly. The number of iron ploughs in use in 1951 was only 693 but it increased considerably thereafter and stood at 2,579 in 1961 and 7,027 in 1972. Despite the use of motor trucks and other mechanised vehicles, the wooden carts still hold the fort. Their number was 27,719 in 1880-81 which declined to 23,204 in 1900-01. It again increased to 26,695 in 1925 and 31,172 in 1940. The number increased to 53,645 in 1951 and 58,576 in 1961. However, in 1972, the number of carts came down to 50,827. Sugar-cane crushers increased rapidly from 120 in 1951 to 527 in 1961 and 2,845 in 1972 because of the establishment of the sugar-cane factory in the district. Mechanisation of agriculture is manifested in the number of electric water pumps which have increased from 47 in 1951 to 3,186 in 1972. Oil-engines also increased rapidly from 2,055 in 1951 to 8,083 in 1972. There were only 13 tractors in 1930. In 1951 the number increased to 117 which rose to 396 in 1961 and 1,760 in 1972. The number of tractors in this district is among the highest in

Gujarat As regards other improved implements in use, there are harrows (32,178), seed-drills (79,776), crop-protection appliances (3,170) and disk harrows (157) according to the Livestock Census of 1972.

As against this, the traditional *oil-ghanis* and *rahats* have almost begun to disappear.

MANURES :

Manures and fertilisers play a vital role in increasing the fertility of the soil. The scheme for preparation and distribution of manure mixture was undertaken in this district in 1947-48. Under this scheme the manure mixture of 217 tons for Kharif paddy and 9 tons for Rabi wheat was distributed covering an area of 1816 acres during 1951-52. With the object of supplementing the production of cow-dung manures in this district, the Farm Yard Manure Scheme was introduced in the year 1949-50. The scheme for the preparation of compost manure from organic wastes in villages was started in the year 1945-46. Cultivators were explained the correct method of preparing manure from farm refuse and many practical experiments were carried out.

Town Compost Scheme—With the object of augmenting the production of manures by composting town refuse, the town compost scheme was initiated in the year 1947 and has since continued. Under this scheme the staff of municipalities and village panchayats was trained in the method of preparing compost from town waste. The quantity of town and rural composts consumed during the last five years is shown below.

STATEMENT IV-12

Compost Used

(IN TONNES)					
Year 1			Rural Compost 2		Town Compost 3
1968-69	..	..	30,014		29,340
1969-70	..	..	20,736		869
1970-71	..	..	63,066		2,865
1971-72	..	..	63,560		3,497
1972-73	..	..	63,557		5,582

Source : District Agriculture Officer, Nadiad.

FERTILISERS

The consumption of fertilisers in this district is quite high compared to other districts of the State. The main fertilisers used are Urea, Ammonium Sulphate, Calcium, Ammonium Nitrate, Diammonium Phosphate etc. Fertiliser consumption during the last five years was as under.

STATEMENT IV-13

Fertilisers Used

(IN TONNES)					
Year 1			Nitrogenous in form of Ammonium Sulphate 2	Phosphatic in form of Super- phosphate 3	Potassic in form of Muri- ate of Potash 4
1968-69	..	..	73,329	1,953	31.5
1969-70	..	..	80,416	11,280	85.9
1970-71	..	..	91,560	10,864	450.4
1971-72	..	..	1,07,600	15,769	689.4
1972-73	..	..	1,59,395	20,397	1,110.0

Source : District Agricultural Officer, Nadiad.

The Fertiliser Promotion Programme—The Programme was implemented in this district during 1973-74. Under this programme the importance of application of fertilisers in proper proportions is explained to cultivators by practical demonstrations. Special training is also imparted to Gramsevakhs regarding sales and distribution of chemical fertilisers. Soil testing appliances are provided under this programme for timely analysis of soils to recommend fertilisers. Guidance is also given to cultivators by arranging exhibitions at different places of the district.

RESEARCH ACTIVITIES

The following research stations are working in the district for evolving improved varieties of seeds :

1. The Agricultural Research Station, Nawagam

The Agricultural Research Station was started in 1945 at Nawagam (Matar-taluka) for carrying research activities in the field of plant breeding, agronomy, plant pathology, entomology, etc.

Originally samples of various local varieties of paddy were collected and grown for study. The study resulted in evolution of six improved varieties, viz., Sukhvel-20, early Sutarsal-39, Jirasar-280, Kamod-118, Pankhali-203 and Nawagam-19. Under the All India Co-ordinated Rice Improvement Project, various promising selections from rice-growing states of India are tested here, for their suitability to local conditions. Under agronomic trials, improved varieties are tested for their requirements of fertilisers in proper doses and at proper intervals.

2. *The Trial-cum-Demonstration Farm, Thasra*

The Trial-cum-Demonstration Farm of Thasra carries out trials regarding (1) irrigation requirements on sugar-cane crop and (2) control of root-rot disease on cotton crop.

3. *The Trial-cum-Demonstration Farm, Jinaj (Khambhat taluka)*

This Trial-cum-Demonstration Farm which was established in 1971-72 conducts different types of demonstrations concerning the number of irrigations required for raising paddy, wheat and other new crops introduced in the Bhal tract.

4. *The Cotton Research Station, Thasra*

Started in 1963 at Thasra, it carries out research on root-rot disease resistant varieties in cotton. Efforts are also made to control the root-rot disease by way of using fungicides and adjusting the agronomic practices. It was found that rotating the Digvijay cotton with *jowar* controls root-rot disease to a considerable extent.

5. *The Regional Sugar-cane Research Station, Thasra*

This research station, started in 1970-71, investigates into agronomic problems concerning manuring, methods of planting and rotation, irrigation requirements etc., of the sugar-cane crop.

6. *The Coconut Demonstration Centre, Metpur (Khambhat taluka)*

This centre which was established in 1959 raises coconut plantations and demonstrates their suitability to local conditions.

7. *The Potato Development Centre, Chaklasi (Nadiad taluka)*

The centre functions under the technical control of the Professor of Botany, College of Agriculture, Junagadh. The Potato Development Officer

Nadiad is the executive head of the scheme. The main object of the scheme is to increase the area under potato cultivation and to achieve a higher yield per hectare. For this purpose, demonstrations on scientific methods of potato cultivation are carried out here.

Taluka Seed Multiplication Farms

There are 10 Taluka Seed Multiplication Farms working for seed multiplication of different varieties of improved strains, viz., paddy, wheat, groundnut, castor, cotton, *tur. chola*, vegetables, etc. The location of the farms is as under.

Sl. No.	Place of Seed Farm	Taluka
1	2	3
1	Nadiad	Nadiad
2	Boriavi	Anand
3	Borsad	Borsad
4	Petlad	Petlad
5	Kansari	Khambhat
6	Matar	Matar
7	Mahij	Mahamadabad
8	Mohmadpura	Kapadvanj
9	Vadasinor	Vadasinor
10	Thasra —	Thasra

The Kheda district has limited scope for extensive cultivation. It is, therefore, only through improved and intensive cultivation that the goal of higher production can be fulfilled. For improved methods of cultivation, supply of improved seeds is necessary. The seed farms thus assume significant importance.

SEED SUPPLY

As a general practice, most of the cultivators keep a reserve stock of their farm produce and use it as seed for sowing in the next season. Others obtain them from co-operative societies which supply improved varieties of seeds recommended by the Department of Agriculture. A few others obtain their requirement from the well-to-do cultivators or from local merchants. Before Independence, there were no regular Governmental agencies to

evolve and supply improved seeds to cultivators. The following statement gives details about improved seeds distributed during the last five years :—

STATEMENT IV-14

Seed Distribution

Year	Distribution in tonnes
1968-69	396
1969-70	206
1970-71	260
1971-72	263
1972-73	378

Source : District Agricultural Officer, Nadiad.

Varieties of Seeds—The improved and high yielding varieties which are utilised by farmers in this district are as under :

(1) Jirasar-280, Sukhvel-20, Gaur-1, Gaur-10, Gaur-100, Jaya, I. R. 8 and Masuri in paddy, (2) J. 1/7, Kalyan Sona, Sonalika, H. D. M. 1,553, H. D. M. 1593 in wheat, (3) Kufri Sinduri, Kufri Chandramukhi, Kufri Alankar, Kufri Chamatkar and Kufri Jyoti in potato, (4) Anand-2, Anand-119, Anand-23, K-20 and Anand-13/145 in tobacco, (5) Hybrid *bajri*-3 in *bajri*, (6) Chata, Dahod Yellow in gram and (7) Hybrid-4, I. A. N. 579/188, Gujarat-67, M. C. U. 5, Digvijay and V. 797 in cotton.

At Chaklasi, Uttarsanda, Boriavi and Nadiad, cold storages are constructed by co-operative societies as well as private bodies to procure and store the produce of the neighbouring areas in items such as potato and other crops.

The yield per hectare of some of the high yielding varieties is given in the following statement :—

(FIGURES IN KG.)				
Sl. No.	Name of Crop	1966-67	1971-72	
1	2	3	4	
1	Paddy	891	1,265	
2	Hybrid <i>Bajri</i>	995	1,337	
3	Wheat	1,083	1,658	
4	Groundnut	625	813	
5	Cotton	152	292	

Source : District Development Officer, Nadiad.

The Intensive Agricultural Area Programme

The entire Kheda district is covered under the Intensive Agricultural Area Programme since 1966-67. Under this programme, cultivators are guided in use of efficient irrigated farming. The introduction of this programme has resulted in the increase of area under different crops as shown below :—

(AREA IN HECTARES)			
Sl. No.	Name of Crop	1966-67	1972-73
1	2	3	4
1	Hybrid <i>Bajri</i> —Kharif	38,180	89,382
	—Summer	..	17,424
2	Hybrid <i>Jowar</i>	..	7,997
3	Paddy	30,640	37,024
4	Wheat	25,881	33,434
5	Hybrid Maize	..	156
6	Cotton	18,339	58,780
7	Tobacco	19,067	37,225
8	Potato and Vegetables	4,080	14,219

Source : District Development Officer, Nadiad.

AGRICULTURAL PESTS AND DISEASES

Before Independence, cultivators did not generally use insecticides and pesticides as they were not available easily and on attractive terms. After Independence and the subsequent implementation of the Five Year Plans and the Community Development Programme, crop protection service was introduced in the district. Under this scheme, insecticides and pesticides are supplied to cultivators on easy terms. The easy availability of the insecticides at subsidised rates through various selling agencies established almost at all talukas has resulted in increasing use of insecticides and pesticides in this district. Rust resistant varieties of seeds were evolved which reduced the damage to standing crops by pests and diseases.

The pests and diseases most commonly found in different crops in this district are as follows :

Sl. No. 1	Name of Crop 2	Pests-Diseases 3
i	Paddy	Stem borer, Army worm, sucking insects, Bittles, Blast, Bacterial Blight, <i>Helmenthasporium</i> .
ii	Bajra	Grass hopper, Blister Bittle.
iii	Wheat	White-ants, Grass hopper, Stemborer, Aphids,
iv	Cotton	Thrips, Aphids, Jassids, Stemborer and Boll worm, Root-rot.
v	Tobacco	Stemborer, Caterpillar, Capsule borer, White flies.

The Institute of Agriculture, Anand

The Institute of Agriculture, popularly known as *Krishi-Go-Vidya-Bhavan* stands for revitalisation of agriculture in the light of achievements of modern science. The improvement of agriculture has two aspects : (i) research or finding of new facts to help agriculture and (ii) extension or carrying the results of research to the cultivators.

In 1937, it was decided by two private trusts to contribute Rs. 9 lakhs for the establishment of a School of Agriculture, Animal Husbandry and Dairying and Rs. 6 lakhs for the Institute of Animal Genetics and Nutrition. On behalf of both the trusts, an amount of Rs. 15 lakhs was offered to the then Government of Bombay. The Government was requested to give an annual grant of Rs. 0.60 lakhs for these institutions. The Government sanctioned the scheme and handed over to the institute 850 acres of land at Anand. The Institute of Agriculture thus came into existence.

The School of Agriculture—In 1941, a modest attempt to impart training to farmers' sons in modern scientific methods of agriculture was made by establishing the School of Agriculture at the Institute of Agriculture. It was the first educational institute teaching a two year diploma course in Agriculture and Animal Husbandry. The school turns out practical hands, who go back to their lands with knowledge of improved methods. The total number of students who have completed Government certificate course at the School is 880.

The College of Agriculture—A major activity in the field of agricultural education was undertaken by the Institute of Agriculture in the year 1947 when it started the Agricultural College. The Government paid a

capital grant of Rs. 15 lakhs for establishment of the College. The College was affiliated to the Bombay University upto March 1950 and then with the Gujarat University upto March 1957. It became a constituent College of Sardar Patel University from June, 1957. It conducts a three-year integrated degree course in Agriculture after a preparatory year. The number of graduates from the college totalled to 2,327 till 1972.

The Dairy Science College, Anand—The Dairy Science College, the second of its kind in India, was started by the Institute in July, 1961. The college imparts training at undergraduate level in the field of Dairy Technology. It conduct B. Sc. (Dairy Technology) course of 4½ years duration and the Indian Dairy Diploma (Dairy Technology) course of 2 years duration.

In addition, the Institute runs (1) a bidi tobacco training scheme for imparting training in tobacco cultivation, (2) a school of baking for those who desire to adopt baking as a career, (3) one Extension Education Institute for improving the professional competence of the instructional staff of the training centres and extension officers (agriculture and animal husbandry) working at block level and (4) a Poultry Training Centre to impart theoretical and practical training in poultry keeping.

The Dryland Agriculture Sub-Centre, Anand—The Indian Council of Agricultural Research sanctioned in 1970 an all India Co-ordinated Research Project on Dryland Agriculture with 24 centres located throughout the country under different soils and climatic zones. One of the sub-centres for Dryland Agriculture is attached to the Institute of Agriculture. The main objective of this project is to narrow the economic disparity between farmers of unirrigated and irrigated areas through improving per hectare production quantitatively and qualitatively by evolving new dryland technology.

The I. C. A. R. has also started a co-ordinated project for research in forage crops. The objectives of the project are to carry out an integrated, multi-disciplined and problem-oriented programme of forage research with a view to achieving quick results to serve as a sound basis for forage development in relation to improvement of livestock.

The Tobacco Seed Multiplication Centre, Anand—The Tobacco Seed Multiplication Centre, Anand, having a total area of 19.07 hectares is fully financed by the Government of India. It was started in the year 1966-67. The main objectives of the centre are to multiply and distribute genuine and pure seeds and seedlings of bidi tobacco and also to grow the crop for

demonstrating improved technique of its cultivation. This is a pioneering centre to undertake the supply of tobacco seedlings of improved varieties on advance registration and guaranteed supply basis. This system has been very much appreciated by tobacco growers and hundreds of needy farmers take advantage of the scheme. Tobacco growers are also given on the spot advice in respect of their problems. For the Gujarat State and some other tobacco growing areas in India, this centre is the only source of getting reliable seeds of improved varieties of tobacco.

Extension Activities

Besides education and research, an important objective of the institute is to popularise improved methods of agriculture and animal husbandry. This objective is served by rendering advisory work, broadcasting radio talks, arranging demonstrations at the Institute and also by providing services in the form of supply of improved seeds, seedlings, irrigation water, pedigree bulls and cows, improved implements and carrying out chemical analysis of soils and water samples.

ANIMAL HUSBANDRY

The district is one of the most advanced and developed districts of Gujarat State so far as agriculture and animal husbandry activities are concerned. Agriculturists of this district generally have high-milk yielding buffaloes or pairs of fine Kankrej bullocks in their houses. The district is also favourably situated for cattle development because of its fertile soil, suitable atmospheric conditions as well as tendency of the people to adopt new techniques of development.

As a result, some pioneering institutions of country, viz., the Polson Dairy, the Amul Dairy, the Institute of Agriculture, Anand etc., have been established here. The Dairy Science College, Anand has been established during the year 1961 for imparting training leading to I. D. D. and B. Sc. (Dairying). The Government College of Veterinary Science and Animal Husbandry at Anand since its establishment in 1964, is playing a dynamic role in imparting education to under-graduate and post-graduate students as well as in doing research work for livestock improvement.

CATTLE DEVELOPMENT

Intensive Cattle Development Programme, Kheda

The scheme for Intensive Cattle Development Programme was started in Kheda District in the year 1955-56 through Kheda District Co-operative Milk Producers' Union Limited, popularly known as the Amul Dairy, Anand.

The scheme is run on the pattern of model scheme prepared by Government of India. The programme envisages complete breeding control and animal health cover duly supported by feed and fodder development and rural dairy extension activities in a planned and co-ordinated manner. The entire expenditure in respect of the scheme is borne by the Government of Gujarat and paid as grant-in-aid to Kheda District Co-operative Milk Producers' Union. The expenditure during the last year, i. e., 1973-74 is Rs. 11.86 lakhs.

The Intensive Cattle Development Programme, Kheda is a full-fledged project having a hundred stockmen centres. The project covers a breedable population of one lakh cattle, mainly buffaloes. During the year 1973-74, 1,20,462 buffaloes were artificially inseminated and 2,81,153 kg. of lucerne seeds were supplied for growing green lucerne. There are 125 milk societies in the project area which procured 6,93,37,000 litres of milk during the year 1973-74. The Amul Dairy runs the largest single A. I. Station in the whole of Asia with 80 Surati breeding bulls of high pedigree at one station.

The following are the important schemes implemented for improvement of livestock :

(1) *The Location of Premium Bulls*—Premium bulls are kept at suitable villages in different parts of this district with an idea to up-grade the local indescrpt cattle. Definite progress is recorded in the progeny at these places. Since 1956, about 70 bulls are supplied for the purpose.

(2) *The Calf Rearing Scheme*—To meet with the demand of the proven bull, pedigree Kankrej bull-calves were selected and given to the farmers. Feeding charges were also given to the farmers. The scheme was introduced in 1958 and is now discontinued.

(3) *The Artificial Insemination Scheme*—This scheme was introduced in 1956-57. To up-grade livestock in district, 17,452 animals were inseminated under this scheme till 1972.

(4) *The Fodder Development Scheme*—To increase the production of nutritive grass, improved seeds of lucerne, Napier, etc., are supplied to farmers at subsidised rates. This scheme is in operation since 1960-61. An amount of Rs. 52,019 has been given as subsidy to 2,896 farmers till now (1972).

(5) *The Gaushala Development Scheme*—The scheme was started in 1958 to encourage development of the Panjrapols and Gaushalas. Grants were sanctioned to 4 Gaushalas for improvement of livestock, viz., (1) *Khoda Dhor Panjrapol*, Dakor, (Thasra taluka), (2) *Nirashrit Panjrapol*, Dakor, (Thasra taluka), (3) *Adarsh Gaushala*, Bochasan, (Borsad taluka) and (4) *Prem Dharm Panjrapol*, Haldharwas, (Mahamadabad taluka).

(6) *The Cross Breeding Programme*—The cross breeding programme with Jersey breed is taken up in this district by the Institute of Agriculture, Anand since 1972-73.

POULTRY DEVELOPMENT

Most of the cultivators in this district are vegetarians and they have a sort of aversion on religious and sentimental grounds for keeping and rearing poultry. As a result, there is a limited scope for this work in this district. However, every endeavour is being made to help the farmers interested in this important activity. It is a good indication that people are slowly attracted to poultry keeping. About 28 private farms are located in the district. These farms are situated in Nadiad, Anand and Borsad talukas. Attempts are being made to organise poultry farmers co-operative marketing societies. There is one Co-operative Poultry Farm at Bochasan (Taluka Borsad). Recently the Kheda District Co-operative Poultry Farmers Society has been organised with headquarters at Anand. In addition to this, 24 farms have been subsidised under the Applied Nutrition Programme for establishing small poultry farms for supplementing the farmers' income. There is one poultry research station and poultry training centre at Agricultural Institute, Anand, under the Gujarat Agricultural University.

This district is also covered under the Intensive Poultry Development Block, Ahmedabad (Makarba) and necessary pre-requisites for poultry developments like supply of high laying chicks, balanced poultry feed, vaccinations, technical guidance etc., are provided to poultry farmers under this programme through the poultry service centres located at Borsad and Khambhat.

One state level poultry feed testing laboratory is functioning in the Veterinary College, Anand for analysing the poultry feed prepared by various manufacturers. To diagnose in poultry diseases and to help the poultry farmers in their poultry disease problems, the services of poultry disease investigation laboratory located at Veterinary College, Anand are available.

Under the Poultry Development Scheme, poultry equipments like incubators, brooders, feeding hoppers, were supplied to the poultry breeders. Subsidy was given towards purchase of day-old chicks and for repairs to poultry houses.

Loans were advanced for starting the poultry farm and for its development. In all Rs. 95,000 have been advanced for poultry development work. From 1968 onwards the policy of advancing loans to poultry keepers has been discontinued by Government.

Buffalo Development—Surati buffaloes in the Kheda district give about 1,000 litres of milk per annum as against the All-India average of about 500 litres. High milk-yield competitions recently organised in the villages of the district brought to light a Surati buffalo which gave a record yield of 20.1 litres of milk in a day. This is due to the impact of steady and remunerative marketing of milk throughout the year as a result of which the farmers have become progressively more receptive to scientific methods of increasing milk production and improving the quality of their animals and milk.

The Artificial Breeding Programme—The artificial insemination is the modern technique of cattle breeding by which an outstanding breeding bull can be used to breed ten to twenty times the usual number of cows or buffaloes for a rapid breed improvement. When the technique was first initiated, the farmers all over the world were sceptical and Kheda farmers were no exception when the programme was introduced in 1950. Today, 'Amul' runs the largest single artificial insemination station in the whole of Asia with 80 Surati buffalo-breeding bulls of high pedigree at one station and 1,70,000 artificial inseminations in the villages of a single district. The District Panchayat also runs artificial insemination centres at Nadiad, Borsad, Dakor (Thasra Taluka) and Sojitra (Petlad taluka). Moreover, one sub-centre at Vaso (Nadiad-taluka) is also functioning in the district. During 1973-74, 2,666 artificial inseminations were carried out by these centres.

The Artificial Insemination Programme has been able to reduce the dry period of buffaloes by increasing the frequency of calvings. About 81 milk trucks which connect a network of 706 villages with Anand, are utilised for most economical daily transportation of fresh stock of semen, preserved in ice for artificial insemination work in the villages.

The farmers have become aware that quality milk stock can be bred by artificial insemination of the cattle and more and more villages have been asking for artificial insemination centres. The Amul Research Development Association (ARDA) offers financial assistance to the societies that undertake artificial insemination work. The system has proved cheap, effective and popular.

Veterinary Aid—Parallel to the programme of improving livestock, is the animal health and hygiene programme, which is maintained by a system of 19 mobile dispensaries and trained veterinary staff. Veterinary Officers are available round the clock to attend to emergency call at nominal rates. First-aid veterinary centres have been set up in as many as 640 villages by 'Amul'. A list of veterinary dispensaries, branch veterinary dispensaries and

first aid veterinary centres run by District Panchayat is appended at the end of the chapter.

The services of the Veterinary Officers have been amply rewarded with the implicit trust that the Kheda farmer has developed in the technique of scientific animal husbandry. Far from being sceptical, or as in many parts of India simply indifferent, he seeks the veterinary service and follows the advice given by the officers regarding the care of cattle, their feeding and even regarding the disposal of useless and uneconomical buffaloes.

Besides the above veterinary facilities, there is one Assistant Disease Investigation Unit for poultry at State level, the headquarter of which is located at Anand. The Assistant Disease Investigation Officer is to extend all possible help to poultry farmers in that area and in other nearby districts.

The epidemics are controlled by clean vaccinations which are done by District Panchayat veterinary staff by protecting animals well in advance. Besides, mobile veterinary aid is provided by the Amul Dairy.

Animal Diseases

Awareness of the modern methods of care and management of animals, their scientific breeding and feeding and sound veterinary facilities available in the district have minimised the effects of animal diseases in Kheda. During 1972-73, Haemorrhagic Septicaemia disease was reported only in case of 80 cattle and buffaloes of the district. Out of these, death was recorded in three cases only.

Livestock Population—The following are the detailed figures of livestock recorded between the years 1880-81 and 1940.

STATEMENT IV-15
Livestock Population

Cattle and other quadrupeds	1880-81*	1890-91*	1900-01*	1908-10*	1919-20*	1930†	1940†
Cattle :							
Plough Cattle	..	112,871	80,613	83,169	103,264	115,714	122,927
Bulls for breeding purposes	..	624	268	879	213	1,167	1,124
Oxen and he-buffaloes for other purposes	..	1,038	846	923	1,664	929	530
Milch Cattle	..	202,105	61,602	113,775	134,998	154,843	154,241
Young Stock	..	..	39,899	121,853	138,502	169,227	183,473
Total Cattle	..	352,962	183,228	320,599	378,641	441,880	462,295
Others :							
Horses or Ponies	..	2,447	1,244	1,574	1,900	2,031	2,268
Sheep	..	..	4,380	5,104	14,045	21,679	32,865
Goats	..	42,406	43,217	32,917	50,461	62,588	82,208
Camels	..	188	65	76	599	..	..
Mules	..	..	..	..	..	..	..
Donkeys	..	5,947	3,794	4,821	5,056	..	..
Elephants	..	..	..	3	2	..	..
Total	..	50,988	52,700	44,495	72,063	86,298	117,341

Sources : * *Gazetteer of the Bombay Presidency*, Vol. III-B, Kaira and Panch Mahals, p. 8.
† *Statistical Atlas of Bombay State (Provincial Part)* 1950, pp. 192-193.

The statement reveals a steady and gradual increase in the number of cattle, sheep and goats. The other categories showed fluctuating trends.

According to the Livestock Censuses of 1951, 1961 and 1972, the livestock population of the district was found to be distributed as under.

STATEMENT IV-16

Livestock 1951, 1961 and 1972

Categories of Livestock	1951*	1961*	1972†
<i>Total Livestock</i>	734,598	840,905	922,216
<i>Cattle</i>	265,465	312,383	247,542
Males over 3 years	176,162	208,041	170,858
Females over 3 years	37,719	40,384	36,682
Young-stock	51,584	63,958	40,002
<i>Buffaloes</i>	340,737	423,490	555,218
Males over 3 years	1,838	3,615	2,927
Females over 3 years	197,701	244,631	298,482
Young stock	141,198	175,250	259,809
<i>Sheep</i>	22,665	15,422	23,886
<i>Goats</i>	94,236	75,072	85,667
<i>Horses and Ponies</i>	2,895	3,684	1,691
<i>Mules</i>	171	50	N. A.
<i>Donkeys</i>	7,188	8,734	N. A.
<i>Camels</i>	691	2,050	850
<i>Pigs</i>	550	14	6
<i>Other livestock</i>			7,856
<i>Poultry</i>	34,792	68,130	77,172

Note : Data of 1972 Census are provisional.

Source :

*District Census Handbook 1961, Kaira district, p. 199.

†Director, Bureau of Economics and Statistics, Government of Gujarat, Ahmadabad.

As the table indicates, the total livestock population has increased from 7,34,598 in 1951 to 9,22,216 in 1972. A steady increase has been recorded in case of buffaloes, particularly among females over three years and young stock. Cattle, horses and ponies, and camels rose between 1951 and 1961 but fell rapidly in 1972. The number of sheep and goats declined between 1951 and 1961 but again increased in 1972. The population of poultry has increased steadily between these two decades.

The Amuldan Factory, Kanjari—Till 1964, most villagers fed their buffaloes with cotton seed as concentrate, a wasteful and expensive feed that did not provide a balanced diet. To make available a cheaper and yet more nutritious feed concentrate, a cattle-feed plant was set up at Kanjari village in 1964 with financial aid amounting to about Rs. 15 lakhs from the Oxford Committee of Famine Relief (OXFAM) under the Freedom from Hunger Campaign of Food and Agriculture Organisation of the United Nations.

This plant manufactures a balanced feed called *Amuldan* by mixing oilseed products such as groundnut cake or cottonseed cake (which are cheaper than the whole oilseed) with damaged cereals and cereal bye-products such as rice bran, wheat bran, and bye-products of pulses, etc., and mineral supplements. Amuldan has proved to be a highly nutritious and balanced feed concentrate, though considerably cheaper than the conventional feed. It is readily available to the dairy farmer in Kheda at regular and fairly stable prices throughout the year, unlike the cottonseed feed for which traders used to charge exorbitant prices in the lean seasons.

Domestic Animals—The former *Gazetteer* mentions oxen, cows, buffaloes, sheep, goats, horses, camels and asses as the chief domestic animals of the district. In 1876-77, their population was as under :

Oxen—1,28,247 ; cows—49,264 ; he buffaloes—10,315 ; she buffaloes—1,80,223 ; sheep and goats—53,880 ; horses—2,366 and asses—6,325. A few of the finest of oxen cost Rs. 150 to Rs. 300 per pair. They were owned by well-to-do Patidar cultivators and were brought from Saurashtra and Kankrej in northern Gujarat. But some of the largest were bred in the district. Bahlej and other villages of the Nadiad sub-division were famous for their bullocks. The poorer cultivators had smaller, leaner and less valuable cattle, costing from Rs. 30 to Rs. 100 a pair. Except in Thasra and Kapadvanj, the Kheda cattle were on the whole large and fine animals. Well-to-do cultivators owned from three to ten milch cows and buffaloes. A cow varied in value from Rs. 20 to Rs. 50 and a she-buffalo from Rs. 30 to Rs. 80. These animals were, except in the rainy season, almost all stall-fed. Their fodder was grass and millet stalks with, when in milk, a pound or two of oil seed cake and cotton seed (*kapasia*). The townsman generally had only one cow or buffalo and used all its milk in his own family. The

cultivator made most of the milk into clarified butter, ghee, sending weekly supplies to market. Professional herdsmen, or Rabaris, as well as cultivators, reared milch cattle, both cows and she-buffaloes. Though the Rabaris were not a wandering tribe, their cattle were not stall-fed. They were supposed to graze them on the common pasture ground. But finding scanty fodder there the Rabaris had little scruple in letting their animals stray into any unguarded field. Brahmins and Banias generally gave their young calves to Kanbis and Kolis for rearing. On handing it over the calf was valued and the common agreement was that when the calf was full grown and again valued the owner paid the man who reared it one-half of the increased price. Milch buffaloes were sent from the district by rail in considerable numbers, chiefly to Surat and Bombay.

Sheep and goats, were reared chiefly by professional herdsmen-Rabaris and Bharvad. They were found in greatest numbers in the less highly cultivated districts of Matar in the west and Thasra and Kapadvanj in the east. Sheep were bred for their milk, wool and flesh. The wool was generally cut twice a year, November and March. Except what little they weaved into coarse blankets, the Rabaris sold their wool to traders, who exported it to Bombay.

Horses cost between Rs. 20 and Rs. 100. Most of them were born and reared in the district. Few camels were bred in Kheda, but large numbers were brought during the fair season from Marwar and Saurashtra to graze in the district. A full-grown camel varied in price from Rs. 40 to Rs. 150. Asses were of two kinds, the common ass and the big white ass of Halar in Saurashtra. The females were kept only by potters and the males by rice huskers. They were used to carry bricks, earth and rice. In value they varied from Rs. 3 to Rs. 7 for the common sort and from Rs. 10 to Rs. 12 for the big Halar sort. During 1929 many Charotar villages were infested with swarms of tame pigs. These animals, ownerless and uncared for, lived on garbage. Filthy and useless, they did much harm to the crops. At last so great was the nuisance that the richer classes hired the Vaghris to cart them out of village limits and set them free.

At present, selective breeding and use of modern methods of feeding have improved the condition of domestic animals.

Generally all farmers maintain bullocks and she buffaloes according to their requirements. Cows, sheep and goats are reared by Rabaris and Bharwads. Poultry farming is restricted to a few non-vegetarian tribes.

Oxen—The oxen are mainly of the Kankrej and the Kachchh breeds. The Kachchh breed of animals are normally imported from Kachchh, when

they are young and are reared in the district. The Kankrej breed bullocks can be purchased from cattle owners during regular cattle markets held in Kathlal, Dakor and Petlad. The cost of a pair of bullocks ranges from Rs. 1,500 to Rs. 5,000.

Buffaloes—The Surati breed of buffaloes is well-known. These buffaloes yield 8 to 10 litres of milk with a high fat percentage. The Surati breed is thriving well in the district and is mainly concentrated in Borsad, Petlad, Anand, Nadiad Mahemadabad and Kapadvanj talukas. The cost of a she-buffalo varies from Rs. 1,000 to 2,500.

Cows—Cows, mainly Kankrej breed, are reared by the local Rabaris. They yield 6 to 8 litres of milk. Farmers normally prefer to rear buffaloes, as they yield more milk with more percentage of fat.

Sheep and Goats—Sheep and goats are kept and reared by Rabaris and Bharvads. They are cross-breed of Kachchhi and Patan varieties.

Horses and Camels—There is no specific breed of horses in the district. Horses are mainly imported from Kachchh and Saurashtra. Over the years, the importance of horses and camels has declined as the horse-carts and camel-carts have been replaced by mechanical conveyances. A few land owners in the villages keep them for personal use only. A horse is normally available for Rs. 800 to Rs. 1,500. Camels are not bred in Kheda district and there is no specific breed. They are normally imported from Marwar and Kachchh. Their prices vary from Rs. 1,500 to Rs. 3,000.

DAIRYING

The Polson Model Dairy, Anand

The Polson Model Dairy of Anand was established in 1929 at a cost of Rs. 7 lakhs on the model of special plans obtained from Denmark. Its butter manufacturing business however, dates back to 1915. During the period of the First World War, when good quality butter was not easily available and the armed forces required it in large quantity, the dairy undertook the production of butter. However, that was not based on scientific and hygienic principles. When this dairy was established it was not only the first of its kind in India, but according to the opinion of European experts, it was considered the biggest in the East. In the year 1934, the pasteurising process in the dairy was changed to vacuum-pasteurisation which removed all the off-flavour and impurities from cream and made it pure and neutral. Upto 1938, this dairy was a proprietary concern and thereafter it was reconstituted into a limited company.

In 1945, the dairy supplied fresh milk everyday from Anand to Bombay, for the Bombay Milk Scheme. This pilot plant had a capacity of processing 50,000 lbs. of milk per day.

During 1957-58, the dairy supplied about 16,000 lbs. of pasteurised milk per day to the Ahmadabad Municipal Corporation in the School Milk Feeding Programme, sponsored by the UNICEF. The following statement gives statistics regarding production of butter, *ghee* and casein for the last five years.

STATEMENT IV-17

Production of butter, etc.

(IN TONNES)			
Year 1	Butter 2	Ghee 3	Casein 4
1968	907	41	249
1969	777	60	260
1970	1,114	26	273
1971	1,149	32	312
1972	1,024	36	294

Source :
Director, Polson Limited, Bombay.

The above statement indicates that the production of butter and casein has on the whole increased while that of *ghee* has declined.

The Kheda District Co-operative Milk Producers' Union Ltd. Anand

The farmers in the rural areas of the Kheda district got an opportunity for a remunerative milk market for the first time in 1946-47 when they organised themselves into the Kheda District Co-operative Milk Producers' Union Ltd., Anand, and started supplying pasteurised milk to the city of Bombay.

The Union started with two village Milk Producers' Societies and began pasteurising milk for the Bombay Milk Scheme in June, 1948. At that time only 500 lbs. of milk per day was being handled. The co-operative movement amongst milk producers became very popular and

the organisation grew up rapidly. In 1953, it was found that the Bombay Milk Scheme could not accept all the milk collected by the union during the winter months. The production of milk in the Kheda district fluctuates very widely between the summer and the winter seasons. In winter the production is 250 per cent of the summer production. Thus it became necessary to drastically restrict the collection of milk during winter months. This created a serious problem as the farmers wanted to be assured of a year round market for all the surplus milk they desired to sell. In order to ensure this, it was necessary that the union should be helped to build a new dairy factory with large milk products section which could absorb the milk surplus to the requirement of the Bombay Milk Scheme and convert the surplus milk into dairy products. The Government of India also helped the union is obtaining assistance to build the new dairy project from UNICEF and from the Government of New Zealand under the Colombo Plan. The project costing Rs. 50 lakhs was declared open on 31st October, 1955.

The opening of the new dairy factory gave a great incentive to milk production in the Kheda district and the union was able to organise many more milk producers' co-operative societies and to handle more and more milk each year. In 1958 the dairy factory was expanded at a cost of Rs. 15 lakhs to manufacture sweetened condensed milk. It was further expanded later on in 1960. The Baby Food Project was implemented in technical collaboration with the Central Food Technological Research Institute, Mysore. The Kheda Union was the first to manufacture milk powder, condensed milk and baby food in India. Incidentally, it is worth noting that this was perhaps the first time anywhere in the world that cheese had been processed from buffalo milk on such a large scale for commercial exploitation.

To meet the milk powder requirements of the defence services, the Government of India called upon this organisation to set up additional drying capacity at Anand and a milk powder plant also at Mahesana. These dairies were completed in 1964-65.

The dairy plant of Amul was declared open in 1965. This dairy has a capacity of 40 tons of powder and 20 tons of butter per day, which enables the entire dairy complex to handle 5,00,000 litres of milk per day. In 1970-71 Amul produced 9,464 tons of baby food valued at Rs. 8.73 crores. During the same year its total turnover was Rs. 27.39 crores.

Besides this, technical advice is given to other milk schemes. The union also trains personnel for the various milk schemes in the country.

The union markets milk in Gujarat and Maharashtra States and milk products all over India. All these milk products are sold under the trade name 'AMUL' (Anand Milk Union Ltd.)

Amul has popularised the co-operative movement far and wide. By 1973, about 75 per cent of villages were covered by the dairy co-operatives. At present, the number of milk producers' co-operative societies affiliated to the Amul Milk Union is 794 with a membership of 2,50,000.

In addition to the direct financial benefits which the producers and the societies derive through this co-operative organisation, there were many other important benefits. Each society makes a net profit of about Rs. 5,000 to Rs. 10,000 every year. From this profit certain portions are allotted to Charity Fund, Cattle Relief Fund, Buildings Fund, etc. Many social welfare activities are undertaken either directly by the societies or assisted by them with their financial contributions.

The National Dairy Development Board, Anand

The National Dairy Development Board with headquarters at Anand, is an autonomous body, formed by the Ministry of Food and Agriculture, Government of India, in September, 1965, for the purpose of dairy development in the country. The board evolved a Rs. 100 crore scheme known as 'Operational Flood', for organized dairy development all over India, which is considered to be the first step towards white revolution in the country. Seeing the Operation Flood through is only one of the Board's major activities. The main objective of the Board in relation to organised dairy development in the country is to make available on request the information, skills and technical services needed to increase production of milk and of dairy technical inputs and to speed up development of milk procurement, processing and distribution.

Requests for Project Development Services are increasing, ever since the formation of the Board. These come from public, private and co-operative sectors in many States and Union territories.

The Board procures dairy equipments and imported skim milk powder, under licence, in bulk. Procurement of equipment frequently involves putting a number of dairies' orders together, in order to obtain more favourable prices. The Board sets specifications, checks materials and workmanship and ensures performance after installation. On requests, the Board procures imported milk powder for license holders. By keeping watch over the world market and bulk orders the Board has been able to obtain considerable savings for the purchasers.

FISHERIES

The district covers mostly inland fisheries except at two centres, viz., Khambhat and Dewhan (Borsad taluka) where creek fishing is conducted with old types of boats. The fishing is seasonal depending upon the availability of water in the tanks. The main fishing centres in the district are Khambhat, Kheda, Mahemadabad, Nadiad, Mehlej (Matar taluka), Dewhan (Borsad taluka) and Pandad (Khambhat taluka).

The district has a large number of small and medium tanks connected with the Mahi Canal system, which offer a good scope to develop fresh water fisheries. The indigenous species consist of carps and catfishes. Among carps *Labeo rohita* and *Cirrhina mrigala* are predominant and among catfishes *Heteropriestis forrihos* is found to thrive very well in small tanks. Exotic varieties being introduced are grass carp and common carp.

The local fishermen use surface gill nets, cast nets and drag nets made of cotton twine. There are 4 fishermen co-operative societies, one each at Khambhat, Nadiad, Mahemadabad and Mehlej with a total membership of 106.

Development Schemes

The Department of Fisheries implements a plan scheme, viz., "Survey of cultural water and spawning grounds for fish production" in the district and undertakes collection of fish seeds from river Mahisagar at Vasad. These are temporarily reared at Vadatu tank (Vasad) and department nursery units at Nadiad and Borsad. These fish seeds are separated and transported to different places for stocking in suitable tanks.

The department runs two demonstration tanks in the district one each at Rasnol and Vasad for demonstration of fish culture. It conducts surveys to locate additional grounds for riverine collection of fish. Moreover, improvements in the transportation and rearing of fish seeds are constantly tried.

In 1971-72, the production of fish in the district was 1,54,098 kg. valued at Rs. 3.84 lakhs of which 7,650 kg. of fish were exported.

For the development of fisheries, the department has plans to set up a composite fish seed farm at Lingda in Anand Taluka at an estimated cost of Rs. 6.66 lakhs.

During 1974-75, about 12 lakhs of quality fish seed (major carp fry) were procured and reared in seasonal tanks. These have been stocked in about 70 gram Panchayat tanks in the district. Fish production is expected to increase several fold by intensive fish cultural practice in this district.

FORESTS

Forest wealth of this district is limited, confined only to Vadasinor taluka which has 87.64 sq. kms. of reserve forest including 25.03 sq. kms. of unclassed forest as on 31st March, 1975. This forest area falls under the territorial jurisdiction of the Godhra Forest Division. The forest growth is very sparse and it is classified as dry deciduous teak forest. The important tree species are teak, *timru*, *palas*, *aleds*, *dhovdo*, etc. On account of shallow and poor soil, the growth of tree crops is stunted and bushy in nature with a low density. No fellings are carried out and there is no revenue from major forest produce. The revenue from minor forest produce amounted to Rs. 15,000 from *timru* leaves and Rs. 15,000 from *asotri* leaves in 1968-69.

During the Vadasinor State regime, there were 46 forests which were divided into suitable beats. The area covered with forests was about one fifth of the total area of the State. Mango, *mowhra*, *limbda*, banyan and *pipal* trees were planted every year by the department and orders were issued for the extensive plantation of babul. The forest products were *teak*, *dhavda*, kher, *sadad*, *timru*, *rayan*, *babul*, *limbda*, mango and *mowhra*. Cattle were allowed to graze free of charge, provided they were owned by State subjects.

Development Schemes

During the First Plan period, there was no scheme of forest development in the district. During the Second Plan, the Bamboo Plantation Scheme was implemented. Under this scheme, 300 acres were covered. In the Third Plan period, three new schemes were implemented, viz., Kharif Plantation, Teak Plantation and Degraded Plantation. Under these three schemes, a total area of 453 acres was covered at a cost of Rs. 66,475.

STATE ASSISTANCE TO AGRICULTURE

Paucity of finance often acts as a hinderance to agricultural development as cultivators are not able to make permanent improvements on their lands. To help them improve their lands, the Bombay Government used to grant tagavi loans to the agriculturists under the two well-known Acts : (1) the Land Improvement Loans Act of 1883 and (2) the Agriculturists Loans Act of 1884 through the Revenue Department. The former was concerned

mainly with long-term finance while the latter with short-term finance. The following statement shows the advances made under these two Acts during the two decades of the present century.

STATEMENT IV-17

Tagavi Advances, Collections and Outstanding Balances under the Land Improvement Loans Act, 1883, and the Agriculturists Loans Act, 1884.

(FIGURES IN RS.)

Year 1			Advances 2	Collections 3	Outstanding balances 4
1901-02	..	..	2,05,225	18,967	13,24,743
1902-03	..	..	61,704	3,43,663	9,21,968
1903-04	..	..	35,791	4,22,433	8,25,873
1904-05	..	..	1,02,348	1,09,522	8,07,600
1905-06	..	..	90,929	68,925	8,20,153
1906-07	..	..	23,349	1,22,501	7,20,914
1907-08	..	..	1,89,422	27,968	5,26,715
1908-09	..	..	33,054	1,04,800	4,96,480
1909-10	..	..	22,004	1,99,006	6,36,189
1910-11	..	..	27,816	1,95,605	5,17,411
1911-12	..	..	7,14,934	86,461	11,85,061
1912-13	..	..	8,11,723	4,79,050	15,17,734
1913-14	..	..	44,929	4,44,441	11,18,221
1914-15	..	..	13,945	3,19,816	8,12,350
1915-16	..	..	1,62,021	64,334	9,10,037
1916-17	..	..	58,829	2,47,270	7,21,596
1917-18	..	..	1,781	1,16,500	6,06,877
1918-19	..	..	8,64,991	34,435	14,37,432
1919-20	..	..	16,65,762	10,39,778	20,63,416
1920-21	..	..	1,57,869	1,83,350	20,37,935
1921-22	..	..	2,36,927	6,01,366	16,73,496

Source :

CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Volume III-B, Kaira and Panch Mahals, (1879), pp. 9-12.

The above statement reveals that the Government advanced larger amounts to cultivators during famines and scarcity years of 1901-02, 1904-05, 1907-08, 1911-12 1912-13 and 1919-20. With this help the cultivators were able to improve their lands and to tide over the difficulties created by the famines. In spite of this, a large number of cultivators remained heavily indebted. They could not extricate themselves from these debts to private money-lenders even though they gave away all their produce to the Sahukars. As the Administration Report of the Vadasinor State for the year 1921-22 reported, "the agriculturists themselves were to be blamed for this state of affairs as they spent a lot of money on ceremonial occasions and adopted luxurious habits."

After Independence, the Government decided to establish a permanent agency to finance agriculture. For this purpose the Bombay State Co-operative Land Mortgage Bank was established in the year 1935. After the formation of the Gujarat State, the Bank was redesignated as the Gujarat State Co-operative Land Development Bank. It opened branches in all taluka headquarters of this district from 1st May, 1967.

The following statement shows details of the finances made available for various purposes to the agriculturists in this district. The statement indicates very clearly that a great portion of the finance made by the bank is utilised for purchase of oil-engines and tractors and construction or repairs of wells.

STATEMENT IV-18

Agriculture Finance Advanced to Cultivators since beginning (upto June, 1973)

Sl. No.	Purpose	Amount in Rs.	Percentage
1	2	3	4
1	Sinking of new wells and repairs to old wells..	1,63,47,855	21.8
2	Oil-engines, electric motors, pumping sets, etc.	2,91,40,798	38.9
3	Purchase of tractors	2,43,57,867	32.5
4	Contour bunding	51,989	0.1
5	Farm houses and machine rooms..	2,75,850	0.4
6	Redemption of old debt and other unclassified purposes.	47,24,898	6.3
Total	.. ..	7,49,08,257	100.0

Source : Annual Report, Gujarat State Co-operative Land Development Bank Ltd., Ahmadabad, (1972-73) pp. XVIII, XIX.

The following statement gives branchwise advances during 1972-73 together with total advances and loans outstanding.

STATEMENT IV-19

Branchwise Advances since Beginning (upto June, 1973)

(FIGURES IN Rs.)

Sl. No.	Taluka	Advances during 1972-73	Advances since beginning (upto June 1973)	Outstanding loans
1	2	3	4	5
1	Nadiad ..	18,07,118	60,76,873	45,88,053
2	Borsad ..	21,32,028	69,97,862	52,01,487
3	Anand ..	18,23,289	78,68,302	56,70,985
4	Matar ..	12,17,030	80,58,489	54,04,025
5	Khambhat ..	8,56,845	53,64,180	38,43,896
6	Thasra ..	11,86,590	69,85,289	52,81,333
7	Petlad ..	9,85,601	42,87,108	25,89,867
8	Kapadvanj ..	13,24,136	1,57,27,284	1,07,43,121
9	Vadasinor ..	5,95,700	53,06,840	34,25,656
10	Mahamadabad ..	11,40,538	82,36,030	55,02,688
Total	..	1,30,68,875	7,49,08,257	5,22,51,111

Source : Annual Report, Gujarat State Co-operative Land Development Bank Ltd., Ahmadabad, (1972-73), pp. XVI-XXVII.

It can be seen from the above statement that a total of Rs. 7.49 crores has been advanced to cultivators since the establishment of its branches in this district. Advances made in 1972-73 are of the order of Rs. 130 lakhs.

In addition to the advances from the Land Development Bank, the cultivators now receive adequate help from the Joint Stock Banks. The co-operative societies also advance loans for specific purposes. For example, the Chaklasi Co-operative Society, Chaklasi, (Nadiad taluka), provided short term advances to the tune of Rs. 5.17 lakhs for purchase of seeds of potatoes, fertilisers, etc.

FAMINES AND FLOODS

Among the early famines, the years between 1738 and 1745 and the season of 1751 are referred to as times of distress when village communities

were broken and villages deserted. However, the severest famine, of which details are available was in 1790-91. Throughout the year rain fell only once. The people were forced to migrate to Malwa where they were attacked by a pestilence and died in great numbers. The whole revenue demand was remitted and steps were also taken for the suppression of crime. The next season of scarcity was 1813-14. Throughout the year there were only two falls of rain, one in July, the other about the middle of September. The total scarcity, itself very serious, was aggravated by the influx of starving people from Saurashtra. 1824 was a year of distress, and in 1825 the later rains almost entirely failed. Much suffering was caused and remissions of land revenue to the amount of Rs. 1,61,980 were granted. In 1834 locusts ate up the crops, a great scarcity arose and many cattle were lost. Remissions amounting to Rs. 1, 96, 550 of land revenue were granted. In 1835, the rain was too heavy and the cold weather crops were spoiled by frost.

Between 1836 and 1877, the rainfall was scanty and the crops partly failed, but there was no famine or general scarcity during that period.

In 1899-1900, the rains failed and the district was visited by severe famine. The total area of 1,595 square miles was affected. The out-turn of crops was estimated at 45 per cent of the normal. Relief works were opened in September 1899 and were continued till July 1900, in Khambat. In July 1900, 1,12,619 persons were paid gratuitous relief. The State of Khambat spent over Rs. 80,000 in famine relief. During 1900-1901 the area affected was the same as in 1899-1900. The highest number in receipt of relief was 48,730 in May, 1901. In 1901-1902 also the area affected was the same as in the previous two years. The total daily average attendance at relief works, which was reduced to 254 in October 1901, rose to 62,300 in March 1902. The number in receipt of gratuitous relief was 4,715 in May 1902. There was no further famine in the district till 1910-11.

In 1911-12, the State of Vadasinor suffered from the utter failure of the monsoon. The total rainfall of the season was less than 10" against 29" of the average of the past five years. As a result, the rice crop was a total failure and the out-turn of *bajri* and maize—the staple food grains of the ryot—was about 3 to 6 annas in the rupee. The prospects of the *rabi* crops were hopeless on account of the absence of rain from the middle of September. The worst feature of the season was the scarcity of fodder which began to be felt in December when the scarcity stock had run short and the cattle had to live on scrapings of grass and leaves of trees.

To meet the situation relief works of metal-breaking were opened and the state forest and reserve *vidis* were thrown open for free grazing.

Timely advances of *tagavi* were made to poor agriculturists, who were encouraged to sink *kacha* wells and to set right the old ones and thereby to

raise *Rabi* crops and fodder. In all Rs. 10,027 were advanced to the people as *tagavi* for sinking and deepening wells as well as for *kos*, *varat*, seed, etc., and Rs. 3,096 were spent on Famine Test Works till the close of March, 1912.

Arrangements were also made to import and distribute grass to needy agriculturists according to their requirements. Private charity funds amounting to over Rs. 2,000 were also raised and the money utilized for human and cattle relief. A generous aid of grass worth Rs. 3,000 was received at a critical time from the Bombay Central Famine Relief Fund and it went a long way in assisting poor agriculturists as well as non-agriculturist to save their suffering cattle from starvation.

In order to enable the agriculturists to tide over the time of stress, great leniency was shown in the matter of land revenue collection. Suspension was granted in the case of different villages according to the extent to which they were affected by the drought.

The season of 1915 in the Vadasinor State was disappointing on account of scanty rainfall. The rainfall during the year was 13 inches. The out-turn of rice was a total failure and that of *bajri* was only 1/5th of the normal.

The monsoon of 1918-19 was also a failure in Vadasinor State. The total rainfall during the year was 7 inches. The crops withered away for want of rains and their out-turn came to only 10 to 25 per cent of the normal. This heavily told upon the poor agriculturists, as scarcity of fodder was greatly augmented. The cheap grain shop and local relief funds rendered valuable services to those for whom they were intended. The famine hit the cattle hardest as the scarcity of fodder was very keenly felt. The State advanced Rs. 11,209 as *tagavi* to the poor and needy cultivators for sinking and building wells and for purchasing fodder, implements, etc.

Scarcity prevailed during the period between 1911-12 and 1918-19. But the sustaining power of the ryots had increased and realizing that every third or fourth year was likely to be a bad year, the people learnt to lay by something in good seasons to provide against the rainy day. These conclusions find support in the fact that no famine works were required in 1911-12. In 1918-19 the number of maximum workers was only 2,129 during the month of May. The year 1920-21 was a lean year. No special famine measures were required.

In 1938-39, scarcity conditions were declared in 51 villages of which 29 villages of Mahemdabad taluka reported one-fourth yield while Kapadvanj taluka a little more. The land revenue amounting to Rs. 2,70,348 was suspended by the Government. In 1939-40, scarcity conditions were declared

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in 76 villages of Borsad taluka and Rs. 6,089 were remitted from *tagavi* advances. Land revenue amounting to Rs. 3,80,968 was suspended by the Government.

In 1947-48, there was a partial failure of crops in some parts of the Matar taluka. Although the rainfall was below average in the district, the other talukas were not affected. To relieve the distress in the affected region, village tanks and wells were constructed. The Government granted *tagavi* loans. Road construction work was also started to provide work to the distressed persons.

In 1948-49, most of the villages in the district were affected by scarcity or semi-scarcity except the villages in Anand, Petlad and Nadiad talukas. Nearly 60,000 bales of grass were imported. Crops failed considerably in 92 villages of Khambhat taluka, 36 villages of Mahemadabad taluka and 29 villages of Matar taluka. The talukas of Khambhat, Thasra, Kapadvanj, Borsad and Petlad were the worst affected areas. Scarcity of water was experienced and water was supplied through tankers by Government. Boring works were started in certain villages. Remissions of Rs. 1,55,749 and suspensions of Rs. 2,49,176 were granted in Borsad, Mahemadabad and Kapadvanj talukas.

In 1950-51, Kapadvanj, Mahemadabad and Nadiad were under scarcity conditions. Fodder scarcity conditions prevailed in Anand, Kapadvanj, Thasra, Borsad, Nadiad, Mahemadabad and Khambhat. Fodder was supplied to cultivators at concessional rates in these talukas.

During the year 1951-52, 685 villages were affected by scarcity, 416 of them reporting less than 25 per cent out turn in crops. 53,935 bales of grass were imported and distributed in Khambhat, Matar, Mahemadabad, Nadiad, Borsad, Kapadvanj, Anand and Thasra talukas. Three villages of Khambhat taluka were affected by water scarcity and arrangements were made by Government to provide drinking water through tankers. Rs. 2,19,886 as remissions and Rs. 5,55,985 as suspensions of *tagavi* loans were granted in Borsad, Mahemadabad and Kapadvanj talukas.

In 1952-53 scarcity conditions were declared in 169 villages of Mahemadabad, Borsad, Nadiad and Kapadvanj talukas. In 1957-58 Khambhat, Matar and Mahemadabad talukas suffered acute scarcity conditions where 169 villages reported crop yield below 40 per cent of the average. Remissions and suspensions totalling to Rs. 75,000 were granted by the Government.

The year 1960-61 saw scarcity conditions in 77 villages of Mahemadabad and Kapadvanj talukas. Remissions in revenue amounting to Rs. 2.14 lakhs and suspension of Rs. 2.92 lakhs were granted by the Government.

About 190 villages experienced scarcity conditions in 1965-66 in Khambhat, Kapadvanj, Vadasinor, Nadiad, Thasra, Borsad, Matar and Mahemadabad. As a relief measure, *tagavi* recoveries of over Rs. 1 lakh were suspended by the Government.

The year 1966-67 was a little below normal. Scarcity was declared in 38 villages of Vadasinor, Matar and Mahemadabad talukas. But the years 1968-69 and 1972-73 were years of acute scarcity, throughout the major part of the district. The detailed information about these two scarcity years is given in the following statement.

		1968-69	1972-73
1. Total number of affected villages	..	525	466
(a) Villages under scarcity	..	293	168
(b) Villages under semi-scarcity	..	232	298
2. Population affected	..	708,056	866,464
3. Cattle population affected	..	N. A.	363,573
4. No. of labourers employed	..	3,000	56,000
		N. A. = Not available	

Source : Collector, Kheda.

Scarcity affected Areas

The Government of Bombay had set up a Fact Finding Committee in 1958-59, with a view to collecting full data regarding the famine and scarcity conditions in the State and making recommendations as to the preventive and ameliorative measures to be taken in future. The Committee demarcated areas which suffered from chronic scarcity. It so graded the scarcity areas that those which suffered intensely due to failures of rainfall at frequent intervals could be distinguished from others where the failures were less frequent or less severe. It divided the scarcity areas into three categories, A, B, and C, according as there had been a total or almost total failure of crop once every (a) three years, (b) six years or (c) ten years respectively. Accordingly, Khambhat and Matar talukas are treated as scarcity areas of class B and Mahemadabad taluka as scarcity area of class C. The remaining talukas are considered free from scarcity.

Floods

Severe storms with heavy downpour had visited Kheda in 1837, 1868 and 1871.

In 1919 Kheda rivers were in high floods. Young crops, especially in low-lying places, were swept away. The floods of July 1927 were disastrous in many parts of Gujarat. The district of Kheda, which received one hundred inches of rainfall was the worst sufferer. Transport and communications had been so extensively disrupted that it was impossible to make an immediate survey of the extent of the damage caused by floods to the economy of the province. Sardar Vallabhbhai Patel was ready with his men to undertake such a study and to organise relief on the required scale. The rain stopped on July 29 and within four days his men were found at their posts in all important places, busily engaged in ascertaining the needs of the flood-affected people. Vallabhbhai issued a public appeal for funds to finance the relief operations which he was convinced would have to be undertaken on a large scale. He made a special appeal to the Gujaratis living outside their province.

By the first week of August 1927, it became possible to gauge the magnitude of the relief problem and to devise measures for meeting it. Meanwhile, even before the situation had become clear, Vallabhbhai was approached by the Collector of Ahmadabad to give immediate assistance to the Kheda district, whose headquarters bearing that name, was completely isolated by the floods. Vallabhbhai promptly collected foodgrains and other necessities of life and rushed them to the district for distribution.¹

In 1973, the river Mahi was flooded beyond expectations. Due to very heavy rains all over the catchment in the last week of August, its water level started rising on 30th and a maximum level of 246 feet at reduced level was reached on 31st August. It was for the first time since the construction of the Vanakbori weir that such an unprecedented flood passed over it. During the same period, other rivers surrounding Mahi Command i. e., Shedhi, Vatrak and Sabarmati were simultaneously in spate. The flood waters of Sabarmati spilled over its normal river banks and water flowed on wide strip on left bank with a velocity of more than 8 ft. per second. This caused tremendous damage to standing crops and houses. Heavy damages were caused to roads, bridges, culverts, drains, canals and tanks.

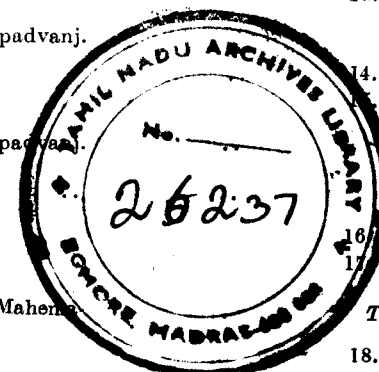
On 8th September, 1973, the water level at Vanakbori reached an all-time maximum level of 249 feet at reduced level. The flood waters over flowed and entered into the main canals causing severe breaches at several places. Heavy floods in the river accompanied with heavy rainfall in the command caused widespread damage to canals. The total damage to flood systems on the Mahi Project (Stage-I) in Kheda district was estimated at Rs. 139 lakhs. About 75 villages in this district were affected by the flood.²

1. V. B. KULKARNI, *The Indian Triumvirate*, (1969), p. 307.
2. Superintending Engineer, Flood Control Circle, Ahmadabad.

APPENDIX

Name of Veterinary Dispensaries, Branch Veterinary Dispensaries and First Aid Veterinary Centres

Sl. No. 1	Veterinary Dispensaries 2	Branch Veterinary Dispensaries 3	First Aid Veterinary Centres 4
1	Anand, Taluka Anand ..	..	<i>Taluka Anand</i> 1. Ode 2. Sarsa 3. Bhalej
2	Borsad, Taluka Borsad ..	Kathana (Taluka Borsad).	<i>Taluka Borsad</i> 4. Sisva 5. Jantral 6. Gambhira 7. Napa 8. Bipad 9. Akalav ..
3	Bhadran, Taluka Borsad ..	..	..
4	Khambhat, Taluka Khambhat ..	Bhuvel (Taluka Khambhat).	<i>Taluka Khambhat</i> 10. Valli 11. Tarapur 12. Kheda 13. Vadgam
5	Kapadvanj, Taluka Kapadvanj ..	..	<i>Taluka Kapadvanj</i> 14. Nirmali Antisar ..
6	Atarsumba, Taluka Kapadvanj ..	..	..
7	Matar, Taluka Matar ..	..	<i>Taluka Matar</i> 16. Radhu 17. Limbasi
8	Mahamadabad, Taluka Mahamadabad ..	..	<i>Taluka Mahamadabad</i> 18. Sinhuji 19. Mahij 20. Haldarvas
9	Nadiad, Taluka Nadiad ..	..	<i>Taluka Nadiad</i> 21. Vaso 22. Alina 23. Chaklashi 24. Mahudha



APPENDIX- *concl'd.*

Sl. No.	Veterinary Dispensaries	Branch Veterinary Dispensaries	First Aid Veterinary Centres
1	2	3	4
10	Dakor, Taluka Thasra	..	<i>Taluka Thasra</i> 25. Thasra 26. Kantharia 27. Menpura
11	Vadasinor, Taluka Vadasinor.	..	<i>Taluka Vadasinor</i> 28. Dev 29. Virpur
12	Sojitra, Taluka Petlad	..	<i>Taluka Petlad</i> 30. Deva 31. Dharmaj 32. Agas 33. Changa
13	Petlad, Taluka Petlad	Nar Baudham	<i>Run By Gram-Panchayat</i> 1. Navagam, Taluka Matar 2. Kathlal, Taluka Kapadvanj 3. Ranoli, Taluka Borsad

Source : District Animal Husbandry Officer, Nadiad.

CHAPTER V

INDUSTRIES

OLD TIME INDUSTRIES

The Kheda district in past was noted for many cottage industries which thrived in various towns and villages and catered to the needs of rural and urban population. Ker, a famous traveller has made reference to the cotton textiles, agate industry and indigo manufacture of Nadiad in 1638 A.D.¹ Nadiad also was noted for its gems and Khambhat had a flourishing trade in carnelians and Akik (agate) industries. There were two cotton ginning factories and 1400 handlooms supporting over 3000 persons. An experimental school for weaving was opened at Khambhat in 1904 A.D.² According to the *Gazetteer of Bombay Presidency* Vol. VI, carpets, salt and embroidery were the important industries of Khambhat. According to the Administration Report of Balasinor State for the year 1905-06 manufacturing of soap and dyeing and calico printing were the chief industries of the State and they were carried out by Boharas and Bhavsars.³

Cotton Weaving

Until the opening of steam factories at Ahmadabad and Nadiad, the spinning and weaving of cotton was next to agriculture, the most important industry. Almost all the women in towns and villages were to some extent engaged in spinning cotton thread. However, the competition of local steam factories greatly reduced the demand for home spun yarn. Khambhat, Petlad and Borsad were the important centres where these industries were run as cottage industries. In Khambhat of 2000 looms, about 50 per cent were engaged in weaving sarees while at Borsad about 40 looms were engaged in making petty coat cloth known as "ghaghrapat". In Kheda there were 3500 looms. Cloth woven out of the hand-spun yarn was of inferior quality and did not find a market outside the district.⁴ In 1876 a steam spinning mill with engines of 50 H. P. and 9744 spindles was started at Nadiad at a cost of 48500 pounds (Rs. 4,85,000).

The other industries that may be mentioned are glass and soap making at Kapadvanj, agate industry of Khambhat, dyeing and printing at Kheda

1. SHAH PURSHOTAM C. & SHAH CHANDRAKANT F. (Editors), *Charotar Sarva-sangrah*, Vol. I, pp. 566, 567.
2. *Imperial Gazetteer of India, Provincial Series, Bombay Presidency*, Vol. II, (1909), p. 472.
3. *Annual Administration Report of the Balasinor State for the year, 1905-06*, p. 9.
4. CHOKSEY R. D., *Economic Life in the Bombay Gujarat*, (1800-1939), 1968, p. 22.

and manufacture of knives and nut crackers at Pij and clarified butter (*ghee*). In this district Mahamadabad was the most important centre of *ghee* trade. During the pre-war days annually about Rs. two lakhs worth of *ghee* was exported from this place to Surat, Bharuch and Vadodara.¹

POWER

Electric power is the basic need for the development of vast economic potential. If there is enough electric power, a large number of industries could be set up and the production from these industrial units could bring prosperity. Power is important also to rural areas. The farmer can use it as a dependable tool in raising the food production. The development and economic prosperity of a region are judged by its industrial and agricultural growth. Power is the prime necessity and the generation of power and its consumption by industry and agriculture are the indicators of development. The areas comprising the present Kheda district had peculiar history of their own so far as power development was concerned.

Electricity was introduced in the district by Christian Missionaries in their hospitals at Nadiad and Anand. However the first systematic effort was made at Nadiad by Shri H. M. Mehta, an industrialist in 1929.²

The North Gujarat Electric Grid Scheme

To ensure co-ordinated development of the electric supply, schemes in Bombay State with particular reference to areas not served by any licensee and to promote rapid development of the use of electricity for agricultural and small scale industries, the Bombay Government set up the Electric Grid Department in 1944.

Under the North Gujarat Grid Scheme, power was purchased from the Sabarmati Power Station of the Ahmadabad Electricity Company, and transmitted upto Vadodara in the south and Kalol in north. For this purpose, the company, in consultation with the Government, had extended its power station.

The area within the economic reach of this scheme was 6215.976 sq. km. The first stage of development of the scheme covered parts of this district and other districts and supplied electric power to the licensees and industries in the towns of Nadiad, Dakor, Umreth, Anand, and Petlad of this district. The Grid supply commenced on February 15, 1951 and licensees of Nadiad, Anand, Dakor, Umreth and several H. T. consumers and villages began to receive power under the scheme. The first stage of the scheme was completed in 1954.

1. TRIVEDI A. B., *Post-War Gujarat*, p. 76.

2. SHAH P. C. AND SHAH C. F., *Charotar Sarvasangrah*, Vol. I, (1954), p. 151.

To promote rapid development, the Government had also approved a scheme for supplying electrical machinery and equipment for use in small industries and agriculture on the hire purchase system. After the formation of Gujarat State, Gujarat Electricity Board came in to existence. The real increase in Gujarat Grid took place when Dhuvaran power station having 254 MW. generating capacity to serve the power needs of the entire State, was commissioned in March 1965. Further two diesel power stations with the generating capacity of 1,120 KW each at Dhuvaran and Vallabh Vidyanagar were established.

The following transmission and distribution lines had been completed with the associated sub-stations during Third Plan :

1. Dhuvaran-Vatwa 132 Kv D/C
2. Dhuvaran-Gotri 132 Kv D/C
3. Dhuvaran-Gondal 132 Kv D/C
4. Dhuvaran-Khambhat 33 Kv D/C 12 miles
5. Dhuvaran-Borsad 33 Kv S/C 16 miles

The following table shows the consumption of electricity during the years 1960-61, 1965-66 and 1970-71.

Consumption of Electricity

(IN MILLION KWH)

Year 1	Domestic consum- ption 2	Commer- cial light and small power 3	Industrial power 4	Other purposes 5	Total 6
1960-61	3.49	5.56	53.02	29.82	91.89
1965-66	8.71	3.67	47.71	40.09	100.18
1970-71	17.40	5.60	103.45	118.35	244.80

Note : Information from the private licensee companies is also included.

Source : DOCTOR C. C., *District Census Handbook, Kheda District*, Part XC-I, Series 5, Gujarat. (1971) p. 26.

The foregoing table shows that the consumption for industrial purposes has gone up from 53.02 million KWH in 1960-61 to 103.45 million KWH in 1970-71. The total consumption has also increased from 91.89 in 1960-61 to 244.80 in 1970-71.

All the towns of district (17) are provided with electric power supply. Significant number of industrial connections are noticed at Anand (215), Khambhat (324), Nadiad (378), and Petlad (183).

(Bk) H-50—39 (Lino)

Rural Electrification

An important objective of the Third Five Year Plan was to develop efficient small scale industries in small towns and in rural areas so as to increase employment opportunities, raise income and living standard and bring about a more balanced and diversified rural economy. In achieving these objectives the major limiting factor was the lack of power. With the supply of electricity, it becomes possible to reorganise the traditional industries and to introduce small industries based on improved techniques in order to meet the new needs of the expanding rural economy. Viewed in this context, the scheme of rural electrification assumes great significance. Special attention is being given during recent years to rural electrification in the district. The table given below shows the progress in the electrification of villages in the district :

Period 1	No. of villages/ towns electrified 2
Before First Plan	9
First Five Year Plan	55
Second Five Year Plan	128
Third Five Year Plan	150
Annual Plans	130
Total	472

Thus, it would be observed that in all 472 villages and towns were electrified. In all 587 villages have been electrified upto 31st March, 1975 by the Board.

However, detailed information upto 31st March, 1969 for all the talukas are given as under :

Name of taluka 1	Number of towns/villages electrified upto 31-3-1969		
	For all purposes 2	For agricultural purpose only 3	Total 4
Anand	57	11	68
Vadasinor	4	8	12
Borsad	62	14	76
Khambhat	27	9	36
Kapadvanj	20	15	35
Matar	17	6	23
Mahomadabad	32	6	38
Nadiad	53	10	63
Petlad	58	20	78
Thasra	9	7	16
Total	399	106	445

Source :

Government of Gujarat, Department of Information, *Pragatina Pantha*,
Gujarat Rajya, *Ayojanna Adharvarsha*, Kheda Jillo.

INDUSTRIES AND MANUFACTURES

Mining and Heavy industries

The Kheda district is deficient in major minerals such as iron, coal, gold, etc. Only bauxite, limestone, blackstone, black trap, rock, etc. are available. However trap, murrum, *kankar*, sand, building stones and bentonite clay, petroleum, gas, etc. are other minerals available in the district.

Bauxite—Narrow isolated outcrops of laterite containing horizons of bauxite is exposed over a length of about 13 km., from Kapadvanj in the north to Dakor in south. The important deposits of Taiyabpur is being worked by A. C. C. Ltd. A. C. C. holds mining lease for 340 acres and 33 gunthas in this area. The reserves in the leased out area are 58,180 tonnes.

Amrutpura mining lease area (68 acres 8 gunthas) is about 8 km., north of Dakor. Area was proved by sinking trial pits and few trenches. The reserves of mixed material (laterite-bauxite) come to about 107,600 tonnes. Thasra is another town where bauxite is mined at the village Amrutpura by the Associated Cement Company Limited, Cement House, Bombay-1.

A small hillock about two km., SW of Savli village, locally known as "Ratnaker hill" is capped by pisolitic bauxite at places. A. C. C. holds 76 acres and 31 gunthas mining lease in this area. The nature of bauxite is irregular and pockety, so it is necessary to ascertain its existence in the intervening soil covered areas. The Directorate of Geology and Mining had taken up this work during field season in 1969-1970. The bauxite exposures had been explored in details during 1970-71.

Limestone—The limestone belonging to the Lametas are seen as thin cappings over the granites near Vadasinor town. These limestones vary in composition from siliceous to calcareous type. The massive limestone at places is impure and is being quarried near Bhogiyakenari, Baliyadev, Jaimatpura and Karanpura villages by the A. C. C. Ltd. Impurities of agate, Jasper and calcareous clays are intimately associated with limestone. Rojawa limestone is the southern extension of Vadasinor limestone formation. The A. C. C., has done prospecting work in the leased out area. Limestone under the heading of major mineral is used for chemical purposes and is mostly free from impurities. The proportion of calcium carbonate is more than 90 per cent while limestone with impurities (70 per cent or so calcium carbonate) is used for preparation of mortar, etc.

The total number of quarry leases granted in the district was 89 as on 31st March, 1973.

The Statement V-1-A and V-1-B show the 'Mineral Production' in the district during the years 1965 and 1972.

STATEMENT V-1-A

Mineral Production (Year of Reference 1965)

(PRODUCTION IN TONNES)

Sl. No.	Taluka/Mahal	Major Minerals		Minor Minerals				Brick earth
		Lime-stone	Bauxite	Trap	Lime-stone	Murram	Bento-nite	
1	2	3	4	5	6	7	8	9
1	Mahamadabad	..	..	N.A.	N.A.	N.A.	N.A.	N.A.
2	Nadiad	..	..	N.A.	N.A.	N.A.	N.A.	N.A.
3	Anand	..	..	N.A.	N.A.	N.A.	N.A.	N.A.
4	Petlad	..	..	N.A.	N.A.	N.A.	N.A.	N.A.
5	Borsad	..	..	N.A.	N.A.	N.A.	N.A.	N.A.
6	Matar	..	..	N.A.	N.A.	N.A.	N.A.	N.A.
7	Kapadvanj	..	16,668 (19,800)	N.A.	N.A.	N.A.	N.A.	N.A.
8	Vadasinor	4,03,790 (21,08,000)	..	N.A.	N.A.	N.A.	N.A.	N.A.
9	Khambhat	..	..	N.A.	N.A.	N.A.	N.A.	N.A.
10	Thasra	42,606 (2,22,000)	..	N.A.	N.A.	N.A.	N.A.	N.A.
Total for district		4,46,396 (23,30,000)	16,668 (19,800)	98,380 (37,000)	5,000 (10,000)	728 (1,000)		

Sl. No.	Taluka/Mahal	Kankar	Gravel	Ordinary sand	Pebbles	Total No. of persons employed	Total (receipts) value in Rs.
1	2	10	11	12	13	14	15
1	Mahamadabad	N.A.	N.A.	N.A.	N.A.	N.A.	..
2	Nadiad	N.A.	N.A.	N.A.	N.A.	N.A.	..
3	Anand	N.A.	N.A.	N.A.	N.A.	N.A.	..
4	Petlad	N.A.	N.A.	N.A.	N.A.	N.A.	..
5	Borsad	N.A.	N.A.	N.A.	N.A.	N.A.	..
6	Matar	N.A.	N.A.	N.A.	N.A.	N.A.	..
7	Kapadvanj	N.A.	N.A.	N.A.	N.A.	N.A.	..
8	Vadasinor	N.A.	N.A.	N.A.	N.A.	N.A.	..
9	Khambhat	N.A.	N.A.	N.A.	N.A.	N.A.	..
10	Thasra	N.A.	N.A.	N.A.	N.A.	N.A.	..
Total for district		540 (2,000)	320 (200)	10,224 (2,000)	..	N.A.	..

N. A. = Not available

Notes:— (1) Talukawise production is not available for minor minerals for the year 1965.

(2) Total No. of persons employed in Kheda district is not available for the year 1965.

(3) Figures shown in bracket indicate production value in rupees.

Source : The Director of Geology and Mining, Ahmadabad.

STATEMENT V-1-B

Mineral Production During the year 1972

(PRODUCTION IN METRIC TONNES)

Sl. No.	Taluka/Mahal	Major minerals		Minor minerals			Ben-tonite
		Limestone	Bauxite	Trap	Lime-stone	Murram	
1	2	3	4	5	6	7	8
1	Mahamadabad	..	..	..	..	..	..
2	Nadiad	..	..	..	..	..	..
3	Anand	..	..	..	..	..	..
4	Petlad	..	..	..	..	..	..
5	Borsad	..	..	..	..	..	..
6	Matar	..	..	..	..	..	..
7	Kapadvanj	..	6,052 (1,45,000)	..	..	6,296 (25,184)	270 (4,050)
8	Vadasinor	3,33,510 (18,78,000)	..	..	6,512 (32,562)	4,578 (18,312)	20 (4,300)
9	Thasra	..	2,201 (53,000)	3,92,056 (19,60,278)	..	5,436 (2,17,821)	..
10	Khambhat	..	..	..	..	..	..
Total		3,33,510 (18,78,000)	8,253 (1,98,000)	3,92,056 (19,60,278)	6,512 (32,562)	16,310 (2,61,817)	290 (4,350)

Sl. No.	Taluka/Mahal	Brick earth	Kankar	Gravel	Ordinary Sand	Ordinary Clay	Pebbles	Total number of persons employed
1	2	9	10	11	12	13	14	15
1	Mahamadabad	200 (400)	..	..	18,644 (37,288)	2,500 (10,000)	..	48
2	Nadiad	24,150 (48,300)	80 (400)	..	2,172 (4,344)	18,064 (72,256)	..	84
3	Anand	61,450 (1,22,900)	2,004 (10,020)	..	80,588 (1,61,176)	2,020 (8,080)	..	312
4	Petlad	1,350 (2,700)	..	..	..	..	..	15
5	Borsad	350 (700)	..	..	2,732 (5,464)	..	..	8
6	Matar	..	..	..	2,512 (5,024)	..	..	6
7	Kapadvanj	..	..	..	2,912 (5,824)	..	..	48
8	Vadasinor	..	..	..	..	..	..	652
9	Thasra	1,000 (2,000)	300 (150)	11,461 (45,844)	5,607 (11,214)	896 (3,584)	80 (N.A.)	754
10	Khambhat	500 (1,000)	..	..	..	..	..	2
Total		89,000 (1,78,000)	2,384 (11,920)	11,461 (45,844)	1,15,167 (2,30,334)	23,496 (18,928)	80 (N.A.)	1,000

N. A. = Not Available.

N. B.—Figures shown in bracket indicate production value in rupees.

Source : The Director of Geology and Mining, Ahmadabad.

INDUSTRIALISATION

Industrialisation can be divided into four main groups, viz., (1) large scale industries, (2) medium-scale industries, (3) small scale industries and (4) cottage industries.

Industrialisation is quite a recent phase in the economic development of the country and its various regions. Till the latter half of the 19th century the economic structure mainly consisted of agriculture, with its complementary and ancillary avocations in the form of various crafts and handicrafts plied by local artisans and craftsmen, some of whom acquired the highest degree of perfection and artistic excellence. The second half of the past century, however, saw the beginning of some industrial activity in the modern sense of the term in the district. The first step in the direction of industrialisation aided by mechanical devices was taken in the textile industry as cotton happened to be the most important raw material grown in this district and adjoining district of Bharuch. Mechanisation was introduced in ginning and pressing factories followed by textile mills.

The first textile mill, known as the mill of Manohar Harkha, was established at Nadiad in 1876 A. D. The mill is no longer in existence now. The Mafatlal Group of Industries bought in auction in 1912, the Shorrock Spinning and Manufacturing Company then known as Swadeshi Mill at Nadiad. Besides textile industry, local talent entered the field and started particularly after Independence, number of industries, such as tobacco processing and *bidi* making units, oil mills, manufacture of electrical accessories, cement, *dal* mills, dairying, etc.

According to 1971 census the district had 14,536 industrial establishments of various types, including household industries, employing 58,423 persons. In all 17 major groups of industries were returned from the district. Some of the major groups of industries prevalent in the district and the total number of establishments and number of persons engaged by each are tabulated below :

Sl. No.	Major groups of industry	Total No. of establishments	No. of persons engaged
1	2	3	4
1	Manufacture of beverages, tobacco, and tobacco products	1,242	13,099
2	Manufacture of cotton textiles	860	11,265
3	Manufacture of non-metallic mineral products	1,330	6,055
4	Manufacture of food products	2,340	5,687
5	Manufacture of textile products (including wearing apparel other than footwear)	2,913	4,000
6	Other manufacturing industries	1,746	4,412
7	Manufacture of wood and wood products, furniture and fixtures	1,209	2,560

Source :

Census of India, 1971, *Administrative Atlas*, p. 76.

CHAPTER V—INDUSTRIES

The industrial activity in the district has assumed importance with the commencement of industrial revolution. According to 1871 Census Report artisans accounted for about 4.27 per cent of the total population. At that time mostly traditional industries operated manually were in existence. With the commencement of textile industry, the district assumed importance. Both handlooms and powerlooms have also been functioning in the district. There were 5,535 handlooms and 177 powerlooms. Apart from the textile mills, engineering units have also contributed substantially towards the industrial development. The oil mills and the oil expellers have also been opened in the district. Among the oil mills, the Nadiad Oil Mill established in 1952 deserves mention. The dairy industry, the cement, pulse mills and small factories of tobacco and *bidi* and other miscellaneous industries have also pushed up the industrial development of the district. Some other industries which deserve mention are manufacture of soap, match-sticks, printing press, ceramics and tanning of leather. From the view point of industrial development the district shows medium linkage potential pattern. Among the industries which show this potential are footwear, other wearing apparel and manufactured textile goods, leather and leather products (except footwear) and non-electric machinery.¹

Except some textile units at Nadiad, Petlad and Khambhat and Amul dairy and some factories like cement factory at Sevalia, Vallabh Glass Works and Elecon factory at Vallabh Vidyanagar, most of the industrial units are in small scale sector. The industries mentioned below would give an idea of the extent of industrialisation in the district.²

Salt—The district is fortunate in having two salt works located at Khambhat. They provide employment to 140 persons. The total annual production of salt is estimated in the neighbourhood of 5,000 tonnes.

Textile Industry—The textile mills in the district are located at Khambhat, Nadiad and Petlad. In Khambhat one spinning and weaving mill and one spinning mill are in existence. These two mills provide employment to 1,800 persons. In the town of Petlad currently one textile mill is functioning and two textile mills are closed since long. The unit which functions at present in the town provides employment to 600 workers. In Nadiad there is a cotton textile mill which manufactures all varieties of cotton cloth. This unit provides employment to 4,000 persons.

Manufacture of Electric Meters—One large scale unit and three small scale units which manufacture electric meters thrive in the district. The

1. Second Gujarat Economic Conference, Chapter entitled "District Profiles towards Industrial Planning in Gujarat." An article contributed by the Senior Patril Institute of Economics and Social Research, Ahmadabad.
2. Commissioner of Industries, Government of Gujarat, *Audhyogic Ruprekha Kheda Jillo*, 1971.

large scale unit is located at Vallabh Vidyanagar on Anand-Sojitra road and provides employment to 400 persons.

Mechanical handling Equipment—A large scale factory exists at Vallabh Vidyanagar which manufactures buckets, alleviators, belt conveyors, etc. This unit provides employment to 1,300 persons and has an annual capacity of producing goods worth Rs. 5.62 crores.

Manufacture of Aluminium windows, etc.—A large scale unit also exists at Karamsad which manufactures windows of aluminium and soft pig iron. It provides employment to 200 workers.

Glass—There is a glass factory on the Anand-Sojitra road located at Vallabh Vidyanagar which manufactures sheet glass. This unit provides employment to 300 persons and its annual capacity is 150 lakh sq. metres.

Pig Iron Rolling Mill—A pig iron rolling mill with an annual capacity of 6,200 tonnes functions at Anand. It provides employment to 42 persons.

Glue—There are two units manufacturing Glue in the district. One is located at Khambhat and the other at Anand. They provide employment to 190 workers and have an annual capacity of 700 tonnes.

Stone crushing Machinery—There is a unit at Karamsad which manufactures stone crushing machinery. It provides employment to 100 workers and its annual production capacity is 50 machines.

Unit Pre-stressed Concrete Pillars—A factory manufacturing pre-stressed concrete pillars on co-operative basis exists at Vallabh Vidyanagar. It provides employment to 50 workers and its annual production capacity is 30,000 pillars. Sevalia also manufactures cement poles.

Household Electrical Grinding Mill—There is a unit producing electrical grinding mills for household use at Vallabh Vidyanagar. This unit annually produces 1,500 grinding mills and provides employment to 32 persons.

Manufacture of Electrical Cables, Insulators, etc.—A unit manufacturing P. V. C., insulated and rubber insulated cables and wires is located at Nadiad. This unit provides employment to 250 persons. One similar unit also exists at village Piplag.

Cement—The cement plant of Associated Cement Company is located at Sevalia. It employs 1,355 persons and produces 170 thousand tonnes of cement.

Quarries—A stone quarry belonging to Associated Cement Company is functioning at Vadasinor. This quarry crushes stones and sends them to Sevalia Cement Factory. It provides employment to 720 persons. In addition to this quarry, there are 17 quarries which provide employment to 400 persons. These quarries are located at Thasra and Sevalia.

Soap Making—There are 32 units in the district manufacturing washing soap. They provide employment to 247 persons.

Cement Products—There are 64 units engaged in producing cement pipes, tiles and other articles. They provide employment to 750 persons.

Saw Mills—There are 82 saw mills in the district which provide employment to 347 persons.

Steel Furniture—In all 21 factories exist in the district. They manufacture steel furniture and provide employment to 193 persons.

Plastic Industries—In all there are 15 units manufacturing plastic articles. They provide employment to 130 persons.

Ginning and Pressing—There are 16 ginning and pressing factories in the district which provide employment to 115 persons.

Tobacco Processing—As many as 100 factories function in the district which process *bidi* leaves and manufacture snuff. They provide employment to 4,248 persons. These factories are located at Anand, Khambhat, Petlad and Nadiad.

Brass and Copper Wares—In the district there are 41 units engaged in manufacturing brass and copper wares. They provide employment to 140 persons. These units are located at Nadiad and Khambhat.

Units manufacturing Electrical Instruments—There are 8 units in the district which are engaged in manufacturing electrical meters, swastik gears, etc. These units are located at Nadiad and Anand. They provide employment to 617 persons.

Power Looms—In all 191 powerloom factories function in the district which provide employment to 1,614 persons. The town of Khambhat alone accounts for 150 powerloom factories having 730 power looms and provide employment to 1,500 workers.

Foundry—There are 26 cast iron factories in the district which provide employment to 900 persons. They are located at Nadiad, Petlad and Khambhat.

Rice and Pulse Mills—There are 45 units providing employment to 340 workers.

Chemicals—There are 14 units in chemical industry which provide employment to 416 persons. The chemicals manufactured in the district are paints, dyestuff, etc.

Dairy Industry and Casein Making

The importance and development of dairying industry can be recognised from the fact that it has contributed substantially towards the industrial development of the district. Tracing the development of this industry, it may be stated at "By 1926 there was one milk buffalo per 7.3 acres of cultivated land in Kaira, and 11 acres of cultivated land in Ahmadabad and Surat. These centres compared quite favourably even with Denmark which had one cow for six acres. Kaira had the greatest possibilities for the development of the dairy industry (milk, butter and ghee)". It is further stated "If there is an industry that grew with the years, it was Dairy Farming. The Kaira district was famous for its dairy industry, Anand is its home. Casein was exported every year to England, Holland and Germany, etc."¹

The Casein making has profitably developed in the district. Since olden days the district has number of creameries located at Anand, Mahamadabad, Kanjari, etc. Among Gujarat's creameries the biggest is the Polson Dairy at Anand. In 1938 the annual production of butter of this dairy stood at 1,302,372 lbs. and that of casein 3,000 maunds.

Casein making has a chequered history. In the 19th century a machine called cream separator or milk separating machine was invented. This machine was bought by a Bombay firm. In the district it made its first appearance at the Nar village. Soon number of creameries started functioning. However credit for starting dairying industry on scientific basis by making use of this machine goes to one Swedish Company called Staffard Company. As there was considerable demand for butter in Europe, the Company selected the district as venue for its work. The two persons called Nanchandbhai Doshi and Dharamji M. Doshi ably assisted the Company in establishing creamery industry in the district.

The Company however was not able to utilise the milk which was rendered useless after the removal of cream from it. One retired German army Officer Kolar became aware of this situation. He came to Anand and started in its vicinity the manufacture of casein. He secretly carried on the business for three years. However at the start of First World War, he was arrested

¹CHOKSEY R. D., *Economic Life in the Bombay-Gujarat*, (1800-1939), p. 225.

and process of casein manufacture became an open secret. However thereafter number of creamery owners in the district turned skimmed milk into casein. Even Amul dairy manufactures casein. In 1972 Polson Dairy manufactured casein valued at Rs. 38,63,412.

Miscellaneous—In addition to the industries mentioned above, there are many small scale and cottage industries manufacturing paper, hand bags, ice, engineering articles, etc., in the district.

TRENDS OF INDUSTRIAL DEVELOPMENT

The trends of industrial development during the last decade 1960-1970 are reflected in the number of factories and workers compared in Statement V-2 given at the end of the chapter. The figures indicate that as compared to the period 1960-65, the growth rate of industries as well as number of workers showed substantial increase during 1965-70. The total number of factories rose from 296 in 1960 to 397 in 1965 and 531 in 1970. As against the increase in the number of factories during both the periods, the employment opportunities also increased correspondingly. The employment rose from 18,718 in 1960 to 25,161 in 1965 and 28,082 in 1970. Both from the view point of workers employed and number of units the most important units were tobacco manufacture (214),¹ spinning, weaving and finishing of textiles (46), structural clay products (39), manufacture of machinery (except electrical machinery) (38), etc.

The industries in operation in the district cover a fairly wide range of products based either on local raw material like cotton, tobacco, groundnut, bauxite, limestone, etc., or others like metals, chemicals, etc., imported from outside. Cotton textiles is the important branch of industry which includes cotton ginning and pressing factories, textile mills, and other weaving factories. The extensive cultivation of tobacco and oil seeds has been responsible for a number of *jarda* factories and oil mills.

Utilisation of Man-power

A review of economic resources must take into account the human resources as determined by its working force and its relative utilisation in gainful pursuits in different sectors of industries. The sub-jointed Statement-V-3 indicates the distribution of working force in secondary sector for the years 1961 and 1971.

The statement shows overall fall in number of persons occupied in industry in 1971 than in 1961. The distribution of different sectors shows

1. Figures in brackets indicate the number of factories.

that there is substantial fall in percentage of persons occupied in household industry in 1971 while there is significant increase in percentage of persons occupied in industries other than household in 1971. The percentage of persons in construction industry has remained practically the same.

STATEMENT V-3

Distribution of Working Force

Sl. No. 1	Secondary Sector 2	1961 3	Percentage of total working population 4	1971 5	Percentage of total working population 6
1	At household industry ..	41,799	6.11	17,580	2.46
2	In manufacturing other than household industry..	32,736	4.79	47,544	6.65
3	In construction ..	6,398	0.93	6,767	0.95
	Total for secondary sector..	80,933	11.83	71,900	10.06

LARGE SCALE INDUSTRIES

Annual Survey of Industries

The progress made by the large scale industrial units in the district is reflected in the results of Annual Survey of Industries conducted annually by the Government of India, since 1959 under the Collection of Statistics (Central) Rules, 1959. The coverage of this survey extends to the factories registered under the Factories Act, 1948.

There are two sectors of Annual Survey of Industries viz: Census and Sample Sectors. In the Census Sector, factories employing 50 or more workers with the aid of power or factories employing 100 or more workers without the aid of power are completely enumerated, whereas in the Sample Sector, factories employing 10 to 49 workers with the aid of power and factories employing 20 to 99 workers without the aid of power are covered on the basis of probability sample. The table given below furnishes the data in respect of factories reported under the Census part of Annual Survey Industries, 1967. Figures indicate the percentage share of the district in State total.

Large Scale Factories, 1966-67

Sl. No. 1	Items 2	1966 3	1967 4
1	Number of reporting factories ..	8.40	8.70
2	Productive capital ..	6.71	6.60
3	Employment ..	5.21	5.61
4	Gross value of output ..	6.83	6.89
5	Net value added by manufacture ..	4.76	3.61

Source : Government of Gujarat, Bureau of Economics and Statistics, Ahmadabad, *Quarterly Bulletin of Economics and Statistics*, Vol. XII, No. 1, January-March 1972, p. 100.

From the foregoing table it is observed that district's contribution in respect of number of reporting factories, productive capital, employment and gross value of output is less than substantial. The industries which fall within the purview of Annual Survey are :

- (1) Manufacture of miscellaneous food preparation
- (2) Tobacco manufacture
- (3) Spinning, weaving and finishing of textiles
- (4) Manufacture of textiles not elsewhere classified
- (5) Iron and steel basic industries
- (6) Manufacture of machinery, except electrical machinery
- (7) Manufacture of electrical machinery, apparatus, appliances and supplies.
- (8) Repair of motor vehicles and
- (9) Other industry groups

REGISTERED FACTORIES

According to the returns furnished by the Chief Inspector of Factories, the total number of registered factories was 554 in 1971 in the district. Among these factories, 525 factories were in the private sector. The public sector accounted for only 29 factories. According to the prescribed industrial classification, their break-up is given in the following Statement V-4. Among the factories working in the private sector, 488 were actually working in 1971 and 35 were closed.

STATEMENT V-4

Registered Factories and Workers, 1971

Sl. No. 1	Name of Industry 2	Total No. of factories 3	Total No. of working factories 4	No. of working factories submitting returns 5	Average No. of workers employed daily in working factories 6
I PUBLIC SECTOR					
1	Machinery (except electrical machinery) ..	5	5	4	194
2	Transport equipment ..	12	12	12	630
3	Electricity, Gas and Steam	10	10	8	560
4	Water and Sanitary Services	2	2	2	18
	<i>Total</i>	29	29	26	1,402
II PRIVATE SECTOR					
1	Processes allied to agriculture (Gins and Presses) ..	23	17	17	1,874
2	Food except beverages ..	40	40	38	2,104
3	Tobacco	212	195	165	5,346
4	Textiles	44	39	38	7,998
5	Footwear, other wearing apparel and made up textile goods ..	1	1	1	271
6	Wood and cork except furniture	3	3	3	27
7	Furniture and fixtures ..	1	1	1	24
8	Paper and paper products ..	9	9	9	265
9	Printing, publishing and allied industries ..	5	5	5	128
10	Leather and leather products (except footwear) ..	3	3	3	45
11	Rubber and rubber products	1	1	1	64
12	Chemical and chemical products	17	17	15	632
13	Products of Petroleum and Coal ..	..	..	..	..
14	Non-metallic mineral products (except products of petroleum and coal) ..	76	70	62	3,325
	<i>Basic metal Industries</i> ..	8	8	7	240

STATEMENT V-4—concl'd.

Sl. No. 1	Name of Industry 2	Total No. of factories 3	Total No. of working factories 4	No. of working factories submitting returns 5	Average No. of workers employed daily in working factories 6
16	Metal products (except machinery and transport equipment) ..	11	10	10	287
17	Machinery (except electrical machinery) ..	34	33	32	2,659
18	Electrical machinery, apparatus appliances and supplies ..	19	19	19	1,480
19	Transport equipment ..	8	8	8	237
20	Miscellaneous industries ..	10	9	9	141
	<i>Total</i> ..	525	488	443	27,147
	<i>Grand Total</i> ..	554	517	469	28,549

Source : The Chief Inspector of Factories, Gujarat State, Ahmadabad.

From the view point of employment, the most important units in the private sector were textiles, tobacco, non-metallic mineral products (except products of petroleum and coal), machinery (except electrical machinery) and food except beverages. From the view point of number of units, the most important units in the private sector were tobacco, non-metallic mineral products, textiles and food except beverages. The industries in operation covered a fairly good range of products based on local raw materials like tobacco and cotton and important food crops such as rice and pulses. The extensive production of tobacco in recent time is responsible for establishment of *jarda* (tobacco) factories located at certain favourable centres like Nadiad, Anand, Chikhodra, Umreth, Napad, etc. in the district. The particulars of the more important among large scale industries are given below:

The Kaira District Co-operative Milk Producer's Union, Anand (Amul)

The development of dairy industry has a glorious history of its own. After careful planning and ceaseless efforts on the part of farmers, the Amul Dairy made a humble beginning in 1946. With financial assistance from UNICEF and the Government of New Zealand and technical assistance from FAO, a Rs. 50 lakh factory to manufacture butter and milk powder was erected, and was opened in 1955 by the late Prime Minister, Shri Jawaharlal Nehru. In 1958 it was expanded to manufacture sweetened

condensed milk. Two years later a new wing was added to manufacture 2,500 tonnes of roller dried baby food and 600 tonnes of cheese.

The additional dairy plant of Amul was declared open by Shri Morarji Desai in April, 1965. It has a capacity of 40 tonnes of powder and 20 tonnes of butter a day. A new baby food called Amul Spray was added to the list of existing items. The dairy also manufactures cheese and casein.

During 1970-71 out of the total turnover of Rs. 27.39 crores, the value of milk sold accounted for Rs. 6.59 crores and remaining products Rs. 20.80 crores. The dairy employed 110 persons in 1972 and disbursed Rs. 6,87,596 as wages and salaries. The milk is supplied to the dairy by 700 village co-operative societies of the Kaira District Co-operative Union.

Cattle Feed Factory, Kanjari

Among the several industrial establishments this factory stands out prominently. Till 1964, most villagers fed their buffaloes with cotton seed as concentrate, a wasteful and expensive feed that did not provide a balanced diet. To make available a cheaper and yet more nutritious feed concentrate, a cattle-feed plant was set-up at Kanjari village in 1964 with aid amounting to about Rs. 15 lakhs from the Oxford Committee of Famine Relief (OXFAM) under the Freedom from Hunger Campaign of Food and Agriculture Organisation of the United Nations. The factory was inaugurated on 31st October, 1964 by Lal Bahadur Shastri, the then Prime Minister of India.

This plant manufactures a balanced feed called *Amuldan* by mixing oil seed by-products such as groundnut cake or cottonseed cake (which are cheaper than the whole oilseeds) with damaged cereals and cereal by-products such as rice bran, wheat bran, meal and bye products of pulse etc. and mineral supplements. *Amuldan* has proved to be a highly nutritious and balanced feed concentrate, though considerably cheaper than the conventional feed. What is more, it is readily available to the dairy farmers in Kheda at regular and fairly stable prices throughout the year, unlike the cotton seed feed for which traders used to charge heavy prices in the lean season. It had fixed capital of Rs. 74,66,454. It produced *Amuldan* amounting to Rs. 3,17,82,314 in 1972.

Polson Model Dairy, Anand

The Polson Model Dairy at Anand is a private dairy. The Dairy was inaugurated on 3rd January, 1930. It is equipped with latest dairy plant and machinery. The most modern and hygienic method of manufacture and packing are employed at the Dairy. It also produces considerable quantity of casein.

It had a fixed capital of Rs. 27,89,841 in 1972. In the same year it provided employment to 188 persons and disbursed Rs. 7,21,034 as wages and salaries. The table given below shows the name of the product and its value for the year 1972. The products are marketed all over India.

Sl. No. 1	Name of the product 2	Value in Rs. 3
1	Butter	2,06,57,315
2	Ghee	6,64,219
3	Casein	38,63,412
4	Skimmed Milk	4,60,051
	Total	2,56,44,997

The New Shorrock Spinning and Manufacturing Company Limited, Nadiad

Nadiad appeared on the national industrial map, in 1912, with the establishment of the New Shorrock Spinning and Manufacturing Company Limited. In 1968, it had provided employment to 3,697 persons and the installed capacity of spindles was 91,364 and looms, 1,441. The mill manufactured different varieties of cloth.

The Hitendra Cotton Factory, Kapadvanj

Cotton ginning and pressing industry has expanded its sphere in the district. The Hitendra Cotton Factory at Kapadvanj is an old factory. It was established in 1934. At present it is engaged in cotton ginning and pressing. It had a fixed capital of Rs. 1,05,867 in 1972. In the same year it provided employment to 200 persons and disbursed Rs. 1,16,650 as wages and salaries. It ginned and pressed 10,936 bales of cotton in 1972.

The Kapadvanj Co-operative Cotton Sale Ginning and Pressing Society Limited, Kapadvanj

This co-operative society was started in 1963-64 and is engaged at present in cotton ginning and pressing. It had a share capital of Rs. 5,00,000 and paid-up capital of Rs. 3,48,762 in 1972. It had a fixed capital of Rs. 17,73,260 in 1972. In the same year it provided employment to 493 persons and disbursed Rs. 1,36,374 as wages and salaries.

Shree Vrajesh Textile Mills Private Limited, Petlad

This mill was started in 1971. It had a share capital of Rs. 10,00,000 and paid-up capital of Rs. 2,85,500 in 1972. It had a fixed capital of Rs. 18,98,148 in the same year. It provided employment to 590 persons and disbursed Rs. 16,19,263 as wages and salaries. The table given below shows the name of the products and their value in 1972.

Sl. No. 1	Name of products 2	Quantity 3	Value in Rs. 4
1	Cotton thread	9,47,054 Kgs.	84,55,874
2	Cotton	1,00,000 metres	1,20,000
3	Waste (bye product) ..	1,49,680 Kgs.	1,85,540
	Total		87,61,414

The products are marketed to Ahmadabad, Delhi, Bombay and Madras.

Shree Saraswati Oil Mill and Ginning Factory, Kapadvanj

This oil mill and ginning factory was started in 1968. It had a fixed capital of Rs. 3,61,172 in 1972. In the same year it produced 9,700 oil tins valued at Rs. 5,84,981 and 5,961 quintals of cotton valued at Rs. 40,91,238. Subsidiary products were oil cake and cotton seeds valued at Rs. 8,05,983.

Sackfilm Corporation of India, Nadiad

It was established in 1970. A special packing material was developed with technical assistance from a New York (U. S. A.) firm. Sackfilm is polymer of low pressure film grade but has special properties which make it rather like paper film which prevents bacterial growth. It is used for packing dairy products, sweets and foodstuffs, soap, medicines, and chemicals. It protects fields and gardens from the calamities of rain and winds. It is air-proof, dust-proof and water-proof. The corporation had fixed capital of Rs. 2.50 lakhs in 1972. It provided employment to 14 persons and disbursed Rs. 20,000 as wages and salaries in 1972.

Charotar Sahakari Khand Udyog Limited, Palej

This unit was started in 1971. It had fixed capital of Rs. 215.92 lakhs in 1972-73. It had a share capital of Rs. 200 lakhs and paid-up capital of Rs. 108.70 lakhs in 1972-73. In the same year, it provided employment to 360 persons and disbursed Rs. 8.39 lakhs as wages and salaries. The table

given below shows the main products and bye—products and their value for the year 1972-73.

Sl. No. 1	Name of product 2	Quantity in M. tonnes 3	Value in Rs. 4
1	Sugar (main product)	3163.10	58.83 lakhs
2	Molasses (bye-product)	2687.016	00.18 lakhs
3	Press-mud (bye-product)	1294.358	..

The products are marketed in the Gujarat State according to the quota prescribed by the Government of India.

The Associated Cement Company Limited., Sevalia Cement Works, Sevalia

Soon after the Independence M/s. Associated Cement Companies Limited, Bombay, thought of constructing a cement manufacturing plant at village Sevalia in the Kheda district to utilize the limestone deposits available around Vadasionor town. The plant was put into commission in the year 1951 with rated capacity of 2 lakh tonnes per annum.

In 1972-73, it had fixed capital of Rs. 4,849.66 lakhs and share capital of Rs. 3,000 lakhs. It had provided employment to 1,722 persons and disbursed Rs. 91.39 lakhs as wages and salaries in 1973-74. It produced 1.73 lakhs tonnes of cement valued at Rs. 188.52 lakhs in 1973-74. At present its annual rated capacity (3 shifts working) of cement production is in the neighbourhood of 2,01,000 tonnes. The cement is sent to areas of Gujarat except Saurashtra and Kachchh regions.

SMALL SCALE AND COTTAGE INDUSTRIES

Since complete data regarding the distribution of small scale and cottage industries in the district are not available, the results of the survey carried out by the Bureau of Economics and Statistics, Gujarat State are summarised below, as they indicate the stage of development in this sector of industry historically. The survey was undertaken in all the districts of State except the Dangs and was spread over two years, 1959-60 and 1960-61. It aimed at obtaining districtwise estimates of income of families in selected cottage and small scale industries and collecting information on other related aspects such as employment, production and consumption of raw materials.

An establishment was classified as cottage industry, if the number of persons employed in it on any day during the year was 9 or less. If the number was 10 or more and the unit was not registered under the Factories Act, the establishment was classified as a small scale establishment whether it was power operated or not. Ordinarily industrial units employing 10 or more workers and using power should be registered under the Factories Act. However, if at the time of the inquiry, such a unit was not registered, it was included in the survey.¹

The survey carried out was a sample survey covering the following sixteen industries in the cottage and small scale sectors (1) weaving, (2) dyeing and printing, (3) jari thread works, (4) blacksmithy, (5) metal works (silver, brass-copper and bell), (6) carpentry, (7) cane and bamboo products, (8) bricks and tiles, (9) other potteries, (10) leather working and tanning, (11) oil pressing, (12) *gur* making, (13) bee keeping, (14) soap making, (15) match making and (16) paddy husking.

For the purpose of survey, the centres were classified into strata A, B, and C. Stratum 'A' related to the centres important for different industries. Stratum 'B' to urban areas other than those covered by stratum 'A'. Stratum 'C' consisted of groups of 4 to 5 villages in the rest of the rural areas from which about 4 per cent of the group villages were selected for the purpose of survey.

Distribution of Establishments by Industry

There were in all 7,383 establishments in the 16 industries surveyed in the district out of which 7,340 (99.4 per cent) were in the cottage sector and only 43 (0.6 per cent) were in the small scale sector.

Power vs. No Power

Out of 7,340 cottage establishments, 367 (5.0 per cent) establishments were operated with power and 6,973 (95.0 per cent) establishments were operated without power. In the small scale sector out of these establishments, 11 (25.6 per cent) establishments were operated with power and 32 (74.4 per cent), establishments were operated without power.

Employment

The total number of persons employed in both the sectors in the district were 17,172 out of whom 14,326 (83.4 per cent) were house hold persons and 2,846 (16.6 per cent) were outsiders. Taking the number of establishments into consideration, it would be observed that important industries

were weaving, carpentry, other potteries, and leather working and tanning. At present 234 small scale units at Nadiad are registered with the Director of Industries.

Small Industries in Unorganised Sector in Urban Areas

The Bureau of Economics and Statistics carried out in 1969-70, the listing survey of small industries in the unorganised sector of the urban areas of the district under the centrally sponsored scheme which was included in Fourth Five Year Plan.

The industrial unit was defined as any unit engaged in production (other than agriculture), processing, repairs and industrial servicing. The units rendering personal services were excluded (e. g., laundries, hotels, dispensaries, etc.).

The units were further classified as units using power and units not using power. The unit was considered to be using power if any kind of motive power was used directly or indirectly in the process of production. The data in the district was collected from the following 17 urban centres, viz., (1) Anand, (2) Vadasinor, (3) Bhadrav, (4) Borsad, (5) Khamhat, (6) Dakor, (7) Dharmaj, (8) Kapadvanj, (9) Kheda, (10) Mahamadabad, (11) Nadiad, (12) Pali, (13) Petlad, (14) Sojitra, (15) Umreth, (16) Vallabh Vidyanagar and (17) Vaso.

From the Statement V-5 given at the end of the chapter, it would be observed that there were 482 industrial units employing 5 or more workers in the unorganised sector of the urban areas of the district providing employment to 3,440 persons. Of the 482 units, 268 were found using power, while 214 were not using power. Of the 482 units, 329 were organised by proprietorship, 145 by partnership, 5 by co-operative society and 3 by others.

From the point of view of employment it may be noted that following units deserve mention viz., tobacco manufacture (764)¹ manufacture of jewellery and related articles (397), saw mill, planning and other wood mill, (257) and spinning, weaving and finishing of textiles (252). In 1975 there were 1,723 small scale registered units in the district.

INDUSTRIAL ESTATE

During the Second Five Year Plan it was generally accepted that industrial estates could become a tool for dispersal and decentralisation of industrial units. The main object of development of industrial estates is

Figures in the bracket indicate the number of persons employed.

1. Bureau of Economics and Statistics, Government of Gujarat, *Quarterly Bulletin of Economics and Statistics*, Vol. II., No. 1 January-March, 1962.

to accord requisite facilities for the development of small-scale industries whereby entrepreneurs with small means can obtain built-up sheds or developed plots with all facilities of roads, water supply, drainage, electric power, etc. Following industrial estates exist at present in the district :

(1) The Vithal Udyognagar Industrial Estate, (2) The Nadiad Industrial Estate, (3) The Khambhat Industrial Estate and (4) The Vadasinor Industrial Estate. The total number of sheds constructed in all the 4 estates were 119 till September 1973, out of which 90 sheds have been occupied.

Nadiad Industrial Estate

The Gujarat Industrial Development Corporation decided to establish an industrial estate at Nadiad in 1968. The estate encompasses an area of 13 hectares. Of the total of 92 plots, 38 plots have already been allotted. The Corporation has constructed 65 sheds of various designs with the built-up area varying from 60 sq. metres to 220 sq. metres, out of which 51 sheds have already been allotted. Twenty-nine units with a total investment of Rs. 67 lakhs have gone into production providing employment to about 380 persons. These industries belong to (i) electronics and electricals, (ii), engineering and foundaries, (iii) cement processing, (iv) chemicals, (v) plastics, (vi) non-ferrous materials, (vii) tobacco, (viii) rice and pulse mills and (ix) miscellaneous. An Association of G. I. D. C. Industries was formed under the name of "Nadiad G. I. D. C. Industries Association."

INDUSTRIAL ARTS

Agate Art of Khambhat

The town of Khambhat (Cambay) in the district has gained international reputation for the craft of *Akik* or agate. *Akik* or agate is the general term applied to different varieties of carnelians, and includes different forms of chalcedonic silica found either underground in mines, in river bed or on the slopes of the hills.

The historical background

After the fall of Vallabhi dynasty, the agate industry was revived at Khambhat in the 15th century during the rule of Gujarat Sultans. Around 1611 A. D., many craftsmen of Khambhat dealing in *Akik* stayed at Goa. The real information about the establishment of this industry at Khambhat is available from the reference made to an Abyssinian mendicant called Bawa Ghor who started an *Akik* factory at Nandod in Rajpipla. At first stones were prepared by Muslims. Kanbis (Patels) did not take long to learn the craft. After sometime, according to the same account the Kanbi (Patels) workers left Nandod and came to Bharuch and from Bharuch settled at

Khambhat. Since the beginning, this industry has witnessed many ups and downs. In Gujarat State, Khambhat is the place, where the *Akik* industry reached its pinnacle of prosperity and survives till this day.

Source of Agates

Agates found within the Rajpipla taluka limits are the major source of raw material required by this industry. The best types of carnelian stones are available from Ratanpur or 'Bawa Ghor' hill in Rajpipla taluka. The agate is also found in the beds of the river Mazum, between the villages of Amliayara and Manda, about 24.30 km., from Kapadvanj, at Ranpur (Ahmadabad district) and at Mahedpur and Bud Kotra villages of Morbi taluka (Rajkot district).

Castes

The artisans are drawn from various castes such as Patels, Ranas, Muslims, Thakors, Valmiks, Chunaras, Rawals, Bhavsars, Panchals, Prajapati, Pakhali, Nagar, Bandhara etc.

Finished Products

Finished products may be classified into (i) ornamental pieces, (2) decorative articles, (3) stationery articles and (4) other varieties. The total value of the production of a single firm ranges from Rs. 20,000 to Rs. 1 lakh.

Marketing

Agate is generally an article of export in foreign countries and is not consumed in substantial quantity in India. Finished products are first of all sold to Bombay merchants who in turn export them to foreign countries viz., Nigeria, Gold Coast, West Asian countries, Malaysia and Singapore. Some of the dealers have established direct trade relations with foreign countries.

Wage structure and Earnings

Daily average earnings of skilled artisans vary from Rs. 4 to Rs. 5 and for the semi-skilled workers from Rs. 3 to Rs. 4. The piece-rate wage varies from 0.50 paise to Rs. 12 per 100 pieces.

PEN KNIVES OF PIJ

This craft is verily a smithy craft, which is traditionally persued by blacksmith (Panchals) at Pij, a town located 4.8 km., from Nadiad.

These craftsmen used to manufacture razors and scissors 65 years ago. Now, they have started manufacturing pen knives and knives by copying imported makes. It is said that this craft developed at Pij because of the old Vav (step well), the water of which possesses unique quality, by which iron could be put into any shape.

Caste

Majority of the craftsmen are blacksmiths (Panchals). There are 45 families of blacksmiths at Pij. Out of 45 families 8 to 10 families are engaged in this craft.

Raw materials

The raw materials required in this craft are used and discarded files, iron rods, copper brass wires, stainless steel and mineral coal for fuel. The annual expenditure of raw materials varies from Rs. 2,000 for a small firm and Rs. 5,000 for a big firm.

Tools and Technique

Mainly smithy tools are used. These are hammers of different denominations, anvil, chisel, punch, drill, file, furnace, etc.

There are four stages in the entire process of production viz., (1) forging (2) grinding, (3) polishing and (4) finishing.

Finished Products

The length of pen knives varies from 1½" to 4". Knives of big, medium and small sizes are sold at the rate of Rs. 10-50, 8-50 and 6-50 per dozen respectively. Finished products are sold both in retail and wholesale either in cash or on credit basis. It is, however, estimated that goods worth Rs. 45,000 to Rs. 50,000 are sold every year. Some of the blacksmiths manufacture sickles also.

Wages

The wage rate of hired worker varies from Rs. 3 to Rs. 8 per day.

Income

The annual income earned by the craftsman varies from Rs. 501 for a small artisan and Rs. 3,000 for a big artisan. Some of them have their own land, the income of which supplements their budget.

SOAP MAKING AT KAPADVANJI

The town of Kapadvanj had acquired considerable importance in respect of soap making. There were 25 to 30 families before 45 years, engaged in this craft. They manufactured soap by mixing and boiling oos, water and non-edible oils. At present there are 2 families manufacturing soap who belong to Prajapati community. Their forefathers stayed at Mount Abu and were known as Parmars of Abu about 200 years ago. They in course of time migrated to Kapadvanj and started factories.

Raw materials

The raw materials used in the production are various types of oils, alkalis, rajan or rosin, colours and water. The raw materials are purchased from Nadiad and Ahmadabad. Rajan or rosin is purchased from Hoshiyarpur in the Punjab. The total value of raw materials used per day varies between Rs. 100 and Rs. 800.

Tools and Implements

The tools and implements are pan, soap cutting machine, chipping machine, stamping machine, frames, etc. The total investment in the tools and implements ranges from Rs. 1,000 to Rs. 5,000 per establishment.

Technique

At Kapadvanj soap is manufactured by semi-boiled method. The old process of manufacturing soap from oos is not followed now.

Finished Products and Marketing

The finished products viz., lata or soap bars, square and rectangular pieces of various sizes of soap and bhuki or chips are marketed in Kapadvanj taluka. The total value of the monthly production of the two units is in the neighbourhood of Rs. 32,000.

Employment and Salaries to Workers

There are two units, providing employment to 14 persons in all. Workers are paid monthly salaries ranging from Rs. 70 to Rs. 150.

GLASS MAKING AT KAPADVANJI

History

The history of the craft is lost in the ~~past~~ or antiquity. Kapadvanj in the Kheda district was the only place in the ~~past~~ in the State where glass

was manufactured in its primitive state from a natural earth called *oos*, which is a mineral with impurities. It is said that crude glass of the value of about 3 lakhs of rupees was annually sent to Bombay for foreign export by some Voras and Baniyas, and that it was purified turned into various shapes in the glass manufactories of Europe.¹ During the course of inquiry it was also learnt that four skilled artisans were invited at a monthly rate of Rs. 45 to England to show the method by which they manufactured glass during the reign of Queen Victoria in 1895. A. D. The craft it is conjectured is 300 years old.

Crafts and Craftmen

In past as may as 50 households worked individually at glass making. The less skilled family members collected *oos* in the early dawn from the nearby areas and assisted the skilled members in the ancillary work of the craft. The head of the family purchased required raw materials like soda, colours, etc., from the local market and attended to the manufacturing processes and sale of finished products. At present there are two glass factories at Kapadvanj.

Employment

The two factories at Kapadvanj provided employment to 12 persons in all.

Raw Materials

At present broken glass pieces are used as a basic raw material and are obtained from soda factories in Ahmadabad and Ahmadabad Municipal Milk Dairy. Other raw materials such as lead, soda ash, arsenic powder, zinc oxide, manganese dioxide, cobalt, colours and chemicals are obtained from Bombay, Ahmadabad and other parts of Gujarat. Steam, coal and firewood are used as fuel for melting the broken glass. The monthly expenditure on raw material comes to Rs. 18,000 for both the establishments.

Tools and Implements

The factories use traditional tools and implements. These are viz., tub, forks, pincers, pavdi, pochari iron plate, iron spoon, iron stand, furnace blow pipe etc.

Products and Marketing

In past the artisans of Kapadvanj used to manufacture tumblers, pots, mirrors, jars, *gulab dani*, lantern shade, etc. At present the production is

confined to uneven glass pieces. The glass pieces are sold at the rate of Rs. 100 per Bengali maund. The finished products are sold on a wholesale basis to the merchants of Limbdi and Madras.

INDUSTRIAL POTENTIAL AND PLANT FOR FUTURE DEVELOPMENT

The industrial development, it may be observed, is related to the availability of primary resources and infrastructure. The main occupation of the people in the district is agriculture and agricultural pursuits. The most important crops of industrial importance are groundnut, cotton, castor-seed and tobacco. Some of the industries, which thrive in the district are based upon these primary resources. A broad and complete picture of the existing industries in the district has been presented in the previous pages. Since Independence, emphasis has been laid, time and again, on the speedy industrialisation of the district. There has been some development in the district in the periods of First, Second, Third, Fourth Five Year Plans and Annual plans. With the increase in tempo of planning, new resources are becoming available for industrialisation in a large measure and facilities for their utilization and for further development are being created in the district. An attempt is made to study the resources available for industrial development from agricultural raw materials, forest produce, minerals and others. The section discusses the potentialities for different types of industries in the district.

Existing Industries

Kheda district is a fairly industrialised district. Important industries of the district are tobacco processing and *bidi* making, cotton textiles, non-metallic mineral products manufacturing, manufacture of machinery, cotton ginning and pressing, oil mills and rice-threshing, manufacture of electrical accessories, cement, glass works, etc. Highly enterprising spirit and industrious habits of the people of this district resisted the attempts of the alien rulers to thwart the growth of industries in this district.

Industrial Development—Under the Indian Factories Act, 1948, 489 factories have been registered till 1969. The Annual Survey of Industries conducted by Government of India in 1966 listed 91 large scale factories in the district. The Master Plan of Industrialisation published by Government of Bombay has dealt with few industries which could be established in the district.

Agro-based Industries : Solvent Extraction of Oil seed-cakes

Solvent extraction of oilcakes to recover residual oil and obtain practically oil-free cake is an important feature of the oil industry. In fact oil milling, solvent extraction of oil cakes, refining of oil, utilising bye-product soap

¹ GEORGE WATT, *A Dictionary of the Economic Products of India*, Vol. III PP. 504—505.

stock for manufacture of soap and splitting of fat are advantageous chain processess.

The suitable location in the district is Kapadvanj. Large quantity of oil cake can be annually available from oil mills of Kapadvanj and Nadiad. A plant with 50 tonnes capacity for processing of meal (oilcake or seed) would require capital investment of about Rs. 15 to Rs. 20 lakhs. It would provide employment to about 60 persons.

Pure fatty acids find wide application in textiles, rubber, lubricants, plastics and cosmetic industries. Fatty acids manufactured by usual method is often not of a very high quality owing to the colour and presence of unsplit fats. These defects can be removed by distillation. Pure white fatty acids from linseed oil will find ready market for the production of alkali resins. Nadiad will be a suitable location from the point of view of availability of raw materials.¹ A plant with a capacity of 3 to 5 tonnes per day would involve a capital outlay of about Rs. 10 lakhs and offer employment to about 75 persons.

Cold-Storage Plant, Refrigeration Van Service for Vegetables (Potatoes)

There is good scope for preserving and transporting perishable vegetables to consuming centres like Ahmadabad and other places away from the centre of production. Cold-storage plant would be of great advantage to the growers of vegetables in those areas in the absence of which large amount of produce is wasted or disposed of at a very low price at present. Further it would also help extending the peak seasons by six to eight weeks. The scheme will have to be operated in such a way that the local cultivators would be able to hire out required space for definite periods. Refrigerated van service could be arranged for transport of vegetables to nearby markets.

Anand town and Chaklasi village in Kheda district may be considered for the establishment of the plant. The size of the unit would depend upon the demand. A unit with 900 tonnes storage capacity will involve a capital outlay of about Rs. 6 lakhs and employ nearly 50 persons.

Phosphatic Fertilisers and Sulphuric Acid

It is generally known that super phosphate is used as manure for paddy and other crops. With the implementation of irrigation schemes in Gujarat more land will come under agricultural use. On account of this the consumption of super phosphate is expected to increase considerably. Rice growing areas of Kheda district would consume this fertiliser.

1. *Master Plan for Industrialisation of Bombay State*, (1960), pp. 12-13.

Mahamadabad in Kheda district owing to proximity to Ahmadabad may be considered as a suitable location. A super phosphate plant with 120 metric tonnes a day capacity and that for sulphuric acid with matching capacity of 50 tonnes a day would involve an investment of Rs. 60 to 70 lakhs. The unit can employ about 250 persons.

Steel Re-Rolling Mills

Steel re-rolling mills depend on gillets and scrap as starting material for the production of steel sections like baling hoops, cart wheel tyres, flats and rounds, demand for which is continuously increasing. A place near Anand would be suitable location for new unit particularly from the point of view of distribution. Anand is now a growing industrial town. Large number of ginning and pressing factories in this area would be potential consumers for baling hoops. Scraps would be available locally for developing industries in those areas.

Capacity of 400 tonnes a month with a 10" rolling mill is considered smallest economic unit. Capital requirements of an undertaking of this size would be about Rs. 10 lakhs to Rs. 15 lakhs employing about 100 persons.

Structural Fabrication

The fabrication of structurals holds an important position in the engineering industry, providing an essential link between the producers of steel and its consumers. Structure of different types are required by the railways. Public Works Department and engineering industries and in the manufacture of variety of equipment and machinery. In fact structural fabrication forms an integral part of engineering establishments. The necessity of developing capacity for the fabrication of structurals is evident from the fact that progress in other industries will depend to a great extent on the speed with which structural fabrications can be completed.

Anand is suitable location for the industry. Although it is difficult to indicate an economic unit in such industries, where the size is variable, a fairly good sized unit capable of handling large orders should have an annual capacity above 4,000 tonnes. The capital requirements of such an unit would be about Rs. 20 to Rs. 25 lakhs offering employment to 250 persons.

Scientific Instruments

Scientific instruments play a very vital role in the plant operation and quality control in industry. Production of some simple scientific laboratory drawing and mathematic instruments was taken up by certain small-scale units before the war. Few of them have grown and stabilised, nevertheless industry has much to achieve. Production of optical and survey

instruments has been taken up recently. The production, however, is much below the present demand. Measuring instruments in engineering industries and for industrial process control, viz., pressure-gauges, pyrometres, flow metres, etc. have very wide scope.

A unit taking up few related items can make a good beginning at Anand and Nadiad in the district. Capital requirements etc. would depend upon factors including foreign collaboration, training of personnel, import of specialised plans, etc.

The District Industries Officer, Nadiad has recommended establishment of some industries which are listed below :

Sl. No. 1	Name of the industry 2
1	Cotton-seed oil plant.
2	Cotton-work spinning plant
3	Surgical cotton and chemical pulp.
4	Special grade paper.
5	Groundnut flour and groundnut butter industry.
6	Solvent extraction of oil cakes.
7	Fat splitting and fatty acid distillation.
8	Manufacture of cigarettes.
9	Manufacture of nicotine acid.
10	Rice pulp and straws.
11	Solvent extraction of rice bran.
12	Paper from Papaya.
13	Potato flour industry.
14	Paper pulp
15	Caustic soda.
17	Petro chemicals
18	Engineering industries, Mineral based Industries in respect of lime stone, bauxite, China clay and oil and natural gas.
19	Marine based industries such as salt and salt based industries.

LABOUR AND EMPLOYERS' ORGANISATIONS

Labour Organisations

The trade union movement signifies a collective effort on the part of labourers to increase their bargaining power in the labour market and thereby improve their social and economic conditions. At present the trade unions in the district are governed by the Indian Trade Unions Act of 1926. The table given below shows the progress of labour unions in the district :

Year 1				Number of unions 2	Number of members 3
1960-61	..	..	..	22	9,283
1961-62	..	..	..	27	13,033
1962-63	..	..	..	20	8,268
1963-64	..	..	..	19	8,485
1964-65	..	..	..	21	13,475
1965	..	..	..	19	16,804
1966	..	..	..	23	16,617
1967	..	..	..	22	19,142
1968	..	..	..	23	9,030
1969	..	..	..	30	12,989
1970	..	..	..	29	14,648
1971	..	..	..	28	17,186
1972	..	..	..	38	24,044

Source : The Commissioner of Labour, Ahmadabad.

From the foregoing table, it would be observed that there has been appreciable increase in the number of trade unions and number of their members during the last decade. In 1960-61 there were in 22 trade unions with membership of 9,283, while in 1972 there were 38 trade unions with membership of 24,044.

Employer's Organisations

In the district there are two important associations, viz., (I) the Kapadvanj Oil Mills Association and (II) the Kapadvanj Cotton Merchants Association. The large scale factories located in the district are the members of these associations. Some of the large scale units of the district are also members

of organisations which are located out side the district. These important organisations are as follows : (I) Gujarat State Co-operative Sugar Industries Union Limited, Vadodara (II) Gujarat Tobacco Merchants Union, Bajva, (District Vadodara), (III) Kachchh Saurashtra Salt Association, Jamnagar, (IV) Central Gujarat Cotton Dealers Association, Bharuch, (V) Federation of Mills and Industries, Vadodara and (VI) Cement Manufacturers Association, Bombay.

WELFARE OF INDUSTRIAL LABOUR

Prior to Independence, the Kheda district formed part of the Bombay State and the labour legislation followed in the State was applicable to this district also. With the advent of Independence the importance of labour was recognised and several measures were taken to promote the welfare of industrial labour. Among several important measures undertaken by Government, the factory legislation stands out prominently.¹ Apart from Government some large scale factories also regard welfare work as prudent investment. Some of important establishments like the Amul Dairy, Polson Dairy and the Cement Works at Sevalia, have not been slow in providing welfare amenities. The section that follows outlines the measures undertaken for the welfare of industrial labour.

The Factories Act, 1948

History.—The harmonious industrial relationship in factories and workshops depends on the humane treatment of the workers. For the regulation of conditions of labour, a beginning in the labour legislation was made as early as 1881, when the Factories Act, 1881 was passed. This Act was a simple piece of legislation primarily designed to protect children and to provide for some health and safety measures. The Act was amended several times to meet changing conditions. In 1934, it was drastically amended to implement the recommendations of the Royal Commission on Labour in India and the conventions of the International Labour Organisation. Since 1937, the Act has been amended from time to time widening its scope and enlarging the rights of workers. However, inspite of a series of amendments, the general framework of the Act had remained unchanged. Its working emphasized the need for complete revision with a view to strengthening its provisions relating to safety, health and welfare of workers. It was also felt desirable to extend its protective provisions to the large number of smaller industrial establishments which were then not within the perview of the Act. In 1948, therefore, an entirely new Act was enacted to

1. The other Acts such as The Workmen's Compensation Act, 1923, The Indian Trade Unions Act, 1926, The Minimum Wages Act, 1948, The Maternity Benefit Act, 1929, The Employee's Provident Fund Act, 1952, which promote the welfare of industrial labour have been described in Chapter XVII—Other Social Services.

consolidate and amend the law relating to labour in factories. The Act lays down the minimum provisions for safety, health and welfare of workers in factories.

The main provisions of the Act are as follows :—
The Act covers all industrial establishments employing 10 or more workers where power is used, or 20 or more workers, where power is not used. It removes the distinction between perennial and seasonal factories. It has made a number of provisions relating to health, safety and welfare of workers. It provides for cleanliness, ventilation, cooling of air, sufficient lighting, supply of drinking water, separate latrines and urinals for males and females, artificial humidification, disposal of waste and effluents.

It further provides for fencing of machinery by substantial construction, only specially trained adult male workers being permitted to handle the machinery in motion. No woman or child is allowed to clean, lubricate or adjust any part of the moving machinery. The other safety provisions relate to the casing of new machinery, devices for cutting off power, hoists, cranes and other lifting machines, protection of eyes and precautions against dangerous fumes.

Provisions are made for adequate washing, facilities of canteens in units employing 250 workers, creches in units employing 50 women and shelter or rest rooms in units employing 150 workers. The Act also requires the owner of any factory employing 500 or more workers to appoint labour welfare officer.

The minimum age for employment of young persons is fixed at 14 and the upper age limit for adolescents is raised from 17 to 18 years.

The hours of work, have been fixed at 48 hours a week and 9 hours a day for adult workers. For persons below 18, the hours of work are fixed at 4½ hours a day. Employment of children and women between 7 p. m. and 6 a. m. is prohibited. For overtime work, twice the normal rate of wage is to be paid.

As regards leave with wages, besides weekly holidays, every worker is entitled to enjoy leave with wages after one year's continuous service.

Thus, the Act makes adequate provisions for the safety, health and welfare of the workers.

WAGES

The problem of wage determination cannot be considered in isolation from the larger and economic and social background obtaining at present

STATEMENTS

in the district. A well conceived wage policy aims at (a) continuous improvement in living standards of workers and (b) reasonable returns for the employers.

In the sphere of wages, workers in the less organised industries have been given income protection through the Minimum Wages Act, 1948. The State Government has made additions, from time to time to the list of employment covered under this Act.

The Statement-V-6 given at the end of the chapter gives a comparative idea of minimum wages fixed for workers in the Kheda district under the Minimum Wages Act, 1948 for various employments.

MEDICAL BENEFITS

The Associated Cement Company Limited, Sevalia Cement Works, Sevalia, State Transport Workshop, Nadiad, Thermal Power Station, Dhuvaran and The New Shorrock Spinning and Manufacturing Company Limited, Nadiad, Kaira District Co-operative Milk Producers Union Ltd., Anand and Polson Model Dairy, Anand have appointed Medical Officers.

LABOUR WELFARE CENTRES

There are three Labour welfare centres in the district, located at Nadiad, Khambhat and Petlad.

OTHER FACILITIES

The canteen and refreshment rooms have been provided by the Keshav Mills Co. Ltd., Petlad, Shree Subhlaxmi Mills, Khambhat, Kaira District Co-operative Milk Producers' Union Limited, Anand, Polson Model Dairy, Anand, The Associated Cement Company Limited, (Sevalia Cement Works), Sevalia, and The New Shorrock Spinning and Manufacturing Company Limited, Nadiad.

The creche building have been provided by The Keshav Mills Company Limited, Petlad, The Petlad Bulakhidas Mills Company Limited, Petlad, Shree Subhlaxmi Mills, Khambhat and The New Shorrock Spinning and Manufacturing Company Limited, Nadiad.

STATEMENT V-2

Number of Factories and Workers for all Industries in 1960, 1965 and 1970 in the Kheda district.

Sl. No.	Name of Industry	1960		1965		1970	
		No. of Factories 3	No. of Workers 4	No. of Factories 5	No. of Workers 6	No. of Factories 7	No. of Workers 8
1	Gins and presses	22	1,710	21	2,457	19	1,765
2	Manufacture of dairy products ..	2	301	2	654	3	807
3	Canning and preservation of fruits and vegetables ..	..	..	..	..	1	10
4	Manufacture of grain mill products ..	17	183	17	182	20	197
5	Manufacture of miscellaneous food preparations ..	14	537	13	560	13	573
6	Tobacco manufacture	142	4,963	178	6,028	214	6,014
7	Spinning, weaving and finishing of textiles..	21	7,782	37	8,052	46	7,484
8	Manufacture of textiles not elsewhere classified ..	1	13	2	108	2	99
9	Manufacture of wood and cork except manufacture of furniture	..	..	1	8	3	23
10	Manufacture of furniture and fixtures	..	..	1	37	1	127
11	Manufacture of pulp, paper, and paper board ..	2	64	4	146	6	224
12	Printing, book-binding etc.	1	76	6	134	5	130

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13	Leather products (except foot wears and wearing apparel)	2	75	2	64	3	50
14	Basic chemicals (including fertilizers and miscellaneous chemical products)	..	..	..	..	..	..
15	Petroleum refineries	..	..	8	382	10	461
16	Structural clay products	..	..	..	..	..	..
17	Glass and glass products (except optical lenses)	8	424	16	663	39	1,234
18	Pottery, china and earthenwares	2	24	1	520	2	657
19	Manufacture of cement	..	..	2	43	1	491
20	Non-metallic mineral products	1	719	1	762	1	614
21	Basic metal industries (ferrous)	11	542	19	920	31	856
22	Basic metal industries (non-ferrous)	..	..	2	89	6	247
23	Metal products (except machinery and transport equipments)	3	87	2	19	2	18
24	Manufacture of machinery (except electrical machinery)	5	124	4	121	8	211
25	Electrical machinery	15	356	24	1,641	38	2,904
26	Manufacture and repairs of motor vehicles	1	39	7	475	15	1,267
27	Transport equipment (not elsewhere classified)	13	347	17	555	19	687
28	Photographic and optical goods	..	..	1	96	1	123
29	Electric light and power	..	..	1	15	1	58
30	Water supply station	4	44	6	408	9	480
31	Manufacture of wearing apparel (except footwear)	1	13	2	22	2	24
32	Manufacture of rubber products	..	..	..	..	1	201
33	Manufacture of miscellaneous chemical products	..	..	..	..	1	38
34	Jewellery and related articles	..	..	..	..	4	120
35	Manufacturing industries not elsewhere classified	..	..	..	..	1	8
Total		296	18,718	397	25,161	531	28,082

* Source: District Census Handbook, Kheda District, Part X-A-1 (1971)

STATEMENT V-5

Small Industries in Unorganised Sector

Sl. No.	Name of industry	Type of organisation											Name of subsidiary products
		No. of units	Pro-priet-er of or ship	Part-ner ship	Co-opera-tive society	Others	Using powers	Not using power	Total work-ers em-ployed	No. of products	Name of products		
1	2	3	4	5	6	7	8	9	10	11	12	13	

1	Slaughtering, preparation and preserving of meat	2	1	1	..	..	..	2	2	16	Meat	Hides	
2	Manufacture of dairy products	..	3	3	..	..	2	1	3	17	Milk foods	..	
3	Manufacture of grain mill products	..	16	12	3	1	..	12	4	16	140	Flour, rice, pulse	Bran and Bhusi
4	Manufacture of bakery products	..	5	3	2	..	..	1	4	5	30	Bakery products	..
5	Manufacture of cocones, chocolate and sugar confectionery	..	2	2	..	..	..	1	1	2	10	Confectionery	..
6	Manufacture of miscellaneous food preparation	26	17	4	2	3	6	20	26	196	Salt grinding, sweets, faran, papad, species etc.	..	
7	Soft drinks and carbonated water industries	..	3	1	2	..	..	3	..	3	20	Soft drinks	..
8	Tobacco manufactures	..	79	58	21	..	..	10	69	79	764	Bidi, processed, tobacco, snuff and Jerda.	..

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9	Spinning, weaving and finishing of textiles	40	35	4	1	..	33	7	40	252	Cotton yarn cloth, hand-loom cloth, sari dyeing, printing, and embroidery	..	
10	Manufacture of wearing apparel (except foot-wear)	..	12	8	4	..	..	7	5	12	75	Tailoring, umbrellas	..
11	Saw mills, planing and other wood mills	44	20	24	..	..	33	11	44	257	Saw wood	Saw dust	
12	Wooden and cane containers and cane small wares	..	6	3	3	..	..	3	3	6	39	Wooden boxes handles, bamboo baskets	..
13	Manufacture of cork and wood products not elsewhere classified	..	1	..	1	..	..	1	..	1	8	Wooden articles	..
14	Manufacture of furniture and fixtures	..	21	13	8	..	..	14	7	21	178	Wooden furniture, Steel furniture	..
15	Printing, publishing, and allied industries	12	2	10	..	..	12	..	12	75	Printing	..	
16	Manufacture of leather products except footwear and other wearing apparel	..	1	..	1	..	..	1	..	1	15	Leather products	..
17	Manufacture of Rubber products	..	1	1	..	..	..	1	..	1	6	Tyre-repairing	..
18	Basic industries chemicals, including fertilisers	..	4	1	3	..	..	2	2	4	45	Fertilizers, Kapur, crackers, matches	..
19	Vegetable and animal oils and fats (except edible oil)	..	2	1	1	..	..	2	..	2	10	Non edible oilcakes	..
20	Manufacture of miscellaneous chemical products	..	19	11	7	1	..	6	13	19	142	Sosp, Agarbatti, saorin, colour	..
21	Manufacture of structural clay products	3	3	..	..	..	..	1	2	3	16	Bricks, flooring tiles	..

STATEMENT V-5—contd.

Sl. No.	Name of industry	Type of organisation										Name of subsidiary products
		No. of units	Pro-ship	Part-ship	Co-operative society	Others	Using power	Not using power	Total	No. of workers employed	Name of products	
1	2	3	4	5	6	7	8	9	10	11	12	13
22	Manufacture of glass and glass products	2	1	1	..	..	..	2	2	13	Glass	..
23	Manufacture of pottery, china and earthenware	4	2	2	..	..	2	2	4	29	Earthenware	..
24	Manufacture of non-metallic mineral products not elsewhere classified	15	8	7	..	..	3	12	15	95	Cement pipe	Lime mixture
25	Manufacture of metal products except machinery and transport equipment	22	17	5	..	..	12	10	22	136	Building materials, metal containers, box, vessels, etc.	Photo frame, engineering, repairing
26	Manufacture of machinery except electrical machinery	40	24	16	..	..	30	10	40	249	Agricultural implements, machinery, spare parts, plough etc.	Wooden
27	Manufacture of electrical machinery apparatus, appliances and supplies	2	2	..	..	..	1	1	2	11	Electrical equipment, radio repairing	..
28	Manufacture of motor vehicles	2	1	1	..	..	2	..	..	13	Motor pumps and automobiles parts	Weldings
29	Repair of motor vehicles	12	9	3	..	..	9	3	12	84	Motor repairing, spray paints on motor cars	..

(Bk) H-50—44 (Line)

30	Manufacture of motor cycles and bicycles	2	2	..	..	..	1	1	2	10	Motor cycle repairing, cycle repairing	..	..
31	Manufacture of watches and clocks	1	..	1	..	..	1	..	1	6	Watch repairing	..	..
32	Manufacture of jewellery and related articles	65	58	7	..	..	50	15	65	397	Ornaments and diamond cutting	..	..
33	Manufacturing industries not elsewhere classified	13	10	3	..	..	6	7	13	87	Ice, plastic goods, Padiapatrala, fodder for livestock, packing tap.	..	..
Total		..	482	392	145	5	3	268	214	482	3,440		

Source : Bureau of Economics and Statistics, Government of Gujarat, Ahmedabad, *Directory of Small Industrial Units in the Unorganized Sector in Gujarat State*, Vol. IV. (1972).

STATEMENT V-6—concl'd.

Sl. No.	Name of the employment	Skilled 3	Semi-skilled 4	Unskilled 5	Date from which the wage rates are in force 6
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6	Employment in any power loom industry.	Skilled Rs. 105.00 P.M.	Semi-skilled Rs. 85.00 P.M.	Unskilled Rs. 75.00 P.M.	1-1-1967
7	Employment in salt pan industry.	Skilled Rs. P. 4.00 per day	Semi-skilled Rs. P. 3.50 per day.	Unskilled Rs. P. 2.75 per day.	1-2-1967
		104.00 per month	91.50 per month	71.50 per month	
8	Employment in any rice mills, flour mills, tur dal mills.	Skilled 1. Anand, Khambhat, Nadiad and Petlad 2. Towns having a population of 10,000 persons and above but less than 35,000 persons. 3. Other parts of the district.	Skilled 90.00 per month 85.00 per month 80.00 per month	Semi-skilled 80.00 per month 75.00 per month 70.00 per month	1-4-1967

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9	Employment in any cotton pressing manufactory.	Skilled A Rs. P. per month 150.00	Skilled B Rs. P. per month 110.00	Semi-skilled Rs. P. per month 100.00	Unskilled Rs. P. per month 80.00	1-11-1967
	1. Nadiad Borough Municipality.	140.00	100.00	90.00	70.00	
	2. Kapadvanj, Anand, Borsad, Umreth, Dakor, Mahamadabad, Kheda, Khambhat, Vadasinor, Petlad.	130.00	90.00	80.00	60.00	
	3. Other parts of the district.	130.00	90.00	80.00	60.00	
10	Employment in stone breaking or stone crushing.	Skilled Rs. P. per day 4.00	Semi-skilled Rs. P. per day 3.00	Unskilled Rs. P. per day 2.40		
11	Employment in cement prestressed products industry.	Skilled Rs. P. per day 4.00	Semi-skilled Rs. P. per day 3.00	Unskilled Rs. P. per day 2.40	Clerical and supervisory staff. per day per month Rs. P. Rs. P. 6.63 175.00	1-5-1969
	1. Nadiad Borough Municipality.	6.00	5.25	4.50	117.00	
	2. Areas other than Nadiad Borough Municipality.	5.75	5.00	4.25	110.50	
		5.75	5.00	4.25	110.50	

Note : 1. (a) The minimum rates for double *Nakh bidi* will be more by Rs. 0.50p. per 1000 *bides*.

(b) The minimum rates for *Asta* or *Astiri bides* will be more by Rs. 0.50p. per 1000 *bides*.

(c) The minimum rates are to be paid to the employees where the leaves are supplied by the employers.

(d) Where the employers are not supplying leaves for rolling *bides*, Rs. 1.00 will be paid extra to the workers per every 1000 *bides*.

(e) The minimum rates include, charges for the cutting of leaves and packing of bundles of 25 each.

Source : The Commissioner of Labour, Ahmedabad.

CHAPTER VI

BANKING, TRADE AND COMMERCE

A—Banking and Finance

INTRODUCTION

In the past when barter system prevailed, monetary or cash transactions had not assumed considerable magnitude as at present. In case of need person approached the village money lender or the indigenous banker, as he was called, for borrowings and promised to return the amount at some later date. This indigenous banker kept the details of transactions and the borrower repaid his debt on the basis of book entries-on trust. As time passed by, these bankers took advantage of the ignorance of the borrowers. Being ignorant, the money-lender charged him exorbitantly in such ways as *Kothali Chhodaman*, discount, interest and compound interest, etc. The burden became so heavy that the borrower became a perpetual debtor and his debt was passed on to his successors.

The oldest institution engaged in the disbursement of finance is that of the indigenous bankers who played a pivotal role in meeting the financial requirements of local inhabitants. Before the advent of the modern banking system, this institution was the only source of credit to which people looked in time of distress or social occasions. In the absence of any alternative means of securing finance, the indigenous money-lender played and still plays an important role in the rural economy of the country.

In modern times, finance is an important factor in the agro-industrial growth of an area, a broad idea of which can be had by reviewing the work of agencies providing credit to farmers, traders, industrialists and others in the district. These are indigenous money-lenders, co-operative credit societies and banks, joint stock banks and corporations formed by Government. They mobilise the savings of the people and invest them in interest yielding securities or contribute to the capital requirements of industries by investing money in shares or debentures. Private and public limited companies also attract savings of the public in the form of share capital, deposits, etc., and utilise them in different productive activities. The State also plays a significant role in the financial sphere by floating loans and promoting small savings for financing developmental plans and other Government activities. Life Insurance Corporation and various other corporations, have been playing an important part in developing the financial structure of the State and the country. The part played by each of these agencies is reviewed in the pages that follow.

Agricultural Indebtedness

After the farmers' riot in the Deccan, growing indebtedness of agriculturists attracted serious attention of the Government. The Deccan Agriculturists' Relief Act, 1879 was passed to lessen the burden of old debts. The measures adopted to provide relief and to assess the extent of indebtedness among agriculturists in the Kheda district are briefly described below :

Matar Taluka

Some information about the indebtedness of peasants in the Matar taluka is available from the findings of the Committee appointed in 1929 by the Gujarat Vidyapith under the chairmanship of Sardar Patel. A survey was conducted under the guidance and directorship of (late) J. C. Kumarappa, the well-known Gandhian economist.

For the sake of convenience, villages in the taluka were divided into three groups : (1) 17 villages from Limbasi group whereunder 465 families were surveyed, (2) 16 villages from Navagam group : whereunder 492 families were surveyed, and (3) 17 villages from Matar group whereunder 258 families were surveyed.

The survey revealed that the bulk of the debts ranged from Rs. 500 to Rs. 1,000 and the average debt per family was about Rs. 900. Indebtedness per acre in the Limbasi group was Rs. 54, in Navagam Rs. 95, and in Matar Rs. 108. In the Limbasi and Matar groups, loans to the extent of about two-third of the land value were taken. In the Navagam group, several borrowings were in excess of land values. The causes of indebtedness broadly were : (1) agricultural expenses, (2) family expenses, and (3) payment of land revenue, etc.¹

Cambay State

In the former Cambay State, a committee of four gentlemen with Rao Saheb Banatwala as President, was appointed to inquire into the financial condition of the agriculturists, with special reference to their indebtedness and to make suggestions for improvement in their economic condition.² Further details on the subject are not available.

Balasinor State

Following extract gives some idea about indebtedness in the former Balasinor State.

1. KUMARAPPA J. C., *Survey of Matar Taluka*, p. 96.

2. *Annual Administration Report, Cambay State, 1938-39*, p. 6.

"The agricultural population consists chiefly of Pagis, Dharalas, Barias, Patidars, Bhils and Musalmans. As elsewhere, the small holders are poor and indebted and the Deccan Agriculturists' Relief Act is in force in order to assist their rescue from the clutches of money-lenders."¹

Bombay Agricultural Debtors' Relief Act, 1939—One of the most important measures adopted, prior to Independence, was the passing of Bombay Agricultural Debtors' Relief Act in 1939, to help the agriculturists to get back the lands mortgaged by them as also to assess and adjust by scaling down their past debt. The Act was applied to Matar, Mahemadabad, Thasra and Kapadvanj talukas in 1945, whereunder the Debt Adjustment Boards were set-up. However, these Boards were abolished and the work was entrusted to the Civil Courts. The remaining talukas of the district were brought within the purview of the Act in 1947. From 1947 to 1959, the Civil Courts in the district disposed of 137,836 applications involving an amount of Rs. 12,820 lakhs. The amount, by which the debt was reduced, came to Rs. 298 lakhs.

After Independence, a number of steps were taken to improve the economic condition of the agriculturists. To relieve their absolute dependence on money-lenders, alternative agencies for providing credit have been organised and strengthened. The co-operative societies provide liberal finance to their members. Moreover, strict legislative restrictions on the activities of money-lenders are expected to reduce exploitation of cultivators. Despite all these measures, large scale indebtedness among the cultivating classes still persists. This will be evident from the details given in the Monograph on the Ambav village of the Thasra taluka.

The survey conducted by the 1961 Census disclosed that 73 out of 98 households in the village were indebted to the tune of Rs. 94,481. As much as 88.29 per cent of the amount borrowed was spent for unproductive purposes. In the words of the Report, "this is as may be expected from a deficit economy in which nearly 50 per cent of the households live on the margin of subsistence."²

The survey clearly indicated that money-lenders, who provided nearly 20.53 per cent of the total credit, played a significant role in the rural economy. The borrowing from the co-operative societies and Government amounted to 8.64 per cent 3.07 per cent respectively. This is because easy money flows from money-lenders while the co-operative societies and Government restrict it to productive purposes only.

1. *Annual Administration Report, Balasinor State, (1942-43)*, p. 5.

2. *Census of India 1961, Village Survey Monograph, Ambav Village, Thasra, Taluka, (1969)*, p. 32.

From the foregoing discussion, it will appear that indebtedness is a deep-rooted disease of our agricultural economy. The positive and preventive measures adopted from time to time did provide some relief, but did not cure the disease. It is, however, expected that with the spread of education among agriculturists, better credit facilities from co-operative and the nationalised banks, increased irrigation facilities and better marketing facilities, agricultural profession would become commercialised and the problem of agrarian indebtedness will be reduced to negligible proportions.

MONEY-LENDERS

Though no statistical information is available either about the extent of lending or about the number of money-lenders in the past in the Kheda district, a good deal of information could be had about their *modus operandi* and their role in rural finance. Because of easy accessibility, the money-lender was almost the uncrowned king and exercised unlimited powers *vis-a-vis* his operations with the cultivating and other classes were concerned. The money-lender was *ma-bap* to these people, as it was he who provided money for productive and non-productive purposes. His relations of centuries with the rural folk, especially with the cultivating class, made him so omnipotent that even after development of co-operative societies and other institutions sponsored by the Government for agricultural finance, there has been a very little difference in his position. The former *Kaira and Panchmahals Gazetteer* (1879) gives a very useful and interesting account about the money-lenders in the Kheda district in the following terms.

"Besides bankers, merchants and shop-keepers, well-to-do cultivators and pleaders invest their savings in trade. But it is in money-lending that the well-to-do in Kaira lay out almost all their capital. Kaira money-lenders are of two classes, professional and non-professional. Among professional money-lenders, there is a marked difference between the banker or *nanavati*,¹ who with a capital of £ 10,000 (Rs. 1,00,000) and upwards negotiates bills of exchange, makes advances to persons of credit, and engages in large mercantile transactions, and the usurer or *tuniat*, who, doling out from a scanty store often borrowed from one of the large money-lenders, preys on the needs of the poorest class of townsmen or the careless and unthrifty villager. Between these extremes, the great body of professional money-lenders hold an ill-defined position. The banker, from smallness of capital, unsuccessful speculation, or changes in the course of trade, forced into petty dealings with low-class borrowers, has to resort to many of the usurer's practices; while the usurer, whose wealth enables him to enter into large dealing, gains by degrees a place among the district bankers."

1. *Nanavati*: Literally means money-changer.

The *tuniat* is also called Khandha-Pan jaravalo or man of instalments.

"Bankers live almost entirely in towns. They trade, negotiate bills of exchange, take deposits, and make advances. The banker's trade ventures are all wholesale; he lays in a store of grain to be sold to small dealers; he speculates in cotton, or he imports cloth from Bombay for local shopkeepers and retail traders. In this trading operations the Kaira banker is careful, risking in speculative investments only a small portion of his capital."

"Among non-professional money-lenders are traders and shop-keepers, rich cultivators, pleaders, Government servants, well-to-do artisans, and religious beggars, chiefly Gosais of whom one is said to be worth about £ 10,000 (Rs. 1,00,000). Of the trading and shop-keeping money-lenders, the chief are cloth-sellers, grain-sellers, and grocers. In some of the larger towns are shop-keepers whose business makes them independent of money-lending. But, as a rule, especially in village shops, dealings in grain or cloth are useful, chiefly as a means of drawing the poorer class of villagers to borrow money. A poor village shop-keeper, his capital laid out in advances, passes his time in dunning his debtors. If rich, leaving his shop in charge of a clerk, he buys a town house, seldom visiting the village, except during the rainy months, when the poor press for grain advances, and at harvest time when he recovers his outstanding debts. The son of a village shop-keeper generally succeeds his father, and in many villages, the shop has for generations been in the hands of the same family. If there are several sons and the family is poor, the younger brothers sometimes try to start business in a fresh village. Next to the shop-keeper, the most important of non-professional money-lenders is the rich cultivator or *patidar*, who lends money and grain to the poorer villages. The number of Government servants, pleaders, and well-to-do artisans, who lend money is small, and they generally deal only with a few men, and those of good credit."

Interest

"In 1827 interest was limited by law to a yearly rate of twelve per cent. This provision was easily evaded, and in 1840, creditors would seem to have been in a position, by making deductions, *mandamni*, from the amount actually advanced, to recover from the most needy of their debtors from one to six per cent additional profit. In 1856, according to Mr. Forbes, monthly interest was stipulated for at two per cent, or if the terms were unusually moderate, at one. At present (1877), according to the returns received, in small transactions when an article is given in pawn, artisans and well-to-do cultivators pay interest at yearly rates varying from six to nine per cent, the charge in the case of the poorer cultivators rising to twelve per cent. In such transactions, if personal security only is given, the corresponding yearly rates are

said to vary from nine to twelve per cent for the richer, rising as high as twenty per cent for the poorer class of borrowers. In large transactions, well-to-do cultivators who give jewels as security, pay yearly rates of from three to four and a half per cent. When cattle or other movable property is pledged by the poorer cultivators, yearly interest is charged at from nine to eighteen per cent. When land is mortgaged, the yearly rates are reported to vary from six to eighteen per cent. Except in Umreth and Borsad, where interest on personal security is unusually high, there would seem to be but little variety in the rates charged in different parts of the district. These are the nominal rates of interest. But in almost all cases, especially when the borrower is poor, by levying a premium or *mandamni*, the lender adds from one to six per cent to his profits. Six per cent per annum is said to be generally considered a fair return for money invested in buying land, the estimates varying from four and a half per cent in Mehmedabad to seven and a half per cent in Umreth. Besides what they make by interest and premiums, money-lenders are said to add to their gains by irregular and unfair means. Serious and wilful fraud is rare. But the cultivator's ignorance and apathy give the money-lender much opportunity for sharp practice."¹

MONEY-LENDERS IN THE FORMER CAMBAY STATE

"Money-lending is chiefly in the hands of Vanias and Shravaks with a few Brahmans and Kanbis. For merchants, the yearly rate of interest is usually from six to twelve per cent, and for cultivators, it is nearly the same, with a further premium of one or two per cent. If ornaments are pledged lower rates are taken.

"When the Nawab is in want of money, he obtains funds from the town bankers, who if the loan is only for a short time, do not as rule, insist upon interest. If the loan is not paid for a long time, a low rate is charged, in no case more than nine per cent. The custom of presenting the lender with a sum of money or some articles of value at the time of repaying the loan makes up to the banker for the low rate of interest. Large sums, raised on the occasion of a marriage or funeral in the Nawab's family are generally repaid by assigning the revenues of certain villages."²

The above extract shows that there were big money-lenders in Khambhat and even the ruler used to borrow from them.

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panchmahals*, (1879), pp. 58 to 61.
2. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. VI, *Rewa Kantha, Narukot, Cambay and Surat States*, (1880), p. 209.

Further details about this age old institution of money-lenders are not available. However, from the details given in *Charotar Sarva Sangrah*, it appears that the *nanavatis* and *shroffs* of the district carried on business of money-lending on a large scale. *Hundi* business which resembled to some extent to modern system of 'Cheques', was carried on on a large scale. Especially, Baniyas, Nagars and Khedawals were reputed in this field. Glowing tributes are still paid by people about the integrity, honesty and large-heartedness of this class of money-lenders. Interesting stories about some of the reputed "*nanavatis*" from this district, are still narrated in the district. Money-lenders from this district also extended their operations to Surat, Bharuch and as far as upto Madras.

Present Position—In the past, the relations between the creditors and debtor borrowers were very cordial. Money-lenders acted as guide and guardian of their *khatedars* (debtors). But with the passage of time, many evils crept in into this system. His unrivalled position in the capital market and ignorance of the agriculturists tempted him to adopt fraudulent and surreptitious methods. This resulted in economic spoliation of the peasantry which sank into heavy debt. It was, therefore, decided to restrict and regulate the activities of money-lenders. The Bombay Money-lenders' Act was, therefore, enacted in 1946. Under this Act, a money-lender is required to obtain requisite licence for carrying on money-lending business in the State. Further, the Act also sought to regulate money-lending activities by : (i) creating a class of licenced money-lenders, (ii) prescribing minimum/maximum rates of interest, (iii) introducing maintenance of systematic account books, and (iv) prescribing penalty for breaches of the Act.

The following statement shows the transactions of money-lenders in the district from 1967-72.

Money-lenders and their Loan Transactions

Year 1	No. of licensed money-lenders 2	Loans to traders (Rs.) 3	Loans to non- traders (Rs.) 4	Total loans (Rs.) 5
1967	668	33,19,765	99,81,941	1,33,01,706
1968	649	18,68,370	1,20,04,205	1,38,72,575
1969	599	16,96,949	1,16,06,919	1,33,03,868
1970	588	15,44,352	1,31,10,867	1,46,55,219
1971	611	7,33,211	1,38,99,251	1,46,32,462
1972	578	15,31,646	1,38,90,413	1,54,22,059

Source : Assistant District Registrar, Money-lenders, Kheda, Nadiad.

The statement reveals that the total advances by licenced money-lenders amounted to Rs. 97,187,889 between 1967 and 1972. Of these 88.77 per cent was availed of by non-traders inclusive of agriculturists, whereas only 11.23 per cent went to traders. This shows the extent and magnitude of

popularity of money-lenders among the people. They are still a force to reckon with in the economy. Though the practices adopted by this class had been and are greatly decried, their effect on the advances on the whole appears to be negligible. Whereas the co-operative societies provide finance to cultivators for productive purpose only and the process adopted by them is cumbersome, people in general and cultivators in particular very often avail of the facilities provided by the money-lenders, who provide money for non-productive purposes as well.

Commercial Banks

These banks play a very important role in the capital formation. The funds collected by them are utilised for the economic development. The two important functions which these banks perform are : (1) collection of savings from the public in the form of deposits, and (2) advances for raising production or expansion of main economic sectors. Thus, the role of commercial banks in capital formation is significant.

At the end of 1970, there were 116 branches of seven nationalised commercial banks, besides the State Bank of India. These were (1) Central Bank of India, (2) Bank of India, (3) Punjab National Bank, (4) Bank of Baroda, (5) United Commercial Bank, (6) Dena Bank, and (7) Union Bank of India. The Statement VI-2 appended to the Chapter shows the growth of banks in the Kheda district upto 31st December, 1970.

The statement discloses three main stages of the growth of banking in this district. These are : (1) Pre-Independence period (2) Post-Independence period, and (3) Post-Nationalisation period.

Pre-Independence Period—Prior to Independence, there were only six branches in the district, of which three were situated at Nadiad and one each at Anand, Petlad and Kapadvanj. Petlad, which was a part of Baroda State, had the distinction of housing the first commercial bank in the district. The establishment of a branch of Bank of Baroda as early as 1920 reveals the progressive policy of the Gaekwar ruler in initiating measures for economic development in the State.

Post-Independence Period—After Independence, the Government of India launched Five Year Plans for the economic development of the country. To meet the financial requirements of the growing economy, competition among the commercial banks resulted in vigorous branch expansion. In the Kheda district also, the number of commercial banks rose from 6 in 1951 to 24 in 1960 and 71 in 1963. Thus the expansion of the banking institutions after 1960 is noteworthy.

Note : The former Cambay State also started its own bank to afford banking facilities to the people as also to give impetus to the trade and commerce of Cambay (*Annual Administration Report of the Cambay State, 1938-39, p. 40*), Further details about the bank are not available.

Post-Nationalisation Period—The year 1969 is a landmark in the economic history of the nation, when fourteen major banks of Indian origin were nationalised by the Government of India, which assumed the ownership of these banks. One of the objectives was to extend the banking facilities to semi-urban and rural areas and to seek expansion of agriculture and small-scale industries. These were largely neglected by the commercial banks, which provided finances only to industry and trade and commerce. The purpose seems to have been achieved to a large extent as in the Kheda district in a single year (*i. e.*, 1969) alone, as many as 31 branches were opened. In the following two years, *i. e.*, 1969 and 1970 as many as 45 branches were opened in the district. It will also be evident from the above statement that largest number of branch offices in the district are situated at Nadiad, because Nadiad has become the hub of industrial and commercial activities in the entire district.

The statement further reveals that these branches belonged to the eight nationalised banks and that there were no private commercial banks in the district. Further, out of 116 branches as on 31st December, 1970, the Bank of Baroda had 28 branches, Central Bank 23, Bank of India 17, Dena Bank 15, State Bank of India 12, Union Bank of India 10, United Commercial Bank 7 and Punjab National Bank 4, respectively.

Deposits and Advances—As already seen, the collection of savings from the public and making advances to the various sectors of economy are perhaps the main functions of the banks. Prior to their nationalisation, a lion's share of the advances went to few big industrial and commercial houses. Small artisans, cottage and small-scale industries, agriculture, etc. were more or less neglected by these banks. However, since nationalisation, there is a welcome change in their lending policy, as part of their funds are now diverted to these sectors. The following statement shows the deposits collected and advances made by the banks till 31st December, 1970.

Deposits and Advances of Commercial Banks

(Upto 31st December, 1970)

			(Rs. IN LAKHS)	
Centre 1		Deposits 2		Bank Credit 3
Total	.. ..	46.52		12.71
Anand	.. ..	9.53		4.14
Vadasinor	.. ..	0.43		0.13
Borsad	.. ..	1.90		0.27
Khambhat	.. ..	4.62		1.16

Deposits and Advances of Commercial Banks—contd.

(RS. IN LAKHS)

Centre 1	Deposit 2	Bank Credit 3
Dakor	0.69	0.8
Dharmaj	1.38	0.21
Kapadvanj	1.57	1.58
Karamsad	0.99	0.6
Mahamadabad	0.54	0.14
Nadiad	9.15	2.31
Ode	0.52	0.20
Petlad	4.02	0.68
Sojitra	0.67	0.2
Umreth	1.29	0.14
Vallabh Vidyanagar	0.61	0.13
Vaso	0.56	0.2
Others	8.05	1.44

Source : Reserve Bank of India, *Statistical Tables Relating to the Banks in India*, 1970, p. 128.

The total deposit collection on 31st December, 1970 amounted to Rs. 4,652 lakhs. Of these Anand, Nadiad, Khambhat and Petlad centres have together contributed 58.71 per cent of deposits.

Advances form 27.30 per cent of the deposits. Among these, Anand claimed 32.57 per cent, followed by Nadiad (18.17 per cent), Kapadvanj (12.43 per cent) and Khambhat (9.12 per cent). These centres jointly accounted for 72.29 per cent of total advances. At these centres, the growth of agro and small-scale industries is significant. The banks have thus contributed their share in the socio-economic advancement of the district.

CO-OPERATION

Introduction—“The co-operative movement has made rapid strides in the State. The objective of covering all villages of the State by primary co-operative credit societies has been almost fully achieved. About 69 per

1. Government of Gujarat, *Draft Fifth Five Year Plan, 1974-79*, (1973), pp. 11, 143-44.

cent of the agricultural population is expected to be covered by the end of the Fourth Five Year Plan. The programme for strengthening the co-operatives by making them viable units has been undertaken.

“Various agencies are participating in the many sided effort to meet ever increasing demand for institutional credit facilities. The main task of co-operative societies is to provide institutional finance to members. The approach relating to the finance to the value of property and to the title thereto has been given up and more rational and scientific way of relating the credit to production need has been introduced.

“The Reserve Bank of India has been assisting the co-operative credit structure by giving finance at the concessional rate of interest. Co-operatives in Gujarat State are, however, on the way to achieving self sufficiency.....”

“.....The co-operative movement made rapid strides after the commencement of the planned development. The provision of ‘credit’ facilities for agricultural production formed the main plank for co-operative development programme. The objective of covering all villages of the State by primary co-operative credit societies has been almost fully achieved. About 51 per cent of the agricultural population was covered by the end of the Third Five Year Plan and it is likely to rise to 69 per cent by the end of the Fourth Five Year Plan. It is estimated that out of about 8,711 societies at the end of 1968-69, the number at the end of the Fourth Plan would be reduced to 7,500 as a result of programme of revitalisation and amalgamation of non-viable societies. Having made co-operative societies viable at village level for all villages of the State, the next objective would be to cover all persons in need of co-operative services. It is felt necessary that the landless labourers should also be enrolled into primary co-operative societies. This is all the more necessary when instead of agricultural credit societies, broad based village service co-operative societies are organised wherein the whole village population including agriculturists, artisans, landless labourers, etc., are proposed to be covered.”

The broad objectives of the Fifth Plan are outlined briefly below :

- ensuring short and medium term credit to all villages by viable primary agricultural credit societies, gap if any, to be filled up by nationalised / commercial banks or central co-operative banks,
- advance of short and medium term finance by the agricultural credit societies,
- increase in membership of agricultural credit societies by enrolling agricultural labourers,
- advance of long term loans by the State Land Development Bank,
- nationalised/commercial banks should advance agricultural credit,

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(f) agricultural credit should be linked with marketing and processing in the co-operative sector, (g) wherever feasible, processing and marketing of agricultural commodities to be attempted by the co-operative sector, and (h) to continue and expand existing schemes of financial assistance under co-operation.

In this background details regarding the growth of co-operative credit societies and banking in the Kheda district are discussed in the following paragraphs.

Co-operative Credit Societies and Banks—The Kheda district enjoys international reputation in so far as the growth of co-operative movement is concerned. In this field it has made very rapid strides. Thanks to the efforts of late Sardar Patel and Shri Morarji Desai, Kaira District Co-operative Milk Producers' Union came into existence as early as 1946. The establishment of Amul Dairy at Anand, in 1946, is the highest peak that the movement has scaled. This is the biggest dairy in Asia.

Prior to Independence, a major portion of the district was under the Bombay Presidency, which was covered under the Bombay Co-operative Societies Act, 1925. But in the Kaira (Kheda) district the co-operative movement was brought about as early as July 1905 by the registration of agricultural credit society at Uttarsanda (Nadiad taluka) in July, 1905 under the Co-operative Societies Act, 1904, enacted by Government of India. Another society was registered at Chhapara village in the same year. But a landmark was achieved with the establishment of Agricultural Bank at Bhadran in 1910, mainly to provide financial assistance to the primary credit societies. It also endeavoured to liquidate the past debts, especially of member cultivators. By the end of 1913, societies were also registered at Vatadara, Sisva, Radhu, Bhuvel, Piploi, Vasana-Buzarg and Pithai. Another important event in the history of co-operative movement in the district is the establishment of Kheda District Central Co-operative Bank in 1920. In the initial years, the bank had to face critical situation as regards transfer of liabilities from the Bombay State Co-operative Bank Limited., which had provided large amounts of loans to the primary societies in the district.

The district witnessed failure of crops in the subsequent years, with the result that the banks' recovery position became far from satisfactory. Consequently the bank had gone into liquidation. This gave a great 'set back' to the co-operative movement in the district. However, Second War time requirements again provided some impetus to the movement. The Borsad Supervising Union was converted into Co-operative Banking Union. It did commendable work to encourage the growth of co-operative societies in the area. During this period, as a result of efforts made by (late) Shri Indulal Yagnik, the 'Kheda District Sales and Purchase Union' came into existence.

Subsequently such unions were also organised at taluka places. In the former Cambay State, a few co-operative societies were registered. By 1938-39, there were as many as 35 co-operative societies in that State.

Thus though efforts were canalised to give a spurt to co-operative movement in the district prior to Independence, much headway could not be made due to the paucity of funds available with the co-operative societies. Moreover, the people were ignorant about the inherent benefits of the co-operative organisation. After Independence, co-operation was accepted as an ideal means to achieve the goal of socialistic pattern of society. The First Five Year Plan launched in the country in 1951-52 laid great stress on development of co-operative movement. Large amounts were earmarked for its development in the successive Five Year Plans to provide adequate financial assistance to the member cultivators through the agency of the primary societies. The Kheda District Central Co-operative Bank was registered in 1949. State patronage and propaganda went a long way to create altogether a new atmosphere for the growth of the movement. At the end of First Five Year Plan, in 1955-56, 83 per cent of the total villages in the district were brought within the co-operative fold. On account of further acceleration in the movement under the Plans, almost a hundred per cent coverage has been achieved in the district. Against this historical perspective, an attempt has been made to review the progress made by the credit societies; agricultural and non-agricultural in the district as only credit societies are to be discussed in this chapter.

Agricultural Credit Societies—These societies form the most important plank in the co-operative structure. As a matter of fact, the movement was initially introduced mainly to solve the problem of agricultural finance. In 1947, there were 203 credit societies in the district. During the Second and Third Five Year Plans, sizeable funds were earmarked and spent for the development of such societies. In order to make these societies more serviceable to the cultivators, on the recommendation of the National Development Council, it was decided in 1959 to widen the functional range of these societies by converting them into service co-operatives. Instead of providing finance only, the service co-operatives were called upon to undertake the distribution of seeds and manures, supply of agricultural tools and implements and run consumer stores. Out of a total of 647 agricultural credit societies in the district in 1971-72 as many as 517 were service Co-operatives. Their progress since Independence is reviewed in the Statement VI-2 that follows :

STATEMENT VI-2
Operations of the Agricultural Credit Societies

(AMOUNT IN THOUSAND RS.)

Year	No. of Societies	No. of Members	Paid up Share Capital	Working Capital	Loans Advanced	Overdues	Deposits	Reserve and other funds	Borrowing From Government
1	2	3	4	5	6	7	8	9	10
1947	..	203	..	684	219	9	..	279	..
1951-52	..	251	..	1,271	475	38	162	483	..
1955-56	..	281	..	3,988	2,414	374	600	1,096	49
1960-61	..	496	..	17,427	12,033	1,877	694	1,268	97
1965-66	..	605	..	33,887	17,704	10,302	673	2,942	329
1966-67	..	628	..	36,341	17,430	11,967	624	3,228	415
1967-68	..	639	..	37,775	21,655	12,136	571	3,745	840
1968-69	..	645	..	39,754	22,675	12,640	541	4,203	924
1969-70	..	646	..	40,551	27,219	12,473	553	4,645	811
1970-71	..	642	..	44,757	33,294	13,442	694	5,128	761
1971-72	..	647	..	64,563	41,474	12,180	783	7,081	518

Source : District Registrar, Co-operative Societies, Nadiad.

The statement reveals that there is a remarkable progress in the working of the societies. The number of societies rose from 203 in 1947 to 496 in 1960-61 and to 647 in 1971-72. Similarly membership went up from 14,381 to 143,000, paid-up share capital from Rs. 4.52 lakhs to Rs. 1.36 crores, working capital from Rs. 12.71 lakhs to Rs. 6.46 crores, advances from Rs. 4.75 lakhs to Rs. 4.15 crores and reserve and other funds increased from Rs. 4.83 lakhs to Rs. 70.81 lakhs. On account of lean and scarcity years the societies had to advance large sums with the result that overdues went up from Rs. 0.38 lakhs to Rs. 1.22 crores. The position of recoveries was thus not always satisfactory.

Non-agricultural Credit Societies

Just as the agricultural credit societies play an important role in the life of cultivators, non-agricultural credit societies do so in the life of small traders, artisans and salary workers. Urban co-operative banks, urban thrift and credit societies, salary earners' societies, etc., are included in this group. These societies are mostly situated in urban and semi-urban areas. In recent years, urban co-operative banks and mercantile co-operative banks are assuming greater importance day by day. The Statement VI-3 that follows gives the information about non-agricultural credit societies excluding urban banks which are discussed separately.

STATEMENT VI-3
Non-Agricultural Credit Societies

(AMOUNT IN THOUSAND RS.)

Year	1	2	No. of Societies	3	4	5	6	7	8	Reserve and other funds		Borrowing from Government		C. F. A.
										9	10	11	12	
					Paid up Share Capital	Working Capital	Loans Advanced	Overdues	Deposits					
1947	..	27	11,800	310	9,308	4,300	..	..	..	409	..	..	4,300	..
1951-52	..	33	13,536	565	12,410	6,300	138	..	..	698	..	..	938	..
1955-56	..	48	28,193	2,149	25,200	8,104	295	218	..	1,705	..	..	1,492	..
1960-61	..	60	40,111	5,356	36,912	9,010	376	349	..	2,163	..	..	1,658	..
1965-66	..	63	41,739	5,419	38,001	9,017	402	5,413	..	2,409	..	..	1,768	..
1966-67	..	67	42,725	5,620	38,223	9,202	381	5,692	..	2,472	..	..	1,700	..
1967-68	..	71	51,003	6,513	45,842	9,254	428	58,106	..	2,834	..	..	1,715	..
1968-69	..	74	53,738	7,492	52,985	9,303	429	5,800	..	3,221	..	..	1,809	..
1969-70	..	90	29,654	4,747	13,246	9,343	461	5,993	..	1,064	..	..	1,886	..
1970-71	..	97	32,130	5,322	15,405	11,633	467	6,907	..	1,176	..	..	2,091	..
1971-72	..	102	39,784	6,496	19,375	15,776	497	7,761	..	1,306	..	..	2,900	..

C. F. A. = Central Financing Agency.

Source :

District Registrar, Co-operative Societies, Nadiad.

It would be observed from the above statement that these societies have made a commendable progress during the last two decades (1951-52 to 1971-72).

The statistics illustrate at the end of 1971-72, number of societies stood at 102, membership 39,784, paid-up capital Rs. 64,96,000, and deposits Rs. 77,61,000. It shows the increased interest and confidence of the people in co-operation and in mutual help.

Co-operative Banking—Urban Co-operative Banks and Mercantile Co-operative Banks play a very important role in meeting the financial requirements of small traders and artisans. In the Kheda district, the first urban co-operative bank was established at Vaso in the Nadiad taluka in 1916. After Independence, these banks have made remarkable progress. The number of such banks went up from 6 in 1951 to 34 in 1971-72. Thanks to the nationalisation of 14 major, commercial banks in 1969, the number of urban co-operative banks has increased very rapidly in recent years when as many as eleven banks were organised. Similarly between 1951-52 and 1971-72 their membership rose from 3,715 to 38,741, paid-up capital from Rs. 3.98 lakhs to Rs. 70.30 lakhs, working capital from Rs. 42.19 lakhs to Rs. 9.90 crores, advances from Rs. 42.90 lakhs to Rs. 5.15 crores, deposits from Rs. 39.90 lakhs to Rs. 7.25 crores and reserve and other funds from Rs. 2.08 lakhs to Rs. 38.89 lakhs. These figures speak of the striking development made by co-operative banks in the district.

The Kheda District Central Co-operative Bank Limited

The Kheda District Central Co-operative Bank was registered at Nadiad on 11th April, 1949. On account of expansion of the co-operative activities, the bank was required to open its branches at important centers in the district. Besides the head office at Nadiad, it had 42 branches at the end of 1972-73. Nearly half of these branches were opened during the last five years (1968-73).

The bank provides, as usual, short term loans to primary societies for a period upto 15 months and medium term loans for a period not exceeding five years for the purchase of bullocks, carts, electric motors, etc. Cash credits are also granted to the consumer stores, industrial co-operatives, etc., to enable them to purchase commodities in large quantities. Further, loans for construction of residential houses are also granted to the housing co-operatives.

The progress made by the bank since 1951 to 1973 is briefly reviewed below :

The number of member societies rose from 250 to 1932, share capital from Rs. 2.29 lakhs to Rs. 149.42 lakhs, deposits from Rs. 26.52 lakhs to

Rs. 1,359.66 lakhs, advances from Rs. 18.97 lakhs to Rs. 1,320.00 lakhs, and working capital from Rs. 28.89 lakhs to 1,82.20 lakhs. These figures indicate that the bank has made significant progress, during the last 25 years of its successful working.

Moreover, the bank has played a very important part in the economic life of the people of the district. Two big co-operative enterprises like Amul Dairy at Anand and *Charotar Sahakari Khand Udyog Mandal* at Palaj are financed by this bank. It has also provided large amounts to the marketing societies, processing societies, urban banks, etc., to help them fulfill their respective obligations.

Long Term Finance

As seen earlier, the short and medium term requirements of the agriculturists are met by the District Central Co-operative Bank through the primary agricultural credit societies. The farmers also require long term finance to effect permanent improvement in their lands and for purchasing appliances like tractors. The agency which caters to the long term needs of the cultivators in the State is the Gujarat State Co-operative Land Development Bank with headquarters at Ahmadabad, and functioning through its branches in the districts. At the end of 1972-73, the bank had ten branches in this district. Since inception the bank advanced Rs. 6.18 crores to the farmers in the district till 1972. (For more details see Chapter IV—"Agriculture and Irrigation" of this Gazetteer).

Small Savings

People's propensity to save depends on a number of factors among which availability of surplus money is the foremost. The habit of keeping surplus money in store is perhaps age old. In the past, people used to keep their money with the local *Sahukars* or the merchant-cum-moneylenders and withdrew or borrowed from him in case of need. But these savings had very little ramification as regards their role in economic development. The first attempt at utilising the surplus income of the people in Governmental machinery was made during the period of First World War (1914-18), when the Government of India introduced Postal Cash Certificates. This scheme was operated by post offices in the country.

No change seems to have been introduced in this system till almost Independence. The operation of the World War II necessitated large circulation of money in the country. The incomes of individuals had also risen *pari-passu*. The Government of India, therefore, mooted a number of schemes to attract savings from the public. Attractive rates of interest were offered so as to induce people to save. A variety of schemes under

small savings were, therefore, put into operation. There was Post Office Savings Banks which gave the investor the facility of withdrawal also. The introduction of National Savings Certificates, Annuity Certificates and the Cumulative Time Deposit Scheme with varying periods of maturity helped an investor to realise handsome amounts after the stipulated period.

In the context of the foregoing description, the Kheda district had been instrumental in collecting small savings under these schemes amounting to Rs. 83.66 lakhs and Rs. 1.11 crores during the years 1970-71 and 1971-72.

Insurance

Agencies doing insurance business play an important part in taping a portion of the savings of the people in the form of insurance premia. Since 1956, the life insurance business in the country has been nationalised and the work of administration and collection of life business is entrusted to the Life Insurance Corporation, which is the largest agency in the country doing life insurance business. Further, general insurance business regarding accident, fire, marine, etc., was left to private enterprises. But since 1964 the Life Insurance Corporation has created a General Insurance Department which manages the issue of policies and collection of premia on accident, fire, marine, etc., from the public.* But, separate figures as regards the extent of business done under these heads are not available.

For the organisational and administrative convenience, Kheda district is placed under the charge of the Ahmadabad Division of the Life Insurance Corporation. In the year 1972-73, the number of agents canvassing the Life Insurance business was 1,386. During the years 1971-72 and 1972-73, the Corporation issued policies numbering 19,025 and 19,003, amounting to Rs. 18.47 crores and 17.80 crores respectively and collected premium of Rs. 5.76 crores during these years.

Private and Public Limited Companies

The private and public limited companies play an important role in attracting savings of the people to finance diverse economic activities such as manufacturing, trading, transport and the like. The company finance thus constitutes an important aspect in the study of financial resources in the economic structure of the district.

By the end of March 1973, there were eighteen public limited companies registered in the district. Of these, six were registered prior to Independence. Their total paid-up capital amounted to Rs. 4,37,22,534 in March, 1973.

*The General insurance business was nationalised with effect from 1st January, 1973, and is looked after by the General Insurance Corporation which was set up on 22nd November, 1973.

There were 77 private limited companies registered in the district at the end of March, 1973. Of these, seven were registered prior to Independence. The largest number of private limited companies was situated at Anand followed by Nadiad and Vallabh Vidyanagar. Their total paid-up capital amounted to Rs. 1,23,06,820 in March, 1973.

ASSISTANCE FOR INDUSTRIAL DEVELOPMENT

Industrial development depends on a number of factors. Among these, lack of adequate finance to industries is perhaps the main bottleneck in achieving a balanced growth of a region. Unless sufficient money is provided and technical advice is tendered, growth of industries would be very slow. To help tide over these difficulties, institutional finance to large, medium and small industries is encouraged in the country since Independence. The Government of India took the initiative and enacted the Industries (Regulation and Control) Act in 1948 so as to streamline the administration of the different types of industries, and to acquire effective control over strategic industries producing material for defence. A land-mark in the history of industrial finance was achieved when the Government of India enacted the Industrial Finance Corporation of India Act in 1948. Thus, the first and foremost all-India institution for providing finance to especially large industries came into existence in 1948 and was named the Industrial Finance Corporation of India. The State Governments also created similar autonomous corporations in their respective States for encouraging the development of industries. Since the formation of the Gujarat State in 1960, the State Government has set up a number of institutions for creating a sound industrial base for an all-round economic development of the State. The Gujarat State Financial Corporation which was established in 1960, became the fore-runner in the field. Subsequently, other autonomous bodies were also established by the State. These are: the Gujarat Small Industries Corporation (1962); the Gujarat Industrial Development Corporation (1962); and the Gujarat Industrial Investment Corporation (1968). The latest addition is the Gujarat Industrial Co-operative Development Bank, which was created in 1970. Besides the Industrial Finance Corporation, the institutions promoted by the Central Government are the National Industrial Development Corporation, (1954), the Industrial Credit and Investment Corporation of India (1955), and the Industrial Development Bank (1964). These agencies cater to the needs of small, medium and large industries in different areas and thus help development of industries by providing financial and technical assistance, wherever necessary. So far as the Kheda district is concerned, the assistance provided by the above mentioned agencies to the industrial units in the district is shown in the Statement VI-4 that follows :

STATEMENT VI-4
Loans to Industrial Units, Kheda District

Sl. No.	Name of the Institution	No. of Units assisted	Type of Units assisted	Amount of loan sanctioned (Rs. in lakhs)	Remarks
		3	4	5	6
A—STATE GOVERNMENT					
1	Gujarat State Financial Corporation, Ahmedabad.	207	Small-scale Units.	239.01	upto - 31st March, 1972.
2	Gujarat Industrial Investment Corporation, Ahmedabad.	11	Metal works, rice and pulse mills, iron and steel, concrete works and industrial artisans	59.60	"
3	Gujarat Small Industries Corporation, Ahmedabad.	15	(Technicians) 29 Rural work shops 6	2.57	"
4	Gujarat State Industrial Co-operative Bank, Ltd. Ahmedabad.	17	Supplied machinery on hire purchase to engineering works, chemical works, ceramics, printing works, saw mills, etc. Bakery, saw mills, soap factories, Plastic works, iron and steel, etc.	3.15	N. A.
B—CENTRAL GOVERNMENT					
1	Industrial Finance Corporation of India, New Delhi.	4	Textile mills, Glass works, Machine manufacturing units, etc.	129.49	Upto June, 1973
2	National Industrial Development Corporation, New Delhi.	2	Textile mills,	40.22	Upto March, 1973
3	Industrial Development Bank of India, Bombay.	2	Textile mills, Machinery works, etc.	17.37	Upto June, 1973
4	Industrial Credit and Investment Corporation of India Bombay.	10	Electrical equipments, Textile mills, Milk and milk products, etc.	342.28	Upto March, 1972

Source :

Based on the data supplied by the G. S. F. C., Ahmedabad, GIC, Ahmedabad, G. S. I. C., Ahmedabad, I. F. C., New Delhi, NIDC, New Delhi, IDBI, Bombay and the ICICI, Bombay upto June 1973.

CURRENCY AND COINAGE

Ancient Period. Some information about the coins in this area in the ancient period could be gathered from a hoard of 200 coins found from Anand and later from the Nagara village of the Khambhat taluka. The coins found from Anand belonged to the *Gupta period* and are of Kumargupta. From the mounds of Nagara, coins are obtained from time to time. They range from those of the Kshatrapas to the Mughals (More details about coins excavated at Nagara are given in Appendix I).

Medieval Period About the currency in vogue in the medieval period, i. e., during Muslim rulers, it is learnt that from the Government bamboo farm in *Kothiyakhad* village of Borsad taluka, seven gold coins were found. They seem to have been issued by Muslim rulers during the Hijari Era 900.

It will be of special interest to know that Mughal Emperor Jahangir visited Khambhat and commemoration he ordered for a novel form of coin, *tanka* to be minted in this town. *Tankas* of gold and silver were twice the weight of the ordinary *muhrs* and rupees. "In no reign except mine", he (Jahangir) said with great pride, "have *tankas* been coined except of copper; the gold and silver *tankas* are my invention." The legend on the silver coins was engraved on one side. *Sikka, Jahangir-shahi, 1027*, and round it the verse, *King Jahangir, the conquering ray struck this.* The reverse of the coins bore the legend, "Coined at Cambay in the 12th year of the reign, with this second hemistich : When, after the conquest of the Deccan, he came to Gujrat from Mandu."²

Modern Period—About coins in circulation after the arrival of the British on the political arena of the country, the former *Kaira and Panchmahals Gazetteer* observes that "In 1806, so scanty was the stock of money, that it was usual for weavers and cultivators to barter their wares. At the same time, there were in circulation no fewer than six varieties of coin, the Surat rupee, the Sicca rupee, the Baroda rupee, the Asasai rupee at par with the Baroda, the Cambay rupee, and a rupee coined in Kaira and known by the name of *jina* or the small rupee. At present (1877), except in the case of payments of the land assessment, the British currency is not in general use. The medium in ordinary dealings is the Baroda or *babashai* rupee, varying in value, but generally about fourteen per cent below the standard. These variations in value, the money-lender in his dealings with the poorer class of borrowers, generally turns to his own advantage."³

1. MEHTA R. N. (DR.), *Excavations at Nagara*, Maharaja Sayajirao University, Archaeology Series, No. 10-1968, p. 116.

2. COMMISSARIAT M. S. (PROF.), *History of Gujarat*, Vol. II, (1957), p. 61-62.

3. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panchmahals*, (1879), pp. 61, 62.

Moreover, mints existed in two of the former princely States and estates, viz., Khambhat and Vadasinor. Other States had no mint.

About coins in the Cambay State, the former Gazetteer supplies the following details :

"The Nawab has a mint at which both silver and copper are coined. The silver coins are rupees, half rupees, and quarter rupees; the copper coins are pice, half pice and quarter pice. Both the silver and copper currency are of the rudest workmanship. The Cambay rupee is 27/32 of the Imperial coin, the present (1880) rate of exchange being twenty five per cent in favour of the British currency."¹ However, rupee coin was withdrawn from circulation after 1896. The mint itself was closed in 1901. It was decided to close the mint for a period of 50 years and was not to be reopened without the permission of the Government of India. From November 1903 currencies of the State² ceased to be a legal tender and was replaced by Imperial currency of rupees, annas and pies. At that time 129 *Khambhati* rupees were exchanged for 100 Imperial rupees. Though the mint was closed in 1901, the coins issued by the State remained in circulation more or less upto 1939.

Vadasinor State

The *Annual Administration Report* for the year 1908-09 observes as follows :

"There is no mint in the State. The one that existed in Balasinor for copper coins some ninety years ago was closed in the year 1819."

Thus, further details about the currency of the former Vadasinor State are not available. The British Indian currency of rupees, annas and pies became the legal tender from 1901 in the entire Kheda district inclusive of the areas under the princely States.

After Independence

There was no change in the currency and coinage system in the country but Imperial marks were replaced by introducing the design of the national emblem on the notes and coins. This system continued till March, 1957.

1. CAMPBELL J. M., *Gazetteer of Bombay Presidency*, Vol. VI, *Rewakantha, Narukot, Cambay and Surat States*, (1880), p. 209.

2. JOTE R. B., *Khambhat-no-Itihas*, (1935), p. 89.

*Decimal Coinage **

A revolutionary change was made in the currency system in the country in April, 1957 when Decimal Coinage based on the metric system was introduced.¹ Formerly one rupee was equal to 64 paise or 192 pies. Under the new system one rupee is equal to a hundred paise. For sometime both old and new coins were in circulation till the former were progressively withdrawn.

At present, coins are issued in the denominations of 1, 2, 3, 5, 10, 20, 25, 50 paise and one rupee. The currency notes of the denominations of 1, 2, 5, 10, 20, 50, 100 and 1,000 rupees are issued in the country. Of these, only one rupee notes are issued by the Central Government and the rest by the Reserve Bank of India.

B—Trade and Commerce**INTRODUCTION**

Gujarat is famous as a land of traders both in and outside the country. Towards the close of the 19th century, Bania community was largely the trading community. Among these the Khadayatas predominated. After the assumption of power by the British, besides Banias, Brahmins, Patels and Mohammedans have become traders. Over and above, any person with means could become a trader and so persons from all community have entered the trading profession. *Per contra* persons from the Bania community have taken to cultivation and also work as labourers in mills.¹

The merchants from Kheda district are spread over in the neighbouring districts of Vadodara, Ahmadabad, Panchmahals and Surat. In Bombay their strength is considerable. Besides, the traders from Kheda are found in North Gujarat, Saurashtra, Kachchh, Marwad, Rajasthan, Maharashtra, Tamil Nadu, Bengal, Assam and practically in all states in India. Outside India, they are found in South and East Africa where the entrepreneurial skill of Kheda merchants is a well known fact. In addition, they have spread towards the Far Eastern countries such as Singapore, Hong Kong, Fiji Islands and as far as Japan for trade purposes. In the West, in London (U. K.), Paris (France) and other places, the Kheda merchants are making fortunes.²

*. It will be of great interest to learn that in June, 1945, the Government of India issued a communique suggesting decimal coinage for India in which rupee would be divided into 100 cents instead of 192 pies and invited public opinion on the proposal. The reasons advanced were that the decimal currency had displaced other forms in most countries of the World, the chief exceptions being India, Great Britain and certain Commonwealth countries. Public reaction was favourable to the proposal, but no definite decision was taken. (See *The Indian Year Book and Who's Who*, 1945-46 Vol. XXXII, p. 25).

1. *Charotar Sarvasangraha*, Vol. I, p. 269.

2. *Ibid.*

In order to get a proper perspective of the condition of trade in the Kheda district, it is necessary to have an idea of the course of trade of the district in the past. A review of the conditions of trade and commerce prevalent in the past which lasted till the end of the British domination in India are briefly described below. The former *Gazetteer of Kaira* and *Panchmahals* gives a succinct account of the conditions of trade in those days. Similarly the details of trade in the former princely areas of Vadasinor and Khambhat is also dealt with briefly in the pages that follow.

COURSE OF TRADE

Though in early times Kheda did not contain any very important centre of trade, many favourite lines of traffic passed through it. North and south, pretty much along the present main line of railway passed the trade between Ahmadabad and Vadodara, Bharuch and Surat, another line lay from the port of Tankari in Bharuch through Dehvan, Petlad and Kheda to Ahmadabad; a third was from Khambhat through Sojitra and Kheda to Ahmadabad. Lines also passed from the Gujarat ports north-east through Dakor and Kapadvanj to Malwa and Mewar, and east through Dholka, Kheda and Nadiad. However, judging from the small revenue from transit dues the trade of the district at the time of its transfer to the British (1803) was scanty. In 1821 the consumption of imported articles was very small. In 1841 the chief articles of trade between Surat and Ahmadabad were silk raw and manufactured, cotton, piece-goods, gold thread, country paper, metal articles, wheat and coriander seed; through Kheda to the Panch Mahals and Malwa, and to Dungarpur and Mewar, cumin seed, cardamoms, betelnut, brimstone, camphor, coffee, coconuts without shells, cotton, dry ginger, gum, iron, indigo, catechu, and lace; from Jambusar and Tankari, through Dehvan to Ahmadabad, long pepper, perfumes, sugar, saltpetre, soap, cloves, cinnamon, and mace; from Khambhat, black pepper, pearls, horses, charcoal, alum, tea, tobacco, sugarcandy, and molasses; and from Dholera, sandalwood, candles, tamarind, and rosewater. In 1855, in consequence of the exorbitant customs duties levied by the Nawab of Khambhat and also by the Gaikwar, the district trade, both in exports and imports, took, instead of the straight road to Khambhat, a circuitous course either to Dholera in Ahmadabad or Dehgam in Bharuch. The chief articles of export were grain to Vadodara, safflower to different Gujarat ports; tobacco to Malwa; cumin seed, soap, and glass bangles to Bombay; and clarified butter to Surat. The chief articles of import were wheat, *sorangi*, cotton, and cloth from Malwa; and sugar, spices, coconuts, metals, European piece-goods, glass ware, paper, jewellery, and dates from Bombay. Shortly after 1855 the trade of the district would seem to have greatly increased. In 1861 at Kapadvanj, during the whole fair season, immense caravans were said to halt regularly on their way between Ahmadabad and Central India. Large quantities of tobacco grown in Nadiad, Petlad and Borsad, came to the Kapadvanj merchants to be sent to Malwa and Marwar, and piece-goods, hardware, country manufactured cotton and

silk robes, glass, soap, bangels and many other articles were very largely exported from Kapadvanj to the Gaikwar's territories, the Mahi Kanthi, the Panch Mahals, the Vadasinor country and Central India.

The former *Kaira Gazetteer* (1879) mentions that the value of trade in clarified butter was to the tune of Rs. 8 lakhs for many years.¹

Vadasinor State

The course of trade in the former Vadasinor State is briefly described below.

The merchants were Banias, Brahmins and Bohoras. Of these, Banias sold grains, Brahmins were money-lenders and the Bohora merchants sold glass bangles and other miscellaneous articles.

There was a system of levying customs duties and the rates were lowest in the State in comparison to other States in the Agency. But the existing rates for levying exports and imports duties were not common for the whole State, till 1921-22. This anomaly was removed and uniform rates for the whole State were introduced from 1922-23. This step did not result in any decrease in the States revenues. Tariff rules were framed in 1933.

The chief articles of imports were : cloth, sugar and molasses, kerosene, grains, salt, groceries and other miscellaneous articles. Exports consisted chiefly of grains, *ghee*, hides, oil and oilseeds, soap, tobacco, sheep wool, cotton and lime stone.

The following statement helps to illustrate the volume of trade :

Year	Imports		Exports	
	Quantity in Mds.	Value Rs.	Quantity in Mds.	Value Rs.
1	2	3	4	5
1906-07	87,300	2,96,800	36,800	1,40,900
1912-13	84,452	2,66,708	29,472	96,334
1915-16	53,653	1,66,531	16,146	47,094
1918-19	1,50,986	6,71,478	91,552	7,53,326
1922-23	1,66,064	12,95,393	77,714	6,54,705
1923-24	2,27,167	12,85,391	1,06,386	9,74,174
1943-44	64,301	10,54,027	1,89,440	15,48,681

Source :

Annual Administration Reports of the Vadasinor State.

The figures of volume of trade are available from the year 1906-07. They reveal on the whole a steady growth, with occasional ups and downs. An analysis shows that soap from Vadasinor went to Bombay, Ahmadabad,

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panchmahals*, (1879), pp. 71-72.

Vadodara and other centres in Gujarat. Similarly there were large exports of sesamum, cotton, hides and tobacco to outside centres. On account of general prosperity, the retention capacity of traders was considerable with the result that there was substantial hoarding of cotton, *ghee*, tobacco, oil and oilseeds for better returns later on. On account of unfavourable seasons in 1912-13 and 1915-16 trade was slack. Similar was the condition in 1918-19 due to unsteady market and difficulty of obtaining railway wagons which hampered trade. Since 1922-23 uniform customs rates were enforced. Large trade in 1923-24 was due to export of coarse and fine lime. There was practically no change in trade pattern almost till the commencement of the War in 1939. People also witnessed general prosperity in the State. The variations in imports and exports were due to War effects. The rise in prices led to imposition of controls. This measure had an adverse effect on trade. On account of rise in price of kerosene, its imports were curtailed. The corresponding increase in imports was due to inflationary conditions. Controls were imposed by the State's administration on grains, sugar and kerosene. Prices of cloth had risen considerably which resulted in decrease in imports. Similarly imposition of a tax on tobacco outside the British districts on tobacco exported from the State, led to decrease in its exports. The War time boom in commodity prices led to rise in the value of exports over those of imports. Information about the trade of Vadasinor State after the year 1943-44 is not available.

Khambhat

Though there is no trade at the Khambhat port at present, Khambhat has had a very interesting story about its maritime activities in the past. It was visited by foreigners—both Arabs and Europeans who have left notes describing the glory that was Khambhat. It was a world mart to some extent as products of India and foreign countries were sold in the Khambhat market. Its docks presented a conglomeration of ships of different countries, flying different banners and flags. It was the naval establishment of Muslim rulers of Gujarat. Khambhat reached its zenith during the period of Mohammed Begda. But the political anarchy, rise of Portuguese, English and Dutch powers in the Indian Ocean and rise of Goa and Surat as rival ports to Khambhat led much to its decline. Last but not to the least, the siltation of the Gulf of Cambay came as a death knell to Khambhat maritime activities. However, the past prosperity of the land and sea trade of Khambhat are briefly described below.

Before the advent of railways, the goods and passengers were carried out by boat to Bombay and other ports. After the inauguration of railways, passenger traffic was diverted entirely through Anand. In the 13th to 15th centuries, Khambhat produced mangoes, coconuts and rice and honey in great abundance. It was also famous for its leather sandals. Though the trade was impeded by pirates known as *Pawarijs*, Khambhat maintained its position as one of the chief centres of trade. Its markets were loaded with ginger and

cotton from the neighbouring ports and north India products were brought from Multan, and sugar from Malwa, etc. The sea borne trade of Khambhat was with Persia, Arabia and Africa in the west and as far as China in the east. Wheat, rice, indigo and sugarcane were the chief exports from Khambhat. Besides these articles, the travellers also noticed that sardonyx, spikenade, myrobalans, silk and pepper were also exported. During the reign of Bahadur Shah (1522-1530), Khambhat trade declined on account of the activities of the Portuguese, who spared no efforts to injure the harbours and shipping of Gujarat. When they acquired mastery over the seas in 1533, they reduced Khambhat to a local port and drew the foreign trade to their own cities of Diu and Goa. However, on the decline of the Portuguese power, the trade between Khambhat and Red Sea again revived. When the English came to Gujarat (1608), the Khambhat trade was of considerable consequence. In the beginning of the 16th century Khambhat was connected with inland towns in Gujarat such as Ahmadabad, Patan and Champaner and with Delhi and Lahore in the north. By sea, it had trade relations with Ghogha and Diu in Gujarat; Diu in Sindh and Calicut and Cochin on the Malabar coast. Outside the frontiers of India, Khambhat traded in the west with Ormuz in the Persian Gulf; Sheher, Aden, Jedda on the Arabian coast and Megado, Melande, Mombasa in East Africa and in the east with Ceylon, Chittagong, Martaban and Malacca. In those days, Khambhat exported agates, carnelians and crystals. These were known as Khambhat stones. Cotton was sent to Malabar and ginger to Persia. Opium was sent to Persia, Malabar, Peru and Malacca. Indigo was chiefly sent to Portuguese ports on the Konkan, where horses were also sent. Agate stones were sent to Malbar, Arabia, Red Sea ports, East Africa and to all countries where Khambhat merchants had trade relations. Besides these, cotton, carpets, bedsteads, lac, lacquered ware, silk, ivory articles were also sent to these places. The imports through land were diamonds from Deccan wheat and barley from Malwa, indigo from Lahore and silk and horses from Kabul. Sea imports were copper, lead, mercury, vermillion and alum from Aden and Goa, silver from Red Sea and Persian Gulf, tin from Siam and iron from Malabar and sulphur came from Ceylon. Besides turquoises, emeralds and lapis lazuli were brought from Persia, wheat and sandal wood came from Timor, and benzoin from Siam, Malacca and Sumatra. Horses were brought from Persia and Arabia, lac came from Peru and ambergris from Africa. Sokotra and Maldive Islands, velvets were brought from Red Sea.

However, towards the close of the 16th century Surat became a dangerous rival to Khambhat. Though the cotton and silk manufactures maintained their position among the most valued exports of Western India, the general trade became more and more limited. The articles of exports were silk and cotton stuff of all kinds and imports were money dates and other merchandise. Besides the home trade to Diu and Goa, Khambhat goods went west to Persian Gulf and as far as Sumatra in South East Asia. In the beginning of the 18th century inland trade consisted of cotton, silk and embroidery.

These were famous not only in India but perhaps in the whole world. Half a century later Khambhat's exports were salt like coarse sand, ivory articles and cloths like those of Persia, Arabia and Europe. Towards the close of the century large quantities of cotton cloth were manufactured and exported to African markets. In the latter half of the 19th century, Khambhat trade rose by 277 per cent in 1877-78. This was due to import of large quantity of grains to meet the failure of crops in north Gujarat and Kathiawar. The exports increased by 167.01 per cent in 1877-78 owing to large tobacco exports.

Sea-borne Trade

The continuous figures of sea-borne trade of Khambhat port are available from 1893-94. Articles of imports were *gur*, sugar, dates, coconuts, oil, timber, iron ware, and porcelain, and those of exports were *ghee*, cloth, copper and brassware, hides, foodgrains and oilseeds and other miscellaneous articles. Till the close of 19th century, the value of trade ranged around of Rs. 10 lakhs and more and imports and exports were almost equal. Since the beginning of this century value of total sea-borne trade has continuously declined. From Rs. 6.80 lakhs it went down to Rs. 4.83 lakhs in 1913-14. There was some revival at Rs. 6.84 lakhs in 1916-17 but in 1921-22 it was to the tune of Rs. 5.36 lakhs. The value of trade rose thereafter to Rs. 37.80 lakhs in 1932-33 but declined to Rs. 17.33 lakhs in 1936-37.

No information is available about Cambay trade upto the year 1953-54. However, since Independence, trade figures are available in quantity and not in value. Value figures do not project a correct picture about the quantum of trade on account of inflationary tendencies in prices. But a correct assessment is possible when the figures are available in quantity.

Imports—The value of imports rose from Rs. 4.93 lakhs to Rs. 9.18 lakhs in 1899-1900 on account of large imports of foodgrains due to famine and scarcity conditions in Gujarat. The value of imports declined to Rs. 3.02 lakhs in 1903-04 revived thereafter and went up to Rs. 5.48 lakhs in 1910-11 and Rs. 6.01 lakhs in 1914-15. Thereafter it went down more or less continuously till it reached Rs. 2.91 lakhs in 1920-21. Revival is seen in imports trade upto Rs. 19.62 lakhs in 1932-33. But in 1936-37 it went down to Rs. 78,000 only.

Exports—The value of exports centred round Rs. 5 lakhs till 1902-03 but continuous decline is noticed till it reached Rs. 89,884 in 1921-23. Trade seems to have revived in 1932-33 when it reached a value of Rs. 18.18 lakhs. But thereafter the trade figures have declined to Rs. 9.53 lakhs in 1936-37.

Sources :

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol VI, *Cambay*, pp. 187-195.
2. TRIVEDI A. B., *Post-war Gujarat*, pp. 20, 240-41.

It has been seen earlier that on account of siltation in the Gulf, the maritime trade of Khambhat had declined. The figures of sea-borne trade available in quantity help us to analyse the trend of trade through the port.

The main commodities of trade are: of imports wood and timber, salt, coconut, building materials and miscellaneous articles; of exports wood and timber, building materials and miscellaneous articles. The figures from 1953-54 to 1958-59 are in ordinary tons, whereas those from 1959-60 onwards are in metric tonnes.

The figures reveal that the total trade at the Khambhat port has not been substantial and indicates a continual declining trend. No returns are found from 1966-67 onwards. Highest trade was noticed in the year 1954-55 when the volume was 2,357 tons. Similarly in the year 1964-65 the volume of trade was of the order of 616 tons.

Imports—Among the figures returned in the Traffic Review of Ports of Gujarat, 2195 tons of goods were imported in 1954-55. Thereafter the trade has continuously declined, till it finally stopped in 1966-67. Even among these figures, large imports in 1963-64 were of building materials consisting of bricks, tiles, cement, etc.

Exports—The picture of exports trade is dismal. The highest was 226 tons in 1954 the lowest 1 metric ton in 1964-65. No exports have been recorded at the port from 1966-67 onwards.

Statement VI-5 gives statistics of imports into and exports from the Khambhat port from 1893-94 to 1965-66.

STATEMENT VI-5

Sea-borne Trade of Khambhat Port

Year 1	Imports 2	Exports 3	Total 4
	Rs.	Rs.	Rs.
1893-94 ¹	4,93,099	5,07,629	10,00,728
1897-98	5,38,176	4,06,942	9,45,118
1901-02	4,73,767	1,96,132	6,69,899
1905-06	4,85,625	1,65,917	6,51,742
1909-10	3,47,847	1,22,624	4,70,471
1913-14	3,21,118	1,62,622	4,83,740

STATEMENT VI-5—concl'd.

Year 1	Imports 2	Exports 3	Total 4
	Rs.	Rs.	Rs.
1917-18	3,61,978	1,14,447	4,76,425
1921-22	4,46,384	89,884	5,36,268
1932-33 [*]	19,62,000	18,18,000	37,80,000
1933-34	10,95,000	15,57,000	26,52,000
1934-35	9,86,000	3,77,000	13,63,000
1935-36	3,35,000	9,20,000	12,55,000
1936-37	7,80,000	9,53,000	17,33,000
	Tons	Tons	Tons
1953-54 [*]	2,069	226	2,295
1957-58	321	51	372
	M. T.	M. T.	M. T.
1961-62 [*]	218	33	251
1965-66	1	3	4

Source :

1. *Gazetteer of the Bombay Presidency*, Vol. VI-B, *Rewa Kaniha, Cambay, Narukot, and Surat States' Agency*, (1904), p. 31 and (1927), pp. 48-51.
2. TRIVEDI A. B., *Post War Gujarat*, pp. 240-41.
3. *Bombay State: Ports Traffic Review*, 1958-59.
4. *The Ports of Gujarat, Annual Traffic Review*, 1964-65 and 1965-66.

After Independence

Imports—At present, the imports in the district consist of the following categories. Among the cereals and pulses, rice, gram, wheat and *jowar* and peas are imported from other parts of Gujarat and from Rajasthan and U. P. (i) *Bajri* is imported from Mahesana and Kachchh districts, ground-nut is imported from Saurashtra and Kachchh. Cotton seeds are imported from Bharhch, Timba and Vadodara, (ii) Fruits, dry fruits such as dates are imported from Bombay, Porbandar, Arabia, Basrah and Vadodara, potatoes from Punjab, Simla and Ahmadabad, onion from Rajasthan and Saurashtra, mangoes from Madras, Rajasthan, Saurashtra, Amalad and Ahmadabad, (iii) among the different varieties in textiles, cotton *sarees* are imported, from Bombay, Ahmadabad and Khambhat, handloom *sarees* from Madras and Banarasi *sarees* from Banaras and Mysore and Madurai. Cotton cloth is imported from Bombay, Surat, Madras and Ahmadabad,

woollen cloth from Delhi, Kanpur, Ludhiana, Calicut, Bombay and Haryana; readymade garments from Punjab, Calcutta, Bombay and Ahmadabad, (iv) Stationery articles such as fountain-pens are brought from Delhi, Punjab, Bombay and Ahmadabad, ink from Ahmadabad, Calcutta and Vadodara, pencils, pins and erasers from Bombay, Punjab, Delhi and Ahmadabad, (v) Grocery items like tea and coffee are imported from Calcutta and Bombay, Salt from Saurashtra and (vi) miscellaneous articles such as hardware and metals are imported from U. P., Delhi, Bombay, Godhra, Vadodara, Rajasthan and Madhya Pradesh. Medicines are imported mostly from the centres of manufacture like Vadodara, Bombay, Calcutta and Madras, iron-ware and tin ware are brought from Delhi, Punjab and Bombay, building materials and cement from U. P., Delhi, Punjab, Maharashtra, Sikka and Ranavav, while leather goods are imported from Maharashtra, Agra, Lucknow and Kanpur.

Exports—As compared to imports, exports are fewer. Kheda district transports tobacco to Uttar Pradesh, Madhya Pradesh, Delhi, Saurashtra and West Bengal. Cotton is exported to Bombay and Ahmadabad. Agate stones (raw), prepared agate and precious stones are exported to Africa and to European countries. The district exports vegetables to Bombay and Delhi. Dairy products like *ghee*, butter, etc., are exported from Anand, Mahemadabad, etc., to other centres in Gujarat and as far as upto Bombay. Milk is also transported to Bombay for use in the Arey Colony.

The details given by the *Charotar Sarvasangraha* are as under :

Kheda district is famous for its tobacco production which is used in this district in the manufacture of *bidi* and snuff, but a large quantity is exported outside the district. The merchants from this district have established their branches and *bidi* manufacturing units at important centres like Jabalpur, Bilaspur and Bhandara in Madhya Pradesh. Moreover, merchants from this district have established their shops in Calcutta, Uttar Pradesh, Bihar, Orissa, Assam, etc., and tobacco produced in Kheda is sent to these places. Recently at Chikhodra in Anand taluka, a conference of All India Tobacco Producers was held, which shows the importance of this taluka in the district as a tobacco producing centre. In order to modernise the trade in tobacco, a co-operative society of tobacco producers has also been proposed to be established.¹ Thus tobacco forms a large component of the exports from this district.

Cotton is also another item of trade. The groundnut and other oil seeds produced in the talukas of Kapadvanj, Thasra and Nadiad not only

Source :

Chief Officers, Nadiad, Anand, Khambhat, Borsad and Umreth Municipalities.

1. *Charotar Sarvasangraha*, pp. 278-79.

meet the oil requirements of this district but also form an important plank in exports outside the district. Moreover, *tur* is also another item of export trade. The *tur-dal* of Vasad of this district is famous in India and abroad.¹

In this district, foodgrains, pulses and other miscellaneous items are produced and are also exported outside the district. Yet these items are also imported from other areas, for example, *tur-dal* from U. P., and oil from the south and *bajri* from U. P. are brought here, though the district produces considerable quantity of *bajri*. The trade in these items is bypartite.²

TRADE THROUGH RAIL

In the composition of inland trade, railways help considerably in the movement of goods from one destination to another as well as through important trade centres. During the year 1972-73, the tonnage of goods passing through the railway wagons both originating and terminating amounted to 34,35,257. Of these, 11,43,438 tonnes were exports and 22,91,819 tonnes imports. This shows that district has large export potential. The stations which handled large tonnage were Nadiad (11,48,513 or 33.43 per cent), Anand (8,23,915 or 23.98 per cent), Vallabh Vidyanagar (3,95,855 or 11.52 per cent), Mahemadabad (2,13,112 or 6.20 per cent), Borsad (1,65,121 or 4.80 per cent), Bhalej (1,08,180 or 3.14 per cent) and Sevaliya (1,02,969 or 2.99 per cent). These stations together handled 85.06 percentage of goods.

The district, though not very rich in mineral wealth, has deposits of limestone, mica, bentonite, moram, and lead in Kapadvanj, Thasra and Vadasinor talukas. Besides, the drilling operations in Matar and Khambhat talukas have revealed availability of oil and natural gas from the wells drilled. There are prospects of recovering oil from the off-shore drilling in the Gulf of Cambay. There is a cement factory at Sevalia which transports cement. There are two salt works near the sea shore of Khambhat and there are possibilities of developing its bye-products. There are four industrial estates of which three belong to the Gujarat Industrial Development Corporation and one belongs to private. Industrial estates at Kapadvanj, Petlad and Vaso are being established. (The details are given in the Chapter V—"Industries").

REGULATED MARKETS

There is a proverb that an Indian agriculturist is born in debt, lives in debt and dies in debt. To a large extent this proverb was true. Because of

1. *Charotar Sarvasangraha*, pp. 278-79.

2. *Ibid.*

his illiteracy and ignorance, he became an easy prey to the local money lender who employed all ways and means to keep the cultivator under his yoke. His reckless borrowings also contributed much to his miseries. Be it related to borrowing money or sale of advance crops in lieu of loans or in marketing the surplus produce, if any, the cultivator remained at the mercy of the village money-lender-cum-trader, who cheated him at every stage. These factors made the Indian cultivator a pathetic showmanship among his counterpart in other counties. The Great Depression which was let loose on account of Wall Street crash in 1929 created slump in the world markets and prices of farm produce went down to a very low bottom. The condition of Indian agriculturists, no doubt, went down from bad to worse. To help him in such an unfortunate position, some efforts were made in the thirties of this century. The Royal Commission on Agriculture which was appointed in 1928 suggested that the agriculturists in the country should be protected by providing equitable facilities in respect of disposal of the marketable surplus, by establishing regulated markets in different areas. Pursuant to this recommendation, the Government of Bombay enacted the Bombay Agricultural Produce Markets Act in 1939 with the object of establishing equity in the bargaining power of agriculturists and merchants, promoting mutual confidence, preventing malpractices and giving a fair deal to the farmers. The legislation also sought to regulate the various features of agricultural marketing in the regulated markets.

On the formation of Gujarat State in May 1960, the State Government, adopted the old Bombay Act but later on replaced it by the Gujarat Agricultural Produce Markets Act, 1963. The regulated markets in this district are now governed by this Act. Each regulated market is governed by market committee constituted in accordance with the provisions of the Act and generally consists of 17 members, comprising 8 representing the agricultural class, 4 representing the trading class, 2 from co-operative societies, one nominated by the local body and two nominees of Government.

The markets established at the places in the Kheda district in accordance with the provisions of the Act are shown in the Statement VI-6 appended to the Chapter.

Regulated Commodities—Paddy, wheat, gram, groundnut, *bajri*, *tur*, *tur-dal*, *kodra* and *mug* are the main commodities regulated in these markets.

The Composition of Markets—Brokers, weighmen and *hamals* constitute the market functionaries and their strength in each market, as on 30th September, 1972, was as follows : Khambhat (2,342), Thasra (1,955), Kapadvanj (1,900), Nadiad (1,689), Borsad (1,296), Anand (1,141), Matar (967), Vadasinor (903), Mahemadabad (719), Petlad (670), and Umreth (197). The Tobacco market at Anand had 3,557 market operators. These persons hold valid licences issued by each market committee on payment of prescribed fees.

Transactions in Regulated Markets—During the year 1971-72 transactions in regulated commodities were to the tune of 22,23,011 quintals. Details of arrivals in each market were as follows :

Sl. No.	Name of the Market	Quantity in quintal
1	2	3
1	Kapadvanj	4,51,713
2	Anand	4,47,931
3	Khambhat	3,63,810
4	Borsad	3,29,784
5	Mahemadabad	3,25,249
6	Matar	1,39,030
7	Umreth	89,381
8	Nadiad	53,633
9	Petlad	22,480
10	Thasra	N. A
11	Vadasinor	"
Total		22,23,011

Source : District Registrar, Co-operation and Marketing, Nadiad.

It is seen that Kapadvanj had the largest arrivals and Petlad the lowest. Further no transactions have been reported at the Thasra and Vadasinor markets during the year 1971-72.

All the markets in the district have been provided with *pucca* godowns. The prices ruling the markets are furnished to the authorities and are published in important newspapers and broadcast from the All India Radio, Vadodara-Ahmadabad.

WHOLESALE TRADE

Wholesale trade is generally concentrated in the large towns and cities where needs of retailers, wholesalers and general public are met. The movement of goods in this district is generally carried out by motor trucks because railway transport is not as quick and economical as that by trucks. Nadiad, Anand, Matar, Mahemadabad, Petlad, Borsad, Khambhat and Kapadvanj are the important wholesale trade centres in the district. At all these centres, the practice of charging brokerage, quality allowance, weighing, etc., is in

vogue and the charges are generally uniform in all the markets, with slight variations according to local conditions. A brief description of each of these centres is given below. These places also function as retail marketing centres.

Nadiad—It is the largest town in Kheda district, and is a taluka centre and sub-divisional headquarters. It is a junction station on the Bombay-Ahmadabad broad gauge section of the Western Railway. The narrow gauge railway lines from here run upto Kapadvanj and Bhadrach. A network of roads connect Nadiad not only with important towns in the district but also joins it with Ahmadabad, Vadodara and Godhra. It was previously known as Nadgam and noted for its indigo and cotton manufacture in the early 17th century.

Nadiad is a centre of considerable trade and commerce. It is also famous for its New Shorrock Mills of the house of Mafatlal Gagalbhai, an industrialist. Besides, manufacturing of iron safes, soap, furniture, brass and copper vessels, and other iron articles, manufacture of gold and silver ornaments and wares are important industries at Nadiad. A large cable wires factory has been recently established at a distance of about a mile from Nadiad. There were approximately 267 wholesale merchants at Nadiad, during the year 1971-72, traded in commodities like *jiru*, *valiari*, *rai*, *methi*, *bajri*, wheat, paddy, etc. The total transactions in these commodities were reported to be Rs. 88.10 lakhs in 1971-72.

Anand—It is an important junction on the Ahmadabad-Bombay broad gauge railway line of the Western Railway, with branches to Godhra and Khambhat. It is also well connected by roads with other taluka centres. Nadiad and Anand are the main receiving and distributing centres for the whole district. Anand occupies a very prominent place in the dairy industry, not only of the State but also of the country. Being in the heart of tobacco growing area, it is famous for its large scale manufacture of snuff. It is noted for its wholesale trade in paddy, wheat, *bajri*, *tur*, tobacco, etc. The total value of transactions in these commodities amounted to Rs. 4.86 crores during 1971-72.

Kapadvanj—It is the taluka headquarters, and the terminus of the Nadiad-Kapadvanj narrow gauge section of the Western Railway. It is also connected by roads with Nadiad, Modasa and surrounding places. It was one of the main routes between Central India and the sea coast before the advent of railways. Kapadvanj has always been an important trade centre since good old days. It was known for the manufacture of soap, glass, leather, *ghee*, porcelain, jars and more particularly for textiles which gave it name of *Kapadvanijiya* or the centre for cloth weaving. Its goods were once exported to Panchmahals, Vadasinor and Central India, and glass and soap were exported even to North Africa, Arabia and Persia. Most of

the handicrafts of Kapadvanj have now fallen into decay. At present cotton and groundnut are its chief produce. The main commodities of wholesale trade besides these are *bajri* and wheat, which valued approximately at Rs. 7.05 crores in 1971-72.

Khambhat—Once the capital of former Nawabs, Khambhat is connected both by railway and roads. Ibn Batuta on his way to China in 1345 A. D. found it a very fine city, remarkable for the elegance and strength of its mosques and houses built by foreign merchants. Under Ahmed Shah I and Mahmud Begada, Khambhat, then a noble city, 12 miles around prospered with many crafts. It was called "Garment of the World" as it supplied textiles to the whole of the East and the greater part of the West. In the past Khambhat exported wheat, rice and indigo and imported precious metals, gold and silver and copper and zinc from the Red Sea ports. Khambhat was considered as a world mart as, products of different countries were available in its market. In 1573 it passed under Mughal Emperor Akbar, who revived its trade. During the 16th century its trade had suffered at the hands of the Portuguese, who plundered and burnt it. Importance of Khambhat then began to decline. Khambhat acquired a new importance recently owing to the find of petroleum and natural gas and its agate industry. It is also famous for its wholesale trade in wheat, paddy, cotton, *bajri*, etc. The value of wholesale trade transactions was reported to be Rs. 4.29 crores in 1971-72.

Matar—It is the headquarters of a taluka and connected by roads with other centres in and outside the district. There is no railway line in the taluka, but Nadiad which is only 19 kms., away is the nearest railway station. There are several co-operative societies manufacturing iron agricultural implements, bone-meal and groundnut oil, a pulse mill, two ginning factories and a saw mill. Paddy, wheat and *bajri* are main products of the taluka. The total value of wholesale transactions amounted to Rs. 4.25 crores during 1971-72.

Mahamadabad—It is another wholesale trade centre situated on the Bombay-Ahmadabad main broad gauge line of the Western Railway. It is about 12.88 kms., north of Kheda, the district headquarters. It is also connected by roads with Kheda, Mahudha and Kathlal. It had once the honour of being the capital of Gujarat, during Mahmud Begada's time. Oil and rice mills and manufacture of brasswares are the main industries of the town. Wheat, paddy and *bajri* are the important commodities of wholesale trade, whose transactions approximately amounted to Rs. 2.81 crores in 1971-72.

Borsad—It is a taluka headquarter and a station on the Vasad-Kathana broad gauge railway section. It is also connected by Vasad-Tarapur section of the State Highway and connected by State Transport services with

Anand, Khambhat, etc. It has a number of tobacco curing and *bidi* making establishments. Wheat, paddy, *bajri*, sesamum, etc., are the main commodities of wholesale trade. The value of wholesale transactions was Rs. 3.34 crores in 1971-72.

Petlad—It is a junction station on the Anand-Khambhat broad-gauge and Nadiad-Bhadran narrow gauge railway sections of the Western Railway. It is also linked by roads with other taluka centres like Anand, Nadiad, Khambhat, etc. Petlad is said to date back to the 5th century, when it was a trade centre known as Petalipadra on the highway from Khambhat to Central and Northern India. It was considered to be the "Manchester of Baroda State" owing to its textile industry. Even at present it is an important industrial town having two textile mills, a dye and paint works, a pulse mill, several brass and iron factories, powerloom factories and a chemical factory. Tobacco is an important produce of the taluka and an item of trade. *Bajri*, wheat, paddy, etc., are also the main commodities of wholesale trade valued approximately of Rs. 22.29 lakhs during 1971-72.

NUMBER OF TRADERS

The following statement gives details about the persons engaged in the trading profession according to the Census from 1951 to 1971.

STATEMENT VI-7

Sl. No. 1	Categories 2	Persons Employed		
		1951 3	1961 4	1971 5
	Total	21,677	31,441	35,954
1	Wholesale Trade	310	1,575	4,174
2	Retail Trade	20,294	28,699	27,627
3	Trade and Commerce miscellaneous	1,073	1,167	4,153

Source :

District Census Handbook, 1951, 1961, and 1971.

In the economic activity related to trade and commerce, the total number of persons engaged amounted to 21,677 in 1951; 31,441 in 1961 and 35,954 in 1971 respectively. In terms of total population their percentage was 1.34 in 1951 and 1.46 in 1971. During the last 20 years (1951-71) the total number of workers engaged in the trading profession has increased by 65.86 per cent. Those engaged in wholesale trade

increased from 1.43 per cent in 1951 to 11.61 per cent in 1971. During the last two decades the number of persons engaged in trade and commerce miscellaneous increased from 4.95 per cent to 11.55 per cent in 1971. The census figures reveal that the number of persons engaged in retail trade are the maximum. Even among these, those dealing in essential commodities like food and clothing claimed 58.14 per cent and 60.97 per cent of the total number of persons engaged as traders in the district in 1951 and 1971 respectively.

Retail Trade

Retail trade is carried on by a large number of establishments in the urban and rural areas and caters to the needs of local inhabitants. These traders usually obtain their goods on credit generally from local wholesalers and settle bills periodically. Their stock in trade is limited and generally depends upon their financial condition and local demand. Retailers quickly replenish items which are much in demand among the people. The capacity of retailers in rural and semi-urban areas for keeping large stocks of goods is, in most cases, limited, on account of their limited financial resources and maintain stock sufficient for their normal sales. But their counterparts in cities and towns, because of their better financial position and social status, are capable of keeping stocks in large quantities. The brisk season for business generally lasts from October to June, because the rest of the period is generally covered by monsoon, when people generally avoid celebrations of social functions like marriage. However, dealings in *pan-bidi*, tobacco, etc., are normal throughout the year, but during festivals and on holidays, the *pan bidi* sales are the maximum. In other branches too, transactions in retail trade particularly are prominent during such festivals as the Holi, the Dassera, the Diwali and the marriage season. Retail sales are usually on cash basis, but running accounts are opened and settled periodically in case of acquainted customers.

Retail trade is generally distributed in the following branches :

- (1) grocery shops selling cereals, pulses, spices, *gur*, groundnut and sesamum, oil, *ghee*, tea, coffee, condiments, dry fruits, baking soda, menthol crystals, saffron, catechu, *agarbatti*, etc.,
- (2) *pan-bidi* and tobacco shops, which are generally one man establishments sell *pan* (betel leaves), *bidi*, cigarettes, cigars, match boxes, chewing tobacco, betelnuts, catechu, menthol crystals, etc.,
- (3) cloth and hosiery shops which deal in all kinds of textiles, in cotton, woollen, silk, and synthetic fibres and other super varieties of cloth having a wide range of clothing such as shirting, coating, *sarees*,
- (4) fuel and charcoal shops,
- (5) stationery and cutlery shops,
- (6) fruits and vegetables shops,
- (7) shops selling household utensils of brass, copper, aluminium, German Silver and stainless steel,
- (8) hardware and building materials,
- (9) chemists,
- (10) sweetmeat and *farsan* shops, and
- (11) leather goods and footwear.

Retail marketing centres are situated in almost all areas. As the population has increased and modes of communications have improved, retail shops have sprung up even in remote rural areas. However, Nadiad, Anand, Kapadvanj, Khamabhat, Matar, Mahemadabad, Borsad, Petlad, Thasra and Vadasinor, being the taluka headquarters are most prominent among these. In recent years co-operative movement has made very rapid strides. On account of soaring prices, the activity has also spread towards providing relief to the middle and lower classes by supplying common consumption articles at reasonable rates. This activity has culminated in the establishment of co-operative purchase and sales unions. These are organised at Matar, Mahemadabad, Kapadvanj, Thasra, Vadasinor, Anand, Borsad, Khamabhat, Petlad, Umreth and Tarapur. During the year 1971-72, their sales amounted to Rs. 4.64 crores bringing a net profit of Rs. 6.47 lakhs to the unions.

CO-OPERATION IN WHOLESALE AND RETAIL TRADE

As a result of expansion of co-operative movement, consumers' stores to supply articles of daily consumption such as sugar, cloth, soap, foodgrains, pulses, ghee, edible oil, etc., have come into existence in recent times primarily to provide relief from inflationary prices in recent times. In the year 1972, there were three central and forty primary stores in the district. The names of the Central stores are mentioned below :

- (1) Federation of Co-operative Stores Ltd., Nadiad.
- (2) Cambay Central Consumers' Co-operative Stores Ltd., Khamabhat.
- (3) Anand Dudh Vaparnari and Madhyastha Grahak Sahakari Mandli Ltd., Anand.

These stores cater to the needs of urban and semi-urban areas. The following figures illustrate the progress of consumers' co-operatives in the district during 1970-72 :

Particulars	Consumers' Co-operatives	
	1970-71	1971-72
1	2	3
Membership	11,820	12,314
Share Capital (Rs.)	3,13,966	3,36,610
Working Capital (Rs.)	7,72,716	9,02,548
Sale of Consumers goods (Rs.)	87,47,005	95,97,164

Source :

District Registrar, Co-operative Societies, Nadiad.

Fair Price Shops

On account of the exigencies of the Second World War, there was an abnormal rise in the prices of essential commodities like cereals, pulses, cloth, sugar, gur, kerosene, etc. Further there was large-scale hoarding and profiteering in essential commodities by the traders. In the circumstances, the Government of India introduced a system of rationing throughout the country. Fair price shops were opened under the Civil Supplies Departments specially created in the British Indian territories and in the princely States. Ordinances were promulgated and hoarding and profiteering were declared punishable under law. The essential commodities of daily consumption were sold to economically weaker sections of the society. Middle class people were also covered under the scheme. This system provided great relief to these sections.

However, prices have continued to rise even in the post-war (and post-Independence) period causing greater hardships to the people. Except for a short pause in the year 1952, following the increase in Bank rate, and the lifting up of controls throughout the country in 1954, the prices of essential commodities have continued to rise spirally.

Moreover, on account of implementation of Five Year Plans from 1951-52 there were large investments in agriculture, industry, irrigation, etc. Further there has been a steady growth in the country's population since 1931 onwards. The increase in the food production has been more than neutralised on account of population growth. Over and above this, on account of increase in the income after Independence, the bargaining capacity of big cultivators has increased. The tendency to hoard grains for better returns at a future date has been rampant among these cultivators. There is also considerable hoarding by traders, creating artificial scarcity in the country. All these factors have greatly influenced in the commodity price levels and essential food grains are no exception.

After the formation of Gujarat State, Government has introduced a system whereunder foodgrains, groundnut oil and sugar are distributed to the economically weaker sections of population inclusive of those whose incomes are not liable to taxation under the family card system. These cards are to be registered with the nearby fair price shop, authorised by Government. In the Kheda district in the year 1972-73, there were 596 shops which distributed rice, maize, gram and other commodities. The total quantity sold through these shops amounted to 10,004 metric tonnes in the year 1972-73. Besides, sugar and groundnut oil were also sold at controlled rates. The scheme helped the poor sections by providing the coarse grains at cheaper rates and affected the rates ruling the open markets. The rationing scheme thus provided relief to the public in general.

FAIRS

Fairs are generally associated with deities, religious festivals and saints and local customs. They exercise a powerful influence over the people from all strata of society on account of great pomp and pageant generally and serve socio-economic, cultural and religious purposes. In the past, on account of meagre facilities of communications, these fairs were the only market places for the village folk. In modern times, however, their economic significance has declined though not to any considerable extent as could be evinced from the fact that some of the important fairs are attended by 10,000 or more persons. But the development of transport, spread of education, and alternative modes of recreation and entertainment have created certain averseness among the educated elite towards these fairs. Yet fairs have not lost their significance. On account of religious inclination and the get-together of people of different moods and attitudes, these fairs provide fun and enjoyment to children, adults and the aged alike.

From the view-point of trade and commerce, articles of common consumption, drinks, *pan-bidi*, and cigarettes, bangles, cheap ornaments, hosiery and a number of other articles are brought to these fairs for display and sale in shops or booths specially erected for them. As the fairs are attended by a large section of the people naturally, there is enough of trade in different commodities, generally fetching handsome profits to dealers.

In all 110 fairs are held in this district at different places and at different times of the year. Of these, following 25 fairs command special significance because of their popularity and consequent large congregation. Even among these, the *manekthari punam* fair at Dakor in the Thasra taluka, the *jal-jhilani agiarash* fair at Vadatal in the Nadiad taluka, the Utkanthesher Mahadev fair on the eve of Mahashivratri at Vaghajipur in the Kapadvanj taluka and the Moti Ratnagar Mataji fair at Kapadvanj are attended by people ranging from 1,25,000 to 27,000 in order.

Important Fairs

Sl. No. 1	Name of the fair 2	Place/Taluka 3	Attendance 4
1	Manekthari Punam	.. Dakor (Thasra)	1,00,000 to 1,25,000
2	Jal-Jhilani Agiarash	.. Vadatal (Nadiad)	35,000
3	Utkanthesher Mahadev Mahashivratri	.. Vaghajipur (Kapadvanj)	27,000
4	Moti Ratnagar Mataji fair	.. Kapadvanj	25,000 to 30,000

Important Fairs—contd.

Sl. No. 1	Name of the fair 2	Place/Taluka 3	Attendance 4
5	Holi	.. Dakor (Thasra)	23,366
6	Santram fair	.. Nadiad (Nadiad)	20,000 to 25,000
7	Janmashtami	.. Sarsa (Anand)	20,000 to 25,000
8	Gokul Atham (Janmashtami)	Dakor (Thasra)	20,000
9	Dev Diwali	.. Vadatal (Nadiad)	18,000
10	Chaitri Punam	.. Khambhat	13,000 to 15,000
11	Janmashtami	.. Anand (Anand)	12,000 to 14,000
12	Varahi Mata's Havan	.. Chaklashi (Nadiad)	12,000
13	Randhali Mata's Havan	.. Chaklashi	12,000
14	Kalka Mataji's Havan	.. Nadiad	12,000
15	Kali Chaudash	.. Kheda (Mahamadabad)	10,000 to 15,000
16	Bhai Bij	.. Kheda (Mahamadabad)	10,000 to 15,000
17	Kapileshtwer Mahadev fair	.. Pij (Nadiad)	10,000
18	Shravani Puman fair	Vadatal (Nadiad)	10,000
19	Gokulashtami (Jamnashtami)	.. Vadatal (Nadiad)	10,000
20	Chaitri Punam fair	.. Vadatal (Nadiad)	10,000
21	Pitheshweri Mataji fair	.. Pithai (Kapadvanj)	10,000
22	Kali Chaudash	.. Lambhvel (Anand)	10,000
23	Mahashivratri	.. Sarnal (Thasra)	10,000
24	Janmashtami	.. Sarnal (Thasra)	10,000
25	Khojai Mata fair	.. Sojitra (Petlad)	10,000

Sources : District Census Handbook 1971, Kheda District.

Part X-C-I, Departmental Statistics and full Count Census Tables, pp 50-5.

Note : More details about these and other fairs are given in the Chapter III. People of this Gazetteer.

Trade Associations

It is interesting to compare the merchant associations of the past with the present ones. The former "*Gazetteer of the Rewa Kantha, Narukot, Cambay and Surat States*" furnishes very useful and interesting details on the subject, in the following terms :

Trade Guilds—In each branch of the craft the heads of factories formed a distinct guild or *panchayat*. There was the guild of polishers on stone, *dolia panchayat*; of polishers on wood, *patimar panchayat*; etc. Over each of these guilds there was a headman, chosen by the votes of the members, who presided. There was no combination among the workers in the different factories, nor was there any record of any dispute between the workers and their employers. Any skilled worker owning a factory, may become a member of the guild of branch to which he belonged. On entrance he had to entertain the members, and pay fee to the Nawab. In any factory, if one of the skilled workers desired to have his son taught the craft, or if a new hand was anxious to join, he had to please other skilled workers by feasting and other entertainments. Except in making arrangements for the unpaid service due to the Nawab, the trade funds were not utilised for specific purposes but were spent on entertaining the members.

On paying Nawab a fee and agreeing to meet the customary charges including a yearly subscription, any member of one of the under-guilds could become a dealer, *akikia*.

The guilds were useful in arranging for the service due to the Nawab. The worker undertaking to carry out the job received cash award from the guild funds. Among guild rules, one forbade the master-workers engaging the services of workmen belong to another factory. Holidays amounting to approximately two months in the year were kept under the rule and breaches of the rules were punished by fines.¹

A trade association in the modern sense of the term is an outcome of the present century. Trade has become too diversified and problems of each branch differ widely, so as to defy any common solution. To bring about harmony among members, to protect interests of trade in the face of Government legislation and to present concerted and joint action, trade associations have been organised practically in all branches of industry and trade and commerce. Above these is a central body, to which individual associations are affiliated, has come into existence to further the interests of trade and commerce and industries and their ultimate expansion.

¹. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. VI, (1880), *Rewa Kantha, Narukot, Cambay and Surat States*, pp. 204-05.

That trade and commerce is one of the principal economic activities of modern times is recognised universally. Recognising their utility and importance, the Central and State Governments nominate their representatives on the various committees and sub-committees appointed by them, and also invite the views of such august bodies on many important economic problems such as taxation, fiscal policy, location of industry, licensing policy, etc. There were in all seventy three associations in the Kheda district in the year 1973. Of these 17 were found in Anand taluka, 12 each in Mahamadabad and Petlad talukas, 8 in Kapadvanj taluka, 7 in Thasra taluka, 5 each in Nadiad and Matar talukas 3 each at Vadasinor and Khambhat talukas, while in Borsad taluka there were only 2 associations as tabulated below :

Trade Associations (as on 31st December, 1973)

Industry 1	Trade and Commerce 2	Miscellaneous 3
1 The Small Scale Powerloom Association, Khambhat.	1 The Cambay Jewellers Association, Khambhat	1 Kachhia Bazar Mahajan, Radhu, (Matar taluka)
2 Limbasi Rice Mill Association, Limbasi.	2 Cambay Merchants' Association, Khambhat	2 Matar Bazar. Mtr. Mahajan, Matar
3 Nadiad Vasan Udhog Association, Nadiad.	3 Chokshi Vepari Mandal, Umreth	3 Navagam Vepari (Mahajan, Navagam, Matar Taluka)
4 The Kapadvanj Oil Merchants' Association, Kapadvanj.	4 Anaj, Telibia Vepari Mandal, Umreth	4 Naika Vepari, Mahajan Naika, (Matar Taluka)
	5 Kapad Vepari Mandal, Umreth	5 Nadiad Saher Muslim Wakaff Association, Nadiad
	6 Radhu Kapad Association, Radhu, (Matar Taluka)	6 Kheda Jilla Fruit and Vegetables' Association, Nadiad
	7 Cutlery Vepari Association, Vadasinor	7 The Merchant Association, Mahamadabad
	8 Kariana and Anaj Vepari Association, Vadasinor	8 The Vegetable Association, Mahamadabad
	9 Kapad Vepari Association, Vadasinor	9 The Vepari Association, Dharmaj, (Petlad Taluka)
	10 The Nadiad Vepari Mahajan Association, Nadiad	10 The Vepari Association Sojitra (Petlad Taluka)
	11 Nadiad Book Sellers and Stationers Association, Nadiad	11 Chokshi Mahajan Sojitra, (Petlad Taluka)

Trade Associations—contd.

Industry 1	Trade and Commerce 2	Miscellaneous 3
	12 Anaj, Kariana Vepari Maha Mandal, Petlad	12 Kapad Mahajan, So- jitra, (Petlad Taluka)
	13 Iron, Hardware and Oil Paints Merchants' Association, Petlad	13 Medical Association, Anand
	14 Petlad Chemist Asso- ciation, Petlad	14 Watch Association, Anand
	15 Cultery Vepari Asso- ciation, Petlad	15 Autoparts Associa- tion, Anand
	16 Kapad Sutar Vepari Association, Petlad	16 Coal and Timber Mer- chants' Association, Anand
	17 Metal Merchants' Association, Petlad	17 Vegetable Dealers' Association, Anand
	18 Petlad Mithai Farsan Association, Petlad	18 Fruit Merchants' Association, Anand
	19 Petlad Flour Mills Asso- ciation, Petlad	19 Book sellers' and Stationery Associa- tion, Anand
	20 Kapadvanj Vepari Maha mandal, Kapad- vanj	20 The Mahajan Haldar- vas, Haldarvas, (Mahe- madabad Taluka)
	21 The Kapadvanj, Kapad Mahajan Association, Kapadvanj	21 Nesti Mahajan Haldarvas, Haldar- vas, (Mahemadabad Taluka)
	22 The Kapadvanj, Cotton seeds Association, Kapadvanj	22 Borsad Vepari Asso- ciation, Borsad
	23 Kariana Merchants' Association, Kapadvanj	23 Dakor Pan-bidi Cigarettee Asso- ciation, Dakor, (Thasra Taluka)
	24 Hotel Owners' Associa- tion, Kapadvanj	24 Samata Vepari Maha- jan, Dakor, (Thasra Taluka)
	25 Grain Merchants' Asso- ciation, Mahemadabad	25 Soni Mahajan Asso- ciation, Kapadvanj
	26 Kariana Merchants' Association, Mahema- dabad	26 Hair Cutters' Asso- ciation, Kapadvanj
	27 Sugar Merchants' Asso- ciations, Mahemadabad	

Trade Associations—concl'd.

Industry 1	Trade and Commerce 2	Miscellaneous 3
	28 Kapad Mahajan Asso- ciation, Mahemadabad	
	29 Sindhi Kapad Merchants' Association, Mahema- dabad	
	30 Chokshi Mahajan Asso- ciation, Mahemadabad	
	31 Hotel and Farsan Asso- ciation, Mahemadabad	
	32 Kansara Merchants' Association, Mahema- dabad	
	33 Anaj Vepari Mahajan, Anand	
	34 The Hotel owners' Associ- ation, Anand	
	35 The Kapad Mahajan, Anand	
	36 Hardware Merchants' Association, Anand	
	37 Tobacco Merchants' Association, Ode, (Anand Taluka)	
	38 Anaj Kariana Vepari, Association Ode, (Anand Taluka)	
	39 Dakor Anaj and Kariana Merchants' Association, Dakor, (Thasra Taluka)	
	40 Dakor Hardware Mer- chants' Association, Dakor, (Thasra Taluka)	
	41 Dakor Cutlery Mercha- nts' Association, Dakor, (Thasra Taluka)	
	42 Dakor Mithai Merchants' Association, Dakor, (Thasra Taluka)	
	43 Sevalia Grain and Kariana Merchants' Association, Sevalia, (Thasra Taluka)	

Source : District Development Officer, Nadiad.

The aims and objects of these associations broadly are (i) to look after the interests of trade and commerce of the region and to help create harmonious relations amongst members, (ii) to arbitrate whenever possible in trade disputes and to study legislation affecting trade and commerce and to put forth their views to Government in this regard, and (iii) to collect and disseminate important statistics relating to industry, trade and commerce and general economic activities in the country for guidance of their members.

WEIGHTS AND MEASURES

The following details from former *Bombay Gazetteer* throw light on the weights and measures used in the past.

"Almost all articles are sold by weights. Except for milk and clarified butter, no measures of capacity are used. The weights are of two sorts; one for gold, silver and drugs; the other for grain, vegetables, and the cheaper metals, copper, brass, iron, lead, and zinc. The former, square in shape are by village goldsmiths, made of lead and sometimes of an alloy or brass and copper, the latter are made of iron by blacksmiths. Both are under the Weights and Measures Act (Act X of 1872) yearly inspected and stamped by the police. Gold, silver and drugs are weighed according to the following scale; six *chokhas* grains or rice one *rati*; three *ratis*; one *val*; sixteen *vals*, one *gadiano*; two *gadianas*, one *tolo*. Again eight *ratis* make one *maso*; and twelve *masas*, one *tolo*. For metals other than gold and silver, and grain of all sorts, the following table is current, two half rupees, one *adhol*; two *adhol*s one *navtak*, two *navtaks*, one *paser*, two *pasers*, one *achher* two *achhers*, one *ser*; forty *ser*s, one *man*, sixteen *mans*, one *kalsi*; two *kalsis*; one *bediyu*."

Cloth was measured either by the *gaj* or *hath*. The *gaj*, made of iron, brass, or wood was of two kinds, the tailor's *gaj* 27½ inches, and the ordinary *gaj* two feet long. Both were divided into twenty-four equal parts called *tasus*. The ordinary *gaj* was used in measuring cotton and silk goods. Turbans, waistcloths, *dhotias* women's robes *sadis*, and such other articles as were sold in pairs or singly, but never in parts, were not measured by the *gaj*, but the *hath*. A *hath*, the distance from the elbow to the tip of the middle finger of a tall man, varied from seventeen to nineteen and half inches. It was the measure commonly used by the poorer classes. The *hath* table was twelve *anglis*, finger breadth, one *vehet*; and two *vehets* one *hath*. The *gaj*

CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panchmahals*, (1879), pp. 65-67.

and the English yard, the latter generally used by cloth merchants, were inspected and stamped by the police.

In measuring land, since the introduction of the revenue survey, an acre of 43,560 square feet was substituted for the *bigha*. The acre was divided into forty *gunthas*, and *guntha* into sixteen *annas*. The *bigha*, equal to 47/80th part of an acre¹ was formerly the unit of land measure, and was generally understood by the people. It was divided into twenty *vasas*, and the *vasa* into twenty *visvasis*. A *visvasi*, also called a *kathi*, equalling five *haths* of from 18.33 to 19.67 inches each, had mean length of about ninety-six inches. Building sites were measured by the *gaj*, and land used for agricultural purposes, by a chain thirty-three feet in length.

Stone were sold by a superficial *gaj* of twenty-four inches, and not by a cubic *gaj*. The price per *gaj* varied according to the nature of the work.

In the case of timber, a *gaj* of twenty-seven inches was used. The *gaj* was divided into twenty equal parts called *vasas*, and each *vasa* into twenty equal parts called *visvasis*. A piece of timber was measured lengthwise. As it was seldom of uniform thickness, the circumference at the middle of the length was taken into consideration.

Precious Stones

As there were no regular shops for selling pearls and precious stones, the weights were but little understood. All purchases were made at Ahmedabad, Baroda, Surat or Bombay. About the Khambhat weights, the *Gazetteer* mentions that "Cambay weights, the *Ser* of one pound, the *man* of forty pounds, and the *khandi* of 20 *mans* or 800 pounds awoirdupois, are the same as those in Kaira."²

The Bombay Weights and Measures Act, 1938 was in force in the areas under the occupation of Government of Bombay. These did not mean any simplification in trade dealings. These weights and measures were used even after Independence. In the smooth flow of the both internal and external trade, these weights and measures placed hindrances at every stage. Some uniformity was, therefore, needed in the weights and measures. A majority of nations had adopted the decimalised system. The Government of India, therefore,

1. Two Kaira *Bighas* are equal to one acre and Seven *Gunthas*.

2. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. VI, *Rawa Kantha, Narukot, Cambay and Surat States*, (1880), p. 210.

introduced the Metric System of Weights and Measures throughout the country for simplifying conversion and calculation. By this system the weight measures and the linear measures were reduced to a multiple of ten. In Gujarat the use of the metric measures was made compulsory throughout the State from April 1962. Its enforcement is entrusted to the office of the Commissioner of Industries in the State. The salient features of the system are set out below :

1. Length is measured in metres instead of in yards.

1 metre = 1.09 yards

2. Distance is measured in kilometres instead of in miles.

1 km. = 0.62 miles

3. Weight is measured into kilograms instead of in pounds (lb) or *seer*.

1 kg. = 2.2 lbs. or 1.07 *seer*, and quintal instead of a maund.

1 quintal = 5.38 mds.

4. Area of land is now measured in hectares instead of in acres.
1 hectare = 2.47 acres

5. Weighment in *tolas* has been replaced by grams.

1 gram is one thousandth part of a kilogram is equal to 0.086 *tolas*

6. Unit for valuable stone continues to be in one carat, carat = one-fifth of the gram = 0.017 *tola*.

At present the use of all the old weights and measures has been banned throughout the State. The Inspectors of Weights and Measures strictly enforce the rules and any breach is dealt with under the Act and Rules and punishments awarded for serious breaches. This has put an end to the variety of weights and measures adopted at different places and markets. The traders now transact only in terms of metric weights and measures. The switch over to metric measures has been smooth. The traders have understood the Act and Rules, and they produce all their weights and measures, etc., for the periodical reverification and stamping, when due, before the concerned authorities.

STATEMENT VI-1

Growth of Commercial Banking
(upto 31st December 1970)

Sl. No. 1	Name of the Bank 2	Location 3	Year of Starting 4
1	Bank of Baroda	Petlad	1920
2	State Bank of India (Imperial Bank of India) ..	Nadiad	1923
3	Bank of Baroda	Kapadvanj	1935
4	Dena Bank	Nadiad	1945
5	Dena Bank	Anand	1945
6	Central Bank of India	Nadiad	1946
7	Bank of Baroda	Khambhat	1949
8	Punjab National Bank	Nadiad	1951
9	Punjab National Bank	Kapadvanj	1955
10	State Bank of India	Khambhat	1955
11	Punjab National Bank	Petlad	1956
12	State Bank of India	Anand	1957
13	State Bank of India	Petlad	1957
14	Dena Bank	Borsad	1957
15	State Bank of India	Kapadvanj	1958
16	State Bank of India	Vadasinor	1958
17	State Bank of India	Kheda	1958
18	Bank of Baroda	Nadiad	1958
19	Union Bank of India	Khambhat	1959
20	Bank of Baroda	Anand	1959
21	Dena Bank	Dharmaj	1959
22	Punjab National Bank	Khambhat	1960
23	Dena Bank	Khambhat	1960
24	Dena Bank	Umreth	1960
25	Dena Bank	Petlad	1961
26	Bank of Baroda	Umreth	1962
27	Central Bank of India	Anand	1962
28	United Commercial Bank	Nadiad	1962

STATEMENT VI-1—contd.

Sl. No. 1	Name of the Bank 2	Location 3	Year of Starting 4
29	Bank of India	Nadiad	1963
30	Bank of India	Anand	1963
31	Bank of Baroda	Borsad	1963
32	Bank of Baroda	Bhadran	1963
33	Bank of Baroda	Dhuvaran	1963
34	Dena Bank	Karamsad	1963
35	Dena Bank	Mahemdabad	1963
36	Dena Bank	Ode	1963
37	Union Bank of India	Vaso	1963
38	Union Bank of India	Sojitra	1963
39	United Commercial Bank	Anand	1963
40	United Commercial Bank	Khambhat	1963
41	Bank of Baroda	Vasad	1964
42	Dena Bank	Dakor	1964
43	Union Bank of India	Vallabh-Vidyanagar	1964
44	State Bank of India	Borsad	1965
45	State Bank of India	Thasra	1965
46	Central Bank of India	Sarsa	1965
47	Bank of India	Chikhodra	1965
48	Bank of India	Kathlal	1965
49	Union Bank of India	Sunav	1965
50	Bank of Baroda	Virsad	1965
51	Bank of Baroda	Mehlav	1965
52	Bank of Baroda	Anklav	1965
53	Bank of India	Nadiad	1965
54	Dena Bank	Mahudha	1965
55	State Bank of India	Mahemdabad	1966
56	Central Bank of India	Boriavi	1966
57	Bank of India	Vadtal	1966
58	Dena Bank	Pali-Sevaliya	1966

STATEMENT VI-1—contd.

Sl. No. 1	Name of the Bank 2	Location 3	Year of Starting 4
59	Union Bank of India	Nadiad	1966
60	Union Bank of India	Nar	1966
61	Bank of Baroda	Uttarsanda	1967
62	Bank of Baroda	Narsanda	1967
63	United Commercial Bank	Chikhodra	1967
64	Central Bank of India	Khambhola	1968
65	Central Bank of India	Pij	1968
66	Central Bank of India	Bakrol	1968
67	Central Bank of India	Bhala	1968
68	Central Bank of India	Antroli	1968
69	Bank of Baroda	Ras	1968
70	Dena Bank	Vadasinor	1968
71	Union Bank of India	Changa	1968
72	State Bank of India	Matar	1969
73	Central Bank of India	Davol	1969
74	Central Bank of India	Kapadvanj	1969
75	Central Bank of India	Lasundra	1969
76	Central Bank of India	Borsad	1969
77	Central Bank of India	Navli	1969
78	Central Bank of India	Petlad	1969
79	Central Bank of India	Limbasi	1969
80	Central Bank of India	Ode	1969
81	Central Bank of India	Mogri	1969
82	Central Bank of India	Thamana	1969
83	Central Bank of India	Vaso	1969
84	Central Bank of India	Malta	1969
85	Bank of India	Kanjari	1969
86	Bank of India	Boohasan	1969
87	Bank of India	Samarkha	1969
88	Bank of India	Dharmaj	1969
89	Bank of India	Dakor	1969

STATEMENT VI-1—concl'd.

Sl. No.	Name of the Bank	Location	Year of Starting
90	Bank of Baroda	Palana	1969
91	Bank of Baroda	Torna	1969
92	Bank of Baroda	Karamsad	1969
93	Bank of Baroda	Pala	1969
94	Bank of Baroda	Dharmaj	1969
95	Bank of Baroda	Pandoli	1969
96	Bank of Baroda	Dabhan	1969
97	United Commercial Bank	Atarsumba	1969
98	United Commercial Bank	Vallabh Vidyanagar	1969
99	United Commercial Bank	Bandhani	1969
100	Dena Bank	Adas	1969
101	Union Bank of India	Radhu	1969
102	Union Bank of India	Rudan	1969
103	Central Bank of India	Tarapur	1970
104	Central Bank of India	Dharmaj	1970
105	Bank of India	Karamsad	1970
106	Bank of India	Sojitra	1970
107	Bank of India	Chhipdi	1970
108	Bank of India	Kavitha	1970
109	Bank of India	Haldarvas	1970
110	Bank of India	Kunjarao	1970
111	Bank of Baroda	Piplav	1970
112	Bank of Baroda	Undol	1970
113	Bank of Baroda	Moholel	1970
114	Bank of Baroda	Vatadra	1970
115	Bank of Baroda	Khambhat (Industrial estate)	1970
116	State Bank of India	Umreth	1970

Source :

1. Reserve Bank of India, Statistical Tables relating to Banks in India, 1970.
2. List of Branches prepared on the basis of information supplied by individual Banks.

STATEMENT VI-6

Regulated Markets in the District, 1970-71

Sl. No.	Name of the Market Committee and Headquarters	Sub-yard (if any)	Area covered	Date of Establishment	Commodities regulated
1	2	3	4	5	6
1	Nadiad	..	Nadiad Taluka	1949	Kodra, Ragi, Mung, Math, Castor, Sesamum, Val, Udid Fennel Seeds, Mustard, Fenugreek, Wheat Bajari, Gram, Paddy, Groundnut, Tamarind, Guar Arhar, Udid, Val, Gram (dal) Potato, Lemon, Bulbous root, Onion, Ginger, Mango, Corianderleaves, Cabbage, Pumpkin, Cauliflower, Sweet-potato, Lady's finger, Tomato, Brinjal, Gourd, etc.
2	Kheda Tobacco Bazar Samiti, Anand.	..	Kheda District	..	Tobacco
3	Mahamadabad	.. Kheda	Mahamadabad Taluka	1949	Kodra, Ragi, Arhar, Mung, Math, Udid, Castor, Sesamum Fennel Seeds, Bajri, Jowar, Wheat, Gram, Paddy (husked and Un-husked), Guar, Cotton and Groundnut etc.
4	Matar	.. (1) Limbasi (2) Nayaka	Matar Taluka	1956	Paddy, Bajri, Wheat, Ragi, Kodra, Arhar, Mung, Math, Udid, Castor bean, Sesamum, Cotton.
5	Umreth	..	Half of Anand Taluka	1948	Groundnut, Arhar, Mung, Math, Udid, Val, Gram, Castor and Paddy.
6	Khambhat	.. (1) Cotton Yard (2) Tarapur (3) Vegetables Sub-Yard	Cambay Taluka	1956	Bajri, Arhar, Sesamum, Math, Mung, Udid, Gram Castor, bean, Jowar, Wheat, Paddy (husked and un-husked), Val, Guar, Kodra, Rajgaro Cotton (ginned and unginned), Mustard, Ragi, Potato, Onion, Tomato, Bulbous root, Vegetables, Sweet-Potato, Mango, Lemon, Banana, Muskmelon, Water-melon, Papaya, Carica, Berries, Guava, Turmeric Coriander, Ginger, Chilly, Garlic, Capsicum.

STATEMENT VI-6—concl'd.

Sl. No.	Name of the Market Committee and Head-quarters	Sub-yard (if any)	Area covered	Date of Establishment	Commodities regulated
1	2	3	4	5	6
7	Anand	..	Anand Taluka	1948	Arhar, Sesamum, Mung, Math, Udid, Val, Gram, Castor bean, Guar, Arhar dal, Mung dal, Math dal, Udid dal, Val dal, Gram dal, Bajri, Ragi, Kodra, Banana, Mango, Papaya, Carica, Lemon, Vegetables, Green Vegetables, Wheat, Kodri, Rice and Jowar.
8	Kapadvanj	..	Kapadvanj Taluka	1947	Groundnut, Cotton, Wheat, Sesamum, Arhar, Castor, Paddy, Rice, Bajri, Moong, Maize, Ragi, Kodra Jowar Math, Gram, Cummin, Fennel-Seed, Cotton-Seed etc.
9	Thasra	..	Thasra Taluka	1948	Wheat, Guar, Udid, Paddy (husked and unhusked), Jowar, Bajri, Val, Arhar, Mung, Gram dal, Kodra Ragi, Math, Castor bean, Sesamum, Groundnut (without Kernels) Cotton (Ginned and unginned)
10	Borsad	..	Borsad Taluka	1955	Arhar, Val, Castorbean, Math, Gram, Bajri, Ragi, Jowar, Wheat, Guar, Kodra, Mung, Sesamum, Udid, Paddy, Rice, Gram (dal).
11	Vadasinor	..	Vadasinor Taluka	1956	Wheat, Bajri, Jowar, Ragi, Maize, Kodra, Paddy, Arhar, Mung, Math, Groundnut, Castor bean, Sesamum, Cotton, Gram, Rice.
12	Petlad	..	Petlad Taluka	1959	Paddy, Wheat, Bajri, Jowar, Kodra, Ragi, Arhar, Mung, Udid, Val, Gram, Cotton.

Source :

Director C. C., Census of India 1971, Departmental Statistics and full Count Census Tables. Kheda, p. 19.

APPENDIX I

Excavations at Nagara

COINS

During the excavations stray coins were obtained. They are of copper, lead, and silver. Most of them are highly corroded and worn out as such they are not of any use in the study. A few of them that yielded some information after cleaning them. Their details are as follows :

Punch-marked Coins

Only two coins could be identified as punch-marked ones. One of them a circular silver coin of 1.8 cm. and 2.124 gm. was obtained from layer (23) Trench I. On its obverse five symbols are seen. They are, the six armed symbols with three taurines and three arrows, balance (?) mountain, and two crescents. On the reverse only the mountain symbol is seen.

The other is a small copper rectangular fragment of a coin weighing 0.844 gm. On its obverse one punched symbol of sun is visible. This coin is obtained from Trench III layer (18) and hence belongs to the stratum of about 1st century A. D.

Uninscribed Coins

A few die-struck coins were also available from the excavations. One of them which shows a tortoise symbol on the obverse and on the reverse faint traces of a symbol looking like the Ujjain symbol are discernible. It is found from trench I layer (19), (No. 1359).

The other coin also seems to be a rectangular cast coin with the symbol of *Vajra* and a bar on the obverse. On the reverse there are faint traces of a horse and wheel with 4 spokes. This uninscribed coin also comes from Trench I layer (19) (No. 233). It is 1.6 × 1.5 cm. and weighs 2.851 gm. This coin with *Vajra* symbol might belong to the Kshaharatas or some of their predecessors. Two more coins of the same type (No. 1232 and No. 1276) were also obtained from Trench I.

Another die-struck coin (No. 1204 L. 1.5 W. 4.791) with the symbol of a man with a standard on the obverse and *Swastik* symbol on the reverse is noteworthy. Similar coins are known from sites like Kamrej, Karvan in Gujarat. It is found from layer (19), Trench I.

A very interesting lead coin (NGR III No. 1842) layer (10) has on the obverse a bust of king facing right. The king has curly hair. On the

reverse there is a trident with a *parsu* on its handle and a circle, seven dots and mountain and moon motif. This circular coin of 1.7 cm. weighs 3.951 gm.

Another rectangular lead coin from the same trench layer (5) has the figure of *Naga* comparable to that on Plate 8 No. G PI of Rapson's Catalogue of B. M. Vol. IV. The obverse is highly worn out. This coin is of 1.1 × 1.0 cm. and weighs 6.136 gm.

Another interesting rectangular lead coin has a bull sitting and facing right on the obverse and mountain and moon-motif on the reverse. It was obtained from Nagara, Trench I layer 13 (No. 645 size 2.3 and W. 1.138).

Still another lead coin with a bull standing at the right and a *Swastik* above its back and two potlike objects having high neck, bulging belly and narrow base on the obverse and a roaring lion with upraised tail and a circle above it (No. 562 d. 1.5 W. 2.106 gms.) was obtained from Nagara, Trench I layer 10.

Inscribed Coins

From the excavations, a few coins with inscriptions in various stages of preservation were obtained. One of them is a highly interesting coin which is restruck [NGR Tr. I. Layer (16)] with a mountain and moon motif on the reverse and marks of restriking on the obverse on which letters 'Raja'..... are visible. These letters are very similar to those from a coin of Chastana that was obtained from the surface. Besides this a lead coin with a bull standing to the right on the obverse and a mountain and moon-motif on the reverse was obtained from NGR III, Layer (9). Below the symbol on the reverse is the date 285. These coins are ascribed to Swami Rudrasena III. This coin incidentally indicates that the uninscribed leadcoins with similar features may be ascribed to the Kshatrapas.

Other Kshatrpa coins were obtained with fragmentary legends from which the name of the ruler or his predecessor were missing hence they could not be ascribed to specific rulers.

From the mounds of Nagara coins are obtained from time to time. They range from those of the Kshatrapas to the Moguls, thus providing a ground for study.

Source :

MEHTA R. N. (D.A.), *Excavations at Nagara*, (1968), M. S. University of Baroda, pp. 114-116.

CHAPTER VII COMMUNICATIONS

ROADS

Roads play a very important part in the economic development of a region. However, prior to the advent of British domination in the country, the idea of constructing them perhaps did not take shape. Even in the Kheda district, in the initial stages of their rule, the British administration used the tracks which were constructed during the Mughal period. These tracks were at places very narrow and overhung with bushes and branches as would make difficult for horseman and carts to pass. Sometimes tracks ran through such a deep sandy soil that it proved to be a very trying experience for men and animals and extremely dangerous for wheeled vehicles. Even after railway lines were laid, only such roads as would connect important centres with the railway stations were constructed. About old time trade routes, the *Kaira Gazetteer* (1879) makes the following observations :

"Though in early times Kaira did not contain any very important centre of trade, many favourite lines of traffic passed through it. North and South, pretty much along the present main line of railway, passed the trade between Ahmedabad and Baroda, Broach and Surat, another line lay from the port of Tankari in Broach through Dehvan, Petlad, and Kaira to Ahmedabad; a third was from Cambay through Sojitra and Kaira to Ahmedabad. Lines also passed from the Gujarat ports north-east through Dakor and Kapadwanj to Malwa and Mewar and east through Dholka, Kaira and Nadiad."¹

This shows that the district was connected through these tracks with important trade centres in the past. But till 1844, there were no man made roads in the district. The position of roads in the former Khambhat State was none too better and before the advent of railways, goods and passengers were carried through the Khambhat harbour by boat to Bombay and other parts. However, some efforts were made during the latter part of the 19th century for construction of roads. The work was entrusted to gram panchayats and municipalities. But substantial progress could not be achieved in this direction for want of sufficient funds. Therefore, in 1863, Local Cess fund was first levied to raise the funds for the construction of

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panch mahals*, (1879), p. 71.

roads and repairs thereof and by the end of 1878 there were 100 miles of roads of which 72 miles were metalled with stone of nodular limestones.¹

An idea about the state of roads in the Anand taluka at the end of 19th century can be had from the following extract :

"Prior to 1862-63, no made roads existed in the taluka. Even now there are few miles of it and these form a part of road leading from Vasad to Borshad. A road to Cambay was attempted from Anand, but it was only built up to the boundary of the village and then abandoned. Judging from the compact shape of the taluka and the manner in which the several railway lines intersect it, I do not think any further macadamised roads are wanted."²

The following extract shows the position of roads in the district in the beginning of the twentieth century.

"Within the last forty years steady progress has been made in the construction of good roads, mostly metalled. All the water courses are bridged except the large rivers. The whole district is connected with Ahmedabad city by the Naika-Bareja road. New roads were constructed by famine labour from Mehmedabad to Dakor (not yet completed) and from Borsad to Agas railway station. The north of the district has two good roads running south to the railway from Kapadvanj."³

However, the necessity of *pucca* roads was not realised till the cessation of the First World War (1914-18), when the automobile vehicles purchased for the War purpose were disposed off to the public for civilian use at a very nominal cost. These vehicles began to move on the roads. In the Kheda district, the motor buses and jeeps rolled on the roads, between 1920-25. Necessity, therefore, for hard surfaced roads became imperative. Because of the pressure of heavy vehicles, existing roads soon fell into disuse and their repairs were badly needed. The Central Legislature, therefore, appointed the Jaykar Committee in 1927 under the chairmanship of (late) Shri M. R. Jaykar. The Committee found that the Provincial Governments and local bodies could not construct roads on account of paucity of finance. It, therefore, favoured an imposition of a surcharge of two anna per gallon of petrol and creation of a Central Road Fund out of its proceeds. It was intended for the development of roads. As a result,

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panch mahals*. (1879), pp. 68-69.
2. *Revision Settlement Survey of Anand taluka*, 1898.
3. *Statistical Atlas of the Bombay Presidency*, II, edition, (1906), p. 87.

the Central Road Fund was created in 1929. This was deemed to be a National Fund and the whole country was to derive benefit from it. In 1934, the Indian Roads Congress was established. This institution, though semi-official, undertook road research and development. During the Second World War period, importance of roads for movement of War material was greatly enhanced. The grants from the above fund were insufficient looking to the delicate situation of the War, and the communications passed through bad and decayed roads. Therefore, at the instance of Indian Roads Congress a conference of expert engineers in India was convened at Nagpur in December 1943, which formulated the Nagpur Plan for the development of a net-work of roads running through the length and breadth of the country.

For construction of roads in the Kheda district in the post-war period, a Road Project Sub-division covering Kheda, Ahmadabad, and Panchmahals districts was created at Kheda. Thus, at the time of Independence, the road-length in the district was 317.50 km., (197.20 miles). The Nagpur Plan was modified in 1952 and was implemented as an integral part of the First Five Year Plan of Bombay State. Roads in the Kheda district were to be constructed as a part of this revised plan.

This is in nutshell the history of road construction in the district.

For speedy economic development of the countryside, priority was given to development of roads and large amounts were earmarked and spent in the successive Five Year Plans for construction of new roads and improving those in existence. As a result of these efforts, the length of roads in the district rose from 460 km., in 1951 to 1,000 km., in 1961 and to 1,736 km., in 1971-72, as shown in the following statement.

STATEMENT VII-1
Roads (as on 31st March, 1972)

		(LENGTH IN KM.)			
Category	1	1951	1961	1972	
		2	3	4	
National Highways ..	..	78.75	86.23	79.46	
State Highways ..	..	175.41	239.84	639.00	
Major District Roads ..	..	110.86	358.55	341.82	
Other District Roads ..	..	88.01	310.67	333.27	
Village Roads ..	..	7.51	25.16	342.93	
Total ..	..	460.54	1000.45	1735.98	

Source : Executive Engineer, Roads and Buildings, P. W. D., Kheda District
Kheda and Executive Engineer, Kheda District Panchayat, Nadiad.

Though considerable progress had been made in road construction after Independence, the district was still lagging far behind the target of the Nagpur Plan by nearly 66 per cent. As against the target of 2,666 km., fixed for the district in the Nagpur Plan, it had only 1,000 km., of roads in 1961. To remove this deficiency and shortfall, a new Road Plan known as the "20-Year State Road Development Plan" has been prepared on the basis of the principles laid down in the All-India Road Development Plan (1961-81) as shown below.

Gujarat State entered the 20-Year Road Development Plan period with a deficit of 42 per cent with reference to the Nagpur Plan. The new plan envisages a target of 57,628 km., of roads in the State as on 31st March, 1981. The objectives of the new plan are as under :

- (i) To provide 32 km., of roads per 200 sq. km., of area on an average.
- (ii) To bring every village - (a) in a developed and agricultural area, within 6 km., of a metalled road and 2 km., of any road, (b) in a semi-developed area within 12 km., of a metalled road and 4 km., of any road; and (c) in an undeveloped and uncultivable area within 18 km., of a metalled road and 7.5 km., of any road.

The all India target under this plan is 10.58 lakh km., by the end of 1980-81. Thus only 49 per cent of new roads will have to be constructed. But in respect of Gujarat State, the position is some what different. As the State started in 1961 with a deficit of 42 per cent, as compared to the Nagpur Plan, it will have to increase road construction activity by 150 per cent to catch up the target of the new plan.

So far as this district is concerned the kilometerage as in 1972 was 1,736. The target for the district in the new plan is 4,406 km., by the end of 1980-81. Thus the gap of 2,670 km., will have to be made good during the remaining period of the 20-Year Road Development Plan.

CLASSIFICATION OF ROADS

The present classification of roads is based upon the resolution of the Indian Roads Congress passed at its Nagpur session in 1943. It broadly classifies roads into two types : (1) Main roads consisting of National Highways, State Highways, and Major District Roads passing throughout the length and breadth of the country, and (2) Other roads consisting of other district roads and village roads.

National Highways

National Highways (N. H.) have been defined as main highways serving predominantly national, as distinct from State purposes, running through the length and breadth of India, which together form a system connecting by routes as direct as practicable major ports, foreign highways, capitals of States and also include those of strategic importance required for the defence of the country. National Highways are maintained by the State Public Works Department from the Central Government funds. These are generally tar roads with a minimum width of 38 feet or 11.58 metres. In this district, their length as on 31st March, 1972 was 79.46 km.

State Highways

State Highways (S. H.) have been defined as all other main, trunk or arterial roads of a State connecting with National or State Highways of adjacent States, district headquarters and important cities within the State and serving as main arteries of traffic to and from district roads. These roads are maintained by the State Public Works Department. They have a tar surface and a minimum width of 32 feet or 9.75 metres and are completely motorable throughout the year, except at those places having causeways or submersible bridges where traffic may be interrupted in monsoon for very short periods. The State Highways are usually connected with National Highways. The total length of such roads in the district was 639 km., in 1971-72.

Major District Roads

The Major District Roads (M. D. R.) are roughly of the same specifications as the State Highways with this difference that their minimum width is 24 feet or 7.32 metres. They connect important marketing centres with railways, State Highways and National Highways. In this district the total length of such roads was 341.32 km., as on 31st March 1972.

Other District Roads

Other District Roads (O. D. R.) are also of the same type as the Major District Roads, except that they are subject to more interruptions of traffic during monsoon. In this district the total length of these roads was 333.27 km.

Village Roads

Village Roads (V. R.) are generally unmetalled approach roads from main roads to villages. The total length of these roads in the district was 343 km., in 1972.

Major District Roads, Other District Roads and Village Roads are placed under the charge of District Panchayats after 1st April, 1963.

A brief description of the important roads passing through the district is given below :

NATIONAL HIGHWAYS

Bombay-Ahmadabad National Highway (No. 8)—This is one of the most important National Highways passing through this district. It starts from Bombay, capital of the Maharashtra State and after passing through the districts of Dangs, Valsad, Surat, Bharuch and Vadodara, enters the Kheda district near Vasad and leaves the district after crossing Bareja. It touches in its course Vasad, Anand and Nadiad, important junction stations on the Bombay-Ahmadabad broad gauge line. Anand is famous throughout the country for its Amul Milk Dairy, largest in Asia. Nadiad is an important centre for trade and industry. It also touches Kheda, the district headquarters.

The total length of the road in this district is 79.46 km., which has a black topped surface-motorable all the year round. This road has a great economic significance as it links (i) two States of Maharashtra and Gujarat, (ii) the important centres in the State and the district like Kheda, Nadiad, Anand, Ahmadabad and Vadodara as also Bombay. The road is proposed to be converted into an Express Highway with a four lane carriage way in the 20-Year Road Development Plan.

STATE HIGHWAYS

The following State Highways pass through the district.

(1) *Nadiad-Jabalpur Road*—This inter-State road starts from Nadiad and passes through Umreth, Dakor, Thasra and Sevaliya, in this district. The road then enters the border of the neighbouring Panchmahals district and goes further upto Jabalpur in Madhya Pradesh. Dakor is a place of pilgrimage for Hindus and at Sevaliya, a quarry and a cement factory are situated.

This road is proposed to be upgraded to National Highway standard in the 20-Year Road Development Plan. The total length of the road in the district is 57.45 km., 18.45 km., with cement concrete and 39.00 km., with black topped surface. This is an all weather road motorable throughout the year.

(2) *Kheda-Dakor Road*—The entire road passes through Kheda district only. It touches Mahemadabad, Mahudha and Dakor, where it amalgamates with the Nadiad-Dakor-Sevaliya State Highway. Further, this road crosses the Ahmadabad-Vadodara-Bombay broad gauge line near Mahemadabad and the Nadiad-Kapadvanj narrow gauge line near Mahudha. The total length of the road in the district is 59.12 km., of which 57.91 km., have black topped surface. This is an all weather road.

(3) *Ahmadabad-Santrampur Road*—The road starts from Ahmadabad and enters the Kheda district at km., 28 near the Mirzapur village. The road touches Vadasinor at km., 84. The work of constructing the remaining missing link from Vadasinor in this district to Lunavada in the Panchmahals district is being carried out. On completion of this missing link and a bridge across the river Mahi, the road will be connected to the Panchmahals district. The total length of the road in the district is 56.51 km., of which 51.08 km., are in black topped surface, water bound macadam in 3.82 and the remaining unmetalled. The length in the district is motorable throughout the year.

(4) *Vasad-Borsad-Dharmaj-Tarapur-Rinza Road*—This is a portion of the Bhavnagar-Dholera-Tarapur-Vasad State Highway. The total length of the road in the district is 61.89 km., all with a black topped surface. It is proposed to be upgraded to the National Highway standard in the 20-Year Road Development Plan. It is an all weather road.

(5) *Nadiad-Kapadvanj-Bibipura-Modasa Road*—This inter-district road starts from Nadiad and passes through Mahudha, Kathlal and Kapadvanj. The road then enters the Sabarkantha district at km., 62. An old bridge on the Mahor river near Kapadvanj which collapsed in the floods in the year 1969 is being replaced by a new bridge at 50 ft. down stream. The alignment of this road is parallel to the Nadiad-Kapadvanj narrow guage line.

The total length of the road is 61.54 km., which has 48.42 km., with cement concrete surface and black topped surface in the remaining portion. It is motorable throughout the year.

(6) *Nadiad-Petlad-Khambhat Road*—This road starts from Nadiad city and runs towards Khambhat connecting in its stretch towns like Nadiad, Piplav, Bandhani, Petlad, Dharmaj and Khambhat and a number of villages in between, etc. The work of widening the road from Nadiad to Petlad is in progress. The entire length of 53.79 km., of the road has a black topped surface. It is trafficable all the year round.

(7) *Rasikpura-Kheda-Matar-Tarapur-Khambhat Road*—This road bifurcates from National Highway No. 8 near Bagodra village of the Ahmadabad

district and enters Kheda district near Rasikpura village at km., 36. The entire length 70.59 km., of this road has a black topped surface. It is motorable throughout the year.

(8) *Boriavi-Anand-Borsad-Dali Road* This road bifurcates from the Ahmadabad-Bombay National Highway No. 8 near the village Boriavi. In this district, it touches important places like Anand, Borsad, etc. The initial length of 47.66 km., of this road, which passes through this district, has a black topped surface, motorable throughout the year.

(9) *Umreth-Sarsa-Anand-Karamsad-Sojitra-Tarapur Road*—The road bifurcates from the Nadiad-Dakor State Highway near Umreth and runs towards Tarapur connecting places like Sarsa, Anand, Bandhani, Piplav, Karamsad, Sojitra and Tarapur. The entire length of 65.73 km., passes through the district only. It has a black topped surface which makes it negotiable in all the seasons.

Rest of the State Highways passing through this district are shown below :

Sl. No. 1	Name of the Road 2	Length in km. 3	Surface 4	Remarks 5
1.	Khambhat-Dhuvaran	16.49	Metalled	Part of the Coastal Highway; all weather road
2.	Khambhat-Golana	26.15	..	All weather road
3.	Mahamadabad-Hirapur	13.87	Water Bound Macadam	Fair weather
4.	Tarapur-Galiana	18.50	Metalled/unmetalled	—Do.—
5.	Anand-Ligda	20.51	Metalled	All weather
6.	Others	9.27	Metalled	—Do.—

The statement that follows shows position of Major District Roads and the Other District Roads. In addition to this, there are nearly 140 villages covering 343 km. The length of individual village roads being meagre, separate statement about Village Roads is not given. These roads are managed by the Kheda District Panchayat, Nadiad.

STATEMENT VII-2

Major District Roads

Sl. No. 1	Name of the Road 2	Total Length 3	Remarks 4
1	Ahima-Chaklashi-Uttarsanda ..	13.94	..
2	Bibipur-Alina-Bhalej-Vasad ..	28.69	..
3	Kheda-Bareja Road upto District limits ..	13.74	..
4	Varukans-Palla-Asamali ..	11.27	..
5	Borsad-Petlad-Sojitra-Limbasi ..	32.07	..
6	Alindra-Dethali-Dabhoi ..	11.27	..
7	Sarsawni-Bilodra-Sunj ..	17.77	..
8	Dakor-Kapadvanj ..	28.11	..
9	Pali-Vadasinor-Birpur ..	56.51	..
10	Nenpur-Haldarvas-Barmuwada ..	23.40	..
11	Mahamadabad-Kathlal ..	11.27	..
12	Kanij-Wasna-Sarsa Lali ..	16.10	..
13	Vadtal-Vallabh Vidyanagar-Anand (joining Anand-Sojitra Road) ..	10.25	..
14	Navli-Napad-Anklav ..	23.53	..
15	Others (below 10 km.) ..	43.40	..
Total		341.32	..

Other District Roads

Sl. No. 1	Name of the Road 2	Total Length 3	Remarks 4
1	Vansar-Matar-Kheda with its branches to N. H. No. 8	12.26	..
2	Kapadvanj-Punendra-Uttakantheshwar Mahadeo ..	18.28	..
3	Dakor-Moramali-Chinel ..	11.86	..
4	Dabhalia-Hadmatia ..	11.01	..
5	Sorna-Vadol-Vadasinor ..	25.87	..
6	Kapadvanj-Nirmali ..	11.27	..
7	Dakor-Kalsar-Rania ..	14.88	..
8	Kheda-Sunj ..	16.42	..
9	Jinaj-Khaksar ..	13.28	..
10	Tarapur-Goraj ..	12.71	..
11	Matlakui-Galiana ..	10.15	..
12	Vadgam-Dehda ..	14.29	..
13	Tarkpur-Milit-Golana ..	10.78	..
14	Bhadran-Kinkhlod-Chamara ..	15.57	..
15	Others (below 10 km.) ..	134.52	..
Total		393.5	..

Source : Executive Engineer, Kheda District Panchayat, Nadiad.

Municipal Roads There are seven municipal towns in the district, viz., (1) Nadiad, (2) Anand, (3) Kapadvanj, (4) Khambhat, (5) Petlad, (6) Borsad and (7) Umreth. The total length of the roads under these municipalities was 495.65 km., in 1973.

VEHICLES AND CONVEYANCE

Beasts of Burden—There are certain animals which are used for carrying goods and passengers from one place to another. Their number according to the Livestock Census, 1972 was : bullocks 170,858, horses and ponies 1,691 and camels 350. Though exact strength of donkeys has not been ascertained under the Livestock Census, there are still a good number of donkeys in the district which are useful for carrying loads from one place to another and are also useful in construction work. They are specially employed by Ravalias and Vanjaras.

Carts—These vehicles are still the useful mode of transport especially for goods from villages to bazaars or markets, in view of the fact that a large number of villages are still without the modicum of approach roads. The bullock carts, therefore, occupy an important place in the rural transport system. However, in recent years their importance has diminished for long distance travels because of the development of road and rail transport. According to the Livestock Census, 1972, there were 50,827 animal drawn carts. Of these 13,319 were with rubber tyres.¹

Other Vehicles—There were 12,575 different types of automobile vehicles in the district in the year 1972-73. These were : motor cars 2,923, motor trucks 1,990, scooters 1,313, motor cycles 917, taxis 100, autorickshaws 40 and others (including tractors, trailers, etc.) 5,287. Though it is not possible to assess the exact number of bicycles, in the absence of their registration, it can safely be said that people prefer bicycles, being the cheapest and most readily available vehicle. The recent price hike in respect of fuel oil will still increase the popularity of bicycles in years to come.

Public Transport—There were very few man-made roads in the district prior to Independence and road transport was, therefore, not developed. However, in the Kheda district bus services were operated on certain routes by private companies or contractors. This will be evident from the following extract :

“In addition to the railway lines, regular bus services are running from Anand to Sarsa, Khambholaj, Karamsad, Borsad and Nadiad.

1. Director, Bureau of Economics and Statistics, Ahmadabad. Figures of Livestock Census, 1972 are provisional.

Khambholaj to Ode and Umreth to Sundarpur and Nadiad, etc. Almost all the villages are very near the railway station and those which are beyond the radius of five miles from railway stations are served by the motor buses running in the taluka.”¹

Similarly, in the Annual Administration Report of the former Vadasinor State for the year 1942-43, it is observed :

“A motor service plies between Sevaliya and Balasinor and between Balasinor and Birpur. The motor service connects with all trains at Sevaliya. A monopoly for playing buses in the limit of the State was publicly auctioned, and was given to Mr. Chimanlal Maganlal Nagarsheth.”²

Thus, in the Kheda district, several places were connected by bus-services prior to Independence. These passenger transport services were operated by :

(1) the Kaira District Bus Corporation, (2) the Anand Motor Transport Company, (3) the General Transport Company, (4) the Gujarat Transport Service, and (5) the Kaira Bus Transport Service.

As these services were operated mostly on a monopoly basis, there was very little incentive for the improvement of road transport and provision of amenities to passengers. After Independence, therefore, it was decided by the former Bombay State to nationalise the passenger road transport services with a view to provide efficient and properly co-ordinated road transport system. A beginning was made in 1948 by nationalising the passenger services in the Poona district of the Bombay State. In the initial stages, these services were managed by the Government till 1950, when the former Bombay State Road Transport Corporation was formed.

In the Kheda district, the first S. T. division at Nadiad was inaugurated on 16-3-1949 by Shri Babubhai Jashbhai Patel. Bus services were started on the following six routes, viz., (1) Nadiad to Matar, (2) Nadiad-Kheda, (3) Nadiad-Vaso, (4) Nadiad-Khandhali, (5) Kheda-Mahemadabad, and (6) Matar-Sojitra. Gradually routes were increased and by the end of 1953, buses were plied on 55 different routes in the district. Depots were also opened at Borsad, Dakor and Nadiad till 1954.

After the formation of Gujarat State in 1960, the Bombay State Road Transport Corporation wound up its operations in Gujarat. At the same time, the Saurashtra State Road Transport Corporation and the Kutch State Road Transport Corporation, functioning in the areas of Saurashtra and Kutch were amalgamated into the newly created “Gujarat State Road Transport Corporation”, which now operates the nationalised road transport services in the entire State.

1. *Revision Survey Settlement Anand Taluka*, 1942.

2. *Annual Administration Report, Balasinor State*, 1942-43, p. 21.

For the administrative convenience, the Corporation has created divisions and depots in the State. In the Kheda district, Nadiad division was created in 1949. At present, there are ten depots at Nadiad, Borsad, Dakor, Kheda, Matar, Anand, Petlad, Khambhat, Kapadvanj and Vadasinor, 15 control points and 90 pick-up stands in the district.

The development of road transport services after Independence is most remarkable. This will be evident from the fact that the number of routes operated by the Nadiad Division increased from 7 in 1949 to 722 in 1972 and route km., from 238 to 25,382 during the same period. As a result, a number of farflung villages, which had almost remained isolated in the past are now connected with important centres in the district and the State. Dakor, which is an important place of pilgrimage for Hindus is linked with big towns and cities of various districts, e. g., Ahmadabad, Vadodara, Panchmahals, Surat, Mahesana, Sabarkantha, Bhavnagar, Rajkot, Jamnagar, Surendranagar, etc.

The 1971 Census has observed that nearly 41 per cent of the villages were connected by bus services throughout the year. Similarly 41.59 per cent of the villages had this amenity during the fair season only. The remaining 17.41 per cent of villages were devoid of any bus facility. This is revealed by the following statement :

STATEMENT VII-3
Villages Connected by Bus Services

Sl. No. 1	Name of the Taluka/Mahal 2	Total No. of inhabited villages 3	No. of villages having bus facilities for the whole year 4	No. of villages having bus facilities during fair season only 5	No. of villages without bus facilities 6
1	Mahamadabad	75(100)	24(32.00)	37(49.33)	14(18.67)
2	Nadiad	100(100)	57(57.00)	34(34.00)	9(9.00)
3	Anand	76(100)	45(59.21)	22(28.95)	9(11.84)
4	Petlad	81(100)	27(33.33)	48(59.26)	6(7.41)
5	Borsad	95(100)	26(27.37)	24(25.26)	45(47.37)
6	Khambhat	99(100)	36(36.36)	61(61.62)	2(2.02)
7	Matar	82(100)	41(50.00)	36(43.90)	5(6.10)
8	Kapadvanj	159(100)	62(38.99)	46(28.93)	51(32.08)
9	Vadasinor	98(100)	33(33.67)	39(39.80)	26(26.53)
10	Thasra	92(100)	41(44.57)	51(55.43)	.. (..)
	Total	957†	392(40.96)	398(41.59)	167(17.45)

† 5 uninhabited villages are not included.

(Figures in brackets indicate percentage of total villages in each taluka).

Source : Gujarat State Road Transport Corporation, Ahmadabad.

The position in the 1972 was as under. Out of a total 957 villages and 17 towns, 73.41 per cent of villages had a local bus stand, 25.77 per cent of villages had it within a distance of 3 km., and 0.82 per cent of villages only had bus stand at a distance of 5 km., and beyond.

Thus, the district of Kheda is nicely served by the passenger bus services operated by the Corporation. By this expansion the mobility of the people has tremendously increased and has brought about diversification of occupations among the otherwise static rural folk. Secondly, the social contacts have greatly increased and educational facilities have been brought within a common man's reach. Thus the State Transport has provided easy, cheap and reliable means of transport and has helped the trade and industry very much. It has thus brought about far reaching socio-economic changes in the district.

Municipal Bus Services.—Out of the seven municipalities in the district, only the Anand Municipality runs bus services in the Anand town. This was started in May, 1973. In 1973, there were two buses and two routes. Average number of passengers carried per day was approximately 1,200. These buses carry passengers to College of Agriculture also.

Besides this, the Charotar Vidyottejak Mandal, Vallabh Vidyanagar, also runs bus services between Anand and Vallabh Vidyanagar.

RAILWAYS

At present, the district is served by seven railway lines as shown below. Of these the first five are broad gauge lines and the remaining two are narrow gauge lines :

1. Vadodara-Anand-Viramgam,
2. Vasad-Kathana,
3. Anand-Dakor-Godhra,
4. Anand-Vadtal-Swaminarayan,
5. Anand-Khambhat,
6. Nadiad-Petlad-Bhadran and
7. Nadiad-Kapadvanj.

An era of the railway construction in the district was inaugurated in the early sixties of the 19th century. The laying down of the broad gauge portion between Bharuch and Vadodara of the Bombay-Ahmadabad main line was completed in 1861. The line was further extended upto Vasad and Mahamadabad in 1862, and finally upto Ahmadabad in January 1863. Thus the entire section between Vadodara and Ahmadabad which passed through this district was completed by 1863. A branch upto Dakor from Anand station on the mainline was constructed in 1874. In 1890 the Baroda State constructed railway between Petlad and Anand, which was further extended upto Tarapur

in 1901. Further, extension was brought about in 1902 when the Nawab of Khambhat entered into an agreement with the Bombay-Baroda and Central India Railway Company whereunder Cambay and Tarapur were joined by a railway line. Nadiad was linked with Kapadvanj by a narrow gauge line in 1911. The Baroda State constructed a narrow gauge railway from Pij to Bhadran which was opened for traffic in stages between 1914 and 1922. The Anand-Vadtal (Swaminarayan) broad gauge section was constructed in 1929. The Vasad-Kathana broad gauge branch line, which was first opened for traffic in 1930, was closed for a few years between 1942-1953 because its rails were transferred to some other place in December 1941 for the purpose of War. However, it was again opened for traffic in 1953. Similarly Nadiad and Pij were connected by a narrow gauge line in 1953.

Thus it could be seen that the railway lines now serving the district were mostly constructed prior to Independence except for the Vasad-Kathana line and small patch of 3.75 miles from Pij to Nadiad laid out in 1953. The princely State of Baroda constructed the Tarapur-Anand section of the Anand-Khambhat line and the Bhadran-Pij line, and the Cambay State laid down the remaining portion of the Anand-Khambhat line, *i. e.*, Tarapur-Khambhat, and all other lines were constructed by the Government of India through the agency of the Bombay-Baroda and Central India Railway Company. The district has 319 km., of railways, of which 215 km., are in broad gauge and 104 km., in narrow gauges. There is no metre gauge railway in the district. Vadasinor and Matar are the only talukas bereft of the rail facilities. There are in all 64 railway stations in the district. The highest number of stations is found in Petlad taluka.

For an all round development of Gujarat and Saurashtra it is necessary to have broad gauge links between the mainland Gujarat and the peninsula of Saurashtra. The present metre gauge-Viramgam-Okha section is lately being converted into broad gauge. Another section proposed is the 76 mile long Bhavnagar-Tarapur project which will help (i) develop the Bhal area of Gujarat, (ii) reduce pressure on Bombay Port, (iii) expansion of Bhavnagar port, (iv) import of cotton from Bhavnagar and export of textiles, (v) increase importance of Bhavnagar as a receiving and distributing centre and also increase the trade of Bhavnagar with Central India, Rajasthan and Central Gujarat. The economic importance of this line is thus obvious. When constructed, it will change the face of the region proposed to be served by it.

A brief description of each of these lines is given below :

(i) *Bombay-Vadodara-Ahmadabad-Viramgam*—This main broad gauge line was constructed by the B. B. and C. I. Railway in 1863. This was the first railway line constructed in the district. After Ranoli station of the Vadodara district the line crosses the Mahi river and enters the district

near Vasad. Here it passes through the Anand, Nadiad and Mahemabad talukas and then enters the Ahmadabad district, terminating at Viramgam. The line thus runs through the heart of the district, and has wielded a great economic significance. The district thus found an outlet with Bombay, Vadodara and Ahmadabad and through them with other important places in India. Important junction stations belonging to this district on the line are Anand and Nadiad, which are centres of considerable trade and industry.

(ii) *Anand-Dakor-Godhra*—This broad gauge line, constructed in 1894, starts from Anand, an important junction station on the Vadodara-Ahmedabad-Viramgam main line, and runs into northeast direction towards Dakor, a famous place of pilgrimage for Hindus on account of its Ranchhodrayji temple. It touches Sevaliya, which is a site for the cement factory. The line then crosses the river Mahi to enter into Panchmahals district and terminates at Godhra. This is also a very important line because (1) it joins Kheda District with Panchmahals, (2) it feeds pilgrim traffic bound for Dakor, and (3) it also helps transshipment of the cement. The cement factory has laid rails between Sevaliya and Vadasinor, for its own purpose.

(iii) *Anand-Khambhat*—This broad gauge line, which runs almost in south-west direction, was constructed by the Baroda and Cambay States between 1890 and 1902. The section between Anand to Tarapur was constructed by the Baroda State and was opened for traffic between 1890 and 1901. The Cambay State constructed the remaining portion in its territory in 1902. Anand and Petlad are junction stations on this line. It passes through the talukas of Anand, Petlad and Khambhat in this district. It links the western talukas of the district with Anand and through it with important centres in the State and the country.

(iv) *Nadiad-Kapadvanj*—This narrow gauge line starts from Nadiad, an important junction station on the Vadodara-Viramgam line and runs into north-east direction towards Kapadvanj, where it terminates. It was constructed in 1911. The entire length of 45 km., of the line passes through this district. Kapadvanj is a taluka headquarter place and also an important trade centre in the district.

(v) *Nadiad-Petlad-Bhadran*—This narrow gauge line was constructed by the Baroda State between 1914 and 1922. The section between Petlad and Vaso was opened for traffic on 10th December, 1914, between Vaso and Pij on 17th April, 1915, and between Petlad and Bhadran on 1st April, 1922. Pij was linked with Nadiad only in 1953. The entire length of 59 km., of this line is within the district. There are three junction stations, *i. e.*, Nadiad, Petlad and Bochasan on this line. It passes through Nadiad, Petlad and Borsad talukas.

(vi) *Anand-Vadatal-Swaminarayan*—This broad gauge line was constructed in 1929. Its total length is 14 km., which runs in this district. It traverses Anand and Nadiad talukas and has two junctions on it, viz., Anand and Boriavi. The line also feeds the pilgrim traffic bound for Vadatal where a famous Swaminarayan temple is situated.

(vii) *Vasad-Kathana*—The line starts from Vasad which is a station on the Vadodara-Ahmadabad-Viramgam line. It was first constructed in 1930, but its rails were dismantled by the Government in December 1941 for War purposes. However, rails were again laid in 1953. The line passes through Anand and Borsad talukas. The entire length of 43 km., of the line falls within the district.

Looking to the railway map of the district, it would be observed that the Vadodara-Viramgam broad gauge line passes through the heart of the district. Anand is very important and the oldest junction station in the district. Nadiad is another important junction station in the district. From these two junction stations feeder lines are constructed so as to bring important places in the district closer to each other. In the eastern part of the district, Vadasinor taluka only and in the western part, Matar taluka are without any railways. It is expected that after the construction of the proposed Bhavnagar-Tarapur line, Matar taluka will get the facilities of railways.

All the railway lines in the district are under the jurisdiction of the Vadodara Division of the Western Railway.

Passengers and Goods Traffic

The following statement gives an idea about the traffic, passengers and goods, handled at each station in the district during 1972-73 :

Passengers and Goods Traffic, 1972-73

Name of the Section 1	Station 2	Passengers Traffic 3	Goods Traffic (In Tonnes) 4
1. Vadodara-Viramgam (B. G.)	1. Vasad	71,696	73,580
	2. Adas Road	6,82,065	N. A.
	3. Navli	4,20,635	5,560
	4. Anand	65,69,774	8,23,015
	5. Boriavi	4,33,210	55,310
	6. Uttarsanda	2,08,522	2,454

Passengers and Goods Traffic, 1972-73—contd.

Name of the Section 1	Station 2	Passengers Traffic 3	Goods Traffic (in Tonnes) 4
2 Vasad-Kathana	7. Nadiad	37,06,684	11,48,513
	8. Gothaj	3,79,625	N. A.
	9. Mahemadabad	23,68,213	2,13,112
	10. Kheda Road	N. A.	N. A.
	11. Nenpur	3,85,410	N. A.
	12. Kaniij	3,94,110	N.A.
	13. Bhetasi	N. A.	N. A.
	14. Ankjav	N. A.	N. A.
	15. Davol	N. A.	N. A.
	16. Borsad	2,03,738	1,65,121
	17. Boohasan	2,68,149	16,179
	18. Virsad	1,85,182	1,760
	19. Ras	57,507	1,310
	20. Kathana	62,680	1,549
	21. Sadanapura	1,85,311	N.A.
	22. Bhalej	74,779	1,08,180
	23. Ode	3,10,677	13,133
	24. Umreth	3,30,870	6,961
3 Anand-Dakor-Godhra	25. Vidyabhavan	N. A.	N. A.
	26. Dakor	11,59,475	31,192
	27. Thasra	3,11,039	1,183
	28. Ambav	N. A.	N. A.
	29. Angadi	16,860	N. A.
	30. Sevalia	4,39,262	1,02,959
	31. Vallabh-Vidyanagar	3,71,370	3,95,855
	32. Karamsad	1,57,470	76,878
	33. Agas	4,39,146	2,0922
	34. Dantali	N. A.	N. A.
4 Anand-Khambhat	35. Petlad	20,81,418	30,144
	36. Pandori	N. A.	N. A.
	37. Nar	1,49,450	15,320
	38. Nar Nagar	4,86,786	N. A.

Passengers and Goods Traffic, 1972-73— conold.

Name of the Section 1	Station 2	Passengers Traffic 3	Goods Traffic (in-Tonnes) 4
5 Anand-Vadtal-Swami-Narayan Nadiad-Petlad-Bhadran	39 Tarapur	3,73,415	5,852
	40 Yawarpara	N. A.	N. A.
	41 Sayama	3,74,150	765
	42 Kalitalavadi	N. A.	N. A.
	43 Khambhat	7,81,163	37,960
	44 Vadtal (Swaminarayan)	2,57,801	435
	45 Pijj	2,36,784	1,023
	46 Vaso	4,62,460	2,675
	47 Deva	N. A.	N. A.
	48 Malataj	4,22,063	1,300
	49 Dabhau	N. A.	N. A.
	50 Sojitra	3,53,021	16,784
	51 Virol	N. A.	N. A.
	52 Vishrampura	42,390	N. A.
	53 Sundarna	N. A.	N. A.
	54 Dharmaaj	1,32,106	2,642
	55 Jharola	1,30,175	7,701
	56 Bhadrans	10,04,117	5,116
	57 Vina	66,800	N. A.
	58 Nadgam	37,320	N. A.
8 Nadiad-Kapadvanj (N. G.)	59 Mahudha	1,72,645	4
	60 Bhaner	59,816	N. A.
	61 Kathlal	2,46,068	29,320
	62 Porda-Bhatara	37,910	N. A.
	63 Torna	17,891	N. A.
	64 Dasalwada-Antroli Road	23,750	N. A.
	65 Kapadvanj	1,60,846	12,608
		2,83,03,804	34,35,357

N. A. = Not Available.

Source :

The Divisional Superintendent, Western Railway, Divisional Office, Vadodara.

WATERWAYS AND BRIDGES

At present, the district has no waterways worth its name. The only port on its soil, i. e., Khambhat near the mouth of the Gulf of Cambay has been suffering from siltation for many years and there is no traffic in imports and exports since 1966-67 and the port has been declared as closed.

Though at present closed for traffic, it has had an interesting and inspiring history behind it. It was visited by foreign travellers both Arab and European who have left voluminous notes about the glory of Khambhat. Khambhat was known as *Sthambhatirtha* and was first mentioned by Suleman in A. D. 850 and probably came into prominence much later than Bharuch. It is probable that the Gurjar Pratiharas developed Khambhat as a rival port to Bharuch, as the later was under the control of their staunch enemy-Rashtrakutas.¹

After the 10th century, the port of Khambhat was the port for the whole of northern India including a portion of Malwa, the whole of Rajputana, Punjab, Sindh, Kashmir and the western part of Uttar Pradesh. During the reign of Delhi Sultans, a special officer was appointed to supervise the trade and commerce of Khambhat. He was known as Bahorbak. During the reign of Gujarat Sultans in 14th and 15th centuries, the port of Khambhat was at its zenith, the Sultan of Gujarat was known as the King of Khambhat, and Gujarat kingdom was famous as the kingdom of Khambhat. Queen Elizabeth-I of England addressed the Mughal emperor Akbar Shah, as the Emperor of Khambhat. These attributes speak of the glory the port enjoyed in the past. In the early part of the 17th century, the establishment of the Dutch and English headquarters at Surat gave a severe blow to Khambhat trade. During the later part of Mughal period, because of siltation, it could not compete with Surat and most of the big vessels used to visit Ghogha and merchandise brought was sent to Khambhat in small boats, and by the end of 18th century Khambhat lost all its former glory. Even then before the introduction of railways, Khambhat had a flourishing trade with ports in western coast, Saurashtra and Kachchh and those in the Persian Gulf. Khambhat had the distinct honour of receiving by sea, the machinery for the Ahmadabad textile mill industry. This became the precursor in the establishment of textile mills at Ahmadabad. Further blow to its trade was given by the construction of the Bombay-Vadodara-Ahmadabad broad gauge line in 1863. The port was gradually becoming unserviceable on account of siltation. For several years, Khambhat trade was becoming entirely local, gathering exports and spreading imports within a radius of about forty miles.²

1. MAJUMDAR A. K., *Chaukhambhat of Gujarat*, (1956), p. 265.2. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. VI, *Rewakantha, Narukot, Cambay and Surat States*, (1880), p. 193.

Not much efforts seem to have been made by the Nawabs, the former rulers of Khambhat to develop the port. The last survey of the Gulf of Cambay was carried out in 1837. In the present century, efforts to revive the port and its traffic were made twice as shown here. In 1912, a solid jetty was constructed and extended upto the deep channel. Second effort at resuscitation was made in 1932, when some additional facilities such as lighting of the channel, providing buoys for marking the channel, tug boats, warehouses and motor trucks were provided at a cost of Rs. 7 lakhs. Despite these measures, trade at the port was gradually decreasing year after year because of the constant siltation. The river Mahi often piled up mud hills near the mouth, which led to changes in the course of water. The spring and neap tides at Khambhat have a range of 39 ft. and 28 ft. respectively. As the bed of the creek alongside the existing jetty is higher than even the high water of neap tide, the ships can touch the jetty only during the spring tide, i. e., once in a fortnight. The crafts sit on the mud. Moreover, the ships visiting Khambhat have also to take care of one dangerous spot known as Bore Rock between Magarvali and Khambhat. If the traffic is to be maintained every day, at least six ft., depth below mean sea level have to be provided, so that the small crafts can come right upto the jetty, even during the neap tides.

After 1965-66, there was no traffic at the port and hence it was closed for traffic by the State Government.

Bridges and Causeways—Bridges play a very important role in the socio-economic activities of the people. They prove to be the real life line for continuous flow of men and material from one place to another. They help to make roads trafficable in all the seasons. In the Kheda district bridges and causeways have been constructed on the rivers and nullahs. A total of 27 bridges has been constructed till December, 1973. They are described in the statement that follows.

STATEMENT VII-4

Bridges and Causeways in the District, 1973

Sl. No. 1	Name of the road 2	Category of road 3	River 4	Length (in Metres) 5	Year of Construction 6
<i>Under Public Works Department</i>					
1	Bombay-Vadodara-Nadiad-Bareja-Ahmadabad.	N.H.	Gobhalaj Canal	90	1955
2	"	"	Kalia Vehla	220	1962
3	"	"	Vatrak	1392	1946
	"	"	Shedhi	280	1953

STATEMENT VII-4—contd.

Sl. No. 1	Name of the road 2	Category of road 3	River 4	Length (in Metres) 5	Year of Construction 6
5	Nadiad-Godhra-Indore-Jabalpur	S.H.	Shedhi (near Umreth).	89.5	1959
6	"	"	Shedhi (Near Dakor)	..	1927
7	"	"	Mahi river	2,496	1958
8	Kheda-Mahudha-Dakor	..	Mahor	390	1957
9	Ahmadabad-Kathlal-Vadasinor	"	Vatrak	650	1972
10	"	"	Mahor	325	1972
11	"	"	Sarup	84	1970
12	"	"	Zarmar	72	1970
13	Nadiad-Bibipura-Modasa	..	Shedhi	280	1955
14	"	"	Mahor (Near Kapadvanj)	320	..
15	"	"	"	160	1902
16	Dholka-Matar-Tarapur-Khambhat	"	Sabarmati	602	1963
17	"	"	Shedhi	235	1955
18	Nadiad-Mahemadabad-Ahmadabad.	"	Vatrak	685	1972
19	"	"	Meshwo	630	1972
20	"	"	Sabarmati	720	..
21	Diversion Round about Nadiad town	N.H.	Matar branch canal	62.6	1967
22	"	"	Khambhat branch canal	128	1963
23	Khambhat-Dhuvaran	.. S.H.	Kalamsar canal	200	..
<i>Under District Panchayat</i>					
24	Bibipura-Alina-Bhalej-Vasad.	M.D.R.	Shedhi	31	1962-63
25	"	M.D.R.	Kani'vehla	40	1968-69
26	Kapadvanj-Niramali	.. O.D.R.	Varansi	45.50	1969-70
27	Vadgam-Dehda	.. M.D.R.	Mithashri creek	62	Work is in progress.

Sources :

1. Executive Engineer, Roads and Buildings Division, Kheda.
2. Executive Engineer, Kheda Jilla Panchayat, Nadiad.

Air-Transport—There is no aerodrome in the district but the aerodromes at Vadodara and Ahmadabad are nearer to the Kheda district and its quite likely that people of this district use either of the aerodromes for their air journey.

Travel and Tourist Facilities—Travel tourist facilities available in the district can broadly be classified into (1) *dharmshalas* for the Hindus and *sarais* for the Muslims, (2) Guest and rest houses maintained by the Government and District Panchayats and (3) private guest houses, lodging and boarding houses, etc.

(1) *Dharmshalas* which are usually built by some philanthropic persons and managed by charitable trusts are the oldest institutions catering to the needs of tourist public. These are generally found in the religious, centres in large numbers. But taluka places are not excluded. Dakor which is the seat of lord Ranchhodraji and Vadtal and Bochasan which are sacred to Shri Sahajanand Swami of the Swaminarayan sect are said to have many such resting places for pilgrims. For short stay, a traveller has to pay little or nothing. There are *sarais* for Muslims at Khambhat and other places. In villages, the *dharmshalas* are generally attached to Ramji Mandirs and *sarais* to mosques.

Rest Houses—For providing facilities to the Government servants travelling on official business, different types of rest houses are provided by Government. District Panchayats and at some places by the municipalities. These are circuit houses, (*atithi grihas*), guest houses (*vishram grihas*), and rest houses (*aram grihas*). The location of such guest and rest houses in the district is shown in the following Statement VII-5. There is no circuit house in the district.

STATEMENT VII-5

Circuit House/Inspection/Travellers Bungalows maintained by P. W. D. and Local Bodies

Sl. No.	Location	Class	No. of Suites	Name of maintaining authority
1	2	3	4	5
1	Kheda ..	Vishram Grah	II	2 Executive Engineer, R. & B. Division, Kheda.
2	Nadiad ..	1. Vishram Grah	II	3 Executive Engineer, R. & B. Division, Kheda.
		2. Vishram Grah	II	2 Executive Engineer M. C. C. Division, No. 2, Nadiad.

STATEMENT VII-5—concl'd.

Sl. No.	Location	Class	No. of suites	Name of maintaining authority
1	2	3	4	5
3	Khambhat ..	1. Vishram Grah	II	3 Executive Engineer R. & B. Division, Kheda.
		2. Aram Grah	III	2 Executive Engineer, Panchayat Division, Nadiad.
		3. Dharmashala, III		8 Municipality, Khambhat.
		4. Guest House, Near Sardar Talao	I II III	2 Municipality, Khambhat.
4	Mahudha ..	Vishram Grah	I	2 Executive Engineer, R. & B. Division, Kheda.
5	Dakor ..	1. Aram Grah	III	2 Executive Engineer Panchayat Division, Nadiad.
		2. Aram Grah, Gaikwar Haveli	III	1 Executive Engineer, Panchayat Division, Nadiad.
6	Kapadvanj ..	Aram Grah	III	2 Executive Engineer, Panchayat Division, Nadiad.
7	Sevalia ..	Aram Grah	III	1 Executive Engineer, Panchayat Division, Nadiad.
8	Thasra ..	1. Aram Grah	III	1 Executive Engineer, Panchayat Division, Nadiad.
		2. Aram Grah	III	2 Executive Engineer, M. C. C. Division No. 1, Thasra.
9	Virpur ..	Aram Grah	III	1 Executive Engineer, Panchayat Division, Nadiad.
10	Vasad ..	Aram Grah	III	1 Executive Engineer, Panchayat Division, Nadiad.
11	Borsad ..	Aram Grah	III	2 Executive Engineer, Panchayat Division, Nadiad.
12	Tarapur ..	Aram Grah	III	1 Executive Engineer, Panchayat Division, Nadiad.
13	Petlad ..	Aram Grah	III	2 Executive Engineer, Panchayat Division, Nadiad.
14	Mahamadabad ..	Aram Grah	III	1 Executive Engineer, Panchayat Division, Nadiad.
15	Kazipura, Taluka Matar	Aram Grah	III	2 Executive Engineer, Irrigation Division, Ahmadabad
16	Wanakbori, Taluka Vadasinor	Aram Grah	III	2 Executive Engineer, M. C. C. Division No. 1, Thasra
17	Anand ..	Aram Grah	III	2 Executive Engineer M. C. C. Division No. 3, Anand.

Source :

1. Superintending Engineer, (R. & B.), Ahmadabad Circle, No. 1, Ahmadabad.
2. Superintending Engineer, Ahmadabad Irrigation Project Circle, Ahmadabad.
3. Superintending Engineer Vadodara Irrigation Circle, Vadodara.
4. Municipality, Khambhat.
5. District Census Handbook, Kheda District, Part X-C-1, Census 1971, p. 38.

Private Guest Houses—In order to meet the growing needs of the travelling public, private guest houses and lodging houses combined with boarding facilities are run by the private entrepreneurs in the district in professional basis. Such facilities are available at the important centres of the district like Nadiad, Anand, Kheda, Thasra, Dakor, Kapadvanj, Borsad, Khambhat, etc.

POSTS AND TELEGRAPHS OFFICES

The former *Bombay Gazetteer* supplies interesting information about the postal facilities in the Kheda district in the following terms :

"For postal purposes, the Kaira district forms a part of the Gujarat postal division, and contains thirteen post offices located at the following stations : Kaira, Matar, Cambay, Anand, Borsad, Vasad, Nadiad, Mehmabad, Mahudha, Kapadvanj, Thasra, Umreth and Dakor. These offices are supervised by the Sub-Inspector of the Kaira district and the Rewa Kantha states."

"The correspondence for surrounding villages is delivered by rural messengers who also bring into the stations letters posted in letter-boxes placed at most of the villages. The rural messengers carry with them a stock of postage stamps for sale at the villages they visit.

The only telegraph offices are those at the different railway stations."¹

The above extract reveals that before nearly a century, postal facilities in the district were very limited. Only important centres possessed these facilities. This was due to the inadequate transport and communications.

After Independence, there has been a significant increase in the postal facilities in the district. Due to the development of road transport, even the far-flung villages are provided with bus services. This has helped expansion of postal facilities. By the end of 1953, besides one head office at Mahemadabad, there were 38 sub-post offices, of which 30 had telegraph facilities. There were 230 branch post offices and 13 public call offices. By 1961, the number of post-offices increased to 410 in addition to 47 combined posts and telegraphs offices. Of these, one was head office, 55 sub-offices and 354 branch offices. There were also 133 experimental and temporary offices and 2 local telegraph offices in the district. It will thus be seen that after the formation of Gujarat State in May, 1960, there is considerable expansion of the transport and communications facilities in the district. This will be evident from the fact that in March, 1973, there were in all 569 post offices. Of these, three were head offices at Mahemadabad, Nadiad and

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panchmahals*, (1879), p. 70.

Anand, 128 sub-post offices and 438 branch offices. As regards the telegraph facilities, there were in 1973, 67 telegraphs offices combined either with the head office or the sub-offices. There were also 77 public call offices. The highest number of post offices is to be found in the Nadiad taluka (75) and the lowest in Matar taluka. The total number of letter boxes in the district was 1,295.

Upto March 1973, the postal division in the district was under the charge of Superintendent of Post Offices, Kheda Division, Nadiad. However, from 10th April 1973, a new Postal Division at Anand has been created. The post offices in the district now function under these two divisions.

TELEPHONES

In March 1973, there were in all 37 places in the district covered by telephone exchanges. Besides taluka headquarters, important marketing centres in the district are now covered. The talukawise distribution of such places is shown below :

1. *Anand taluka*—Anand, Bhalej, Ode, Napad, Umreth, Vadod, Vallabh Vidyanagar, Vaso and Vasad.
2. *Kapadvanj taluka*—Kapadvanj, Attarsumba, Kathana, Kathlal, Lasundra and Torna.
3. *Nadiad taluka*—Nadiad, Mahudha, Vadtal and Kanjari.
4. *Borsad taluka*—Borsad, Ankav, Bochasan and Ras.
5. *Petlad taluka*—Petlad, Dharmaj, Mahelav and Sojitra.
6. *Khambhat taluka*—Khambhat, Tarapur and Undel.
7. *Mahemadabad taluka*—Mahemadabad, Kheda and Sarsa.
8. *Thasra taluka*—Thasra and Dakor.
9. *Vadasinor taluka*—Vadasinor.
10. *Matar taluka*—Matar.

The Anand taluka had the highest number of telephone exchanges, whereas the Nadiad exchange had the highest number of connections (1,781) and that the Bochasan exchange had the lowest connections (10). Besides these, trunk line alignments are provided to places in the district such as : (1) Ahmadabad-Nadiad, (2) Kheda-Nadiad, (3) Nadiad-Pij, (4) Nadiad-

Kapadvanj, (5) Nadiad-Katnalal, (6) Nadiad-Mahudha, (7) Nadiad-Umreth, (8) Nadiad-Uttarsanda, (9) Nadiad-Narsanda, (10) Nadiad-Anand, (11) Nadiad-Petlad, (12) Nadiad-Vaso, (13) Nadiad-Sojitra, (14) Mahudha-Sinhaj, (15) Mahudha-Alina, (16) Kathlal-Mahisa, (17) Kapadvanj-Attarsumba, (18) Kapadvanj-Torna, (19) Kapadvanj-Lasundra, (20) Kapadvanj-Kathlal, (21) Umreth-Anand, (22) Anand-Bhalej, (23) Bhalej-Kanjari, (24) Anand-Samarkha, (25) Anand-Vadtal, (26) Anand-Sarsa, (27) Sarsa-Khambholaj, (28) Umreth-Dakor, (29) Umreth-Thasra, (30) Umreth-Vadasinor, (31) Umreth-Sarsa, (32) Umreth-Ode, (33) Umreth-Timba Road, (34) Anand-Chaklashi, (35) Anand-Boriavi, (36) Anand-Kanjari, (37) Sojitra-Petlad, (38) Anand-Petlad, (39) Anand-Khambhat, (40) Khambhat-Vadtal, (41) Petlad-Khambhat, (42) Petlad-Tarapur, (43) Petlad-Nar, (44) Petlad-Dharmaj, (45) Anand-Borsad, (46) Petlad-Borsad, (47) Anand-Napad, (48) Anand-Karamsad, (49) Anand-Vallabh Vidyannagar, (50) Kheda-Mahemadabad, (51) Ahmadabad-Kheda, (52) Kheda-Limbasi, (53) Kheda-Matar, and (54) Kheda-Radhu.

Rural Broadcasting

The scheme of Rural Broadcasting which was started as early as 1944 envisages installation and maintenance of community listening radio sets in the villages for the benefit of rural population. Under this scheme, Government provides subsidy for installation and maintenance of radio sets. However, subsidy for installation which is equal to the 33 per cent of the cost of radio set or Rs. 150 which ever is less, is available to the villages situated in the 56 notified economically backward talukas in the State.¹ The rates of maintenance contribution per set per year are Rs. 75 for a transistorised set, Rs. 150 for valve type battery operated set and Rs. 60 for an electrically operated set. The remaining cost has to be borne by the participating villages. Under this scheme, State Directorate of Information has installed 269 radio sets in the villages of the Kheda district till August, 1973.

Radio has proved to be a very powerful media of mass communication and the rural broadcasting scheme has helped dissemination of knowledge among the village folk about the latest know-how in the field of agriculture and has also increased political awareness of the people. It has also rendered useful services during the time of natural calamities like floods by alerting the people in time to shift to a safer place.

RADIO WIRELESS

There is no broadcasting station in the district. Radio receiving sets which began to be used in the early thirties of this century are becoming popular day by day. The total number of radio licenses both new and renewed in the district was 95,906 as on 31st December, 1972.

1. Government Resolution G. A. D. No. 4894 1065-3174-D, dated 26th May, 1966. Vadasinor is the only taluka in the district coming within the purview of this G.R.

CHAPTER VIII

MISCELLANEOUS OCCUPATIONS

DISTRIBUTION OF WORKERS ACCORDING TO OCCUPATIONAL DIVISIONS

Before the occupational divisions are discussed, it is necessary to know the connotation of the word 'occupation'. It connotes the exact function of a person such as a carpenter, a fitter, a mechanic, etc. The distribution of workers according to occupational divisions is shown in the Statement VIII-1 at the end of the Chapter.

The 1961 Census has returned 246,652 workers engaged in occupations other than cultivation. Of these, 109,088 workers were from the urban areas and 132,062 were from the rural areas of the district. The largest number of workers was found in the occupations relating to craftsmen, production process workers and labourers not classified elsewhere. They were followed by sales workers, (29,181), farmers, fishermen, hunters, loggers and related seer that sales workers as also those engaged in transport, storage services etc., If we consider the distribution of occupations in the urban areas it can be seen that sales workers as also those engaged in transport, storage services, etc. were more in the urban areas (16,008) than in the rural areas. The physicians, surgeons and dentists also were similarly numerically higher in the urban areas than in the rural areas. Same was the case with nurses and other health technicians.

In the 1971 Census provisional figures are available for urban areas only. The classification of occupations was also made a little broad-based in 1971 Census. The provisional figures show that 32,777 workers were engaged in different occupations in the district. The number of teachers in the urban areas of the district increased from 2,393 in 1961 to 4,987 in 1971. Tailors, dressmakers, etc., increased from 3,089 to 3,302, jewellery and precious metal workers increased from 1,880 to 3,667, food and beverages process workers went up from 1,551 to 2,089, house-keepers, cooks, etc., increased from 1,803 to 2,067 and persons in medical professions increased from 973 to 1,632. Of these surgeons, physicians, etc., who were 390 in 1961 and 952 in 1971.

INDUSTRIAL ESTABLISHMENTS

Since the 1961 Census, enumeration of industrial establishments has been started by the Census organisation with a view to assessing the number of industrial establishments and the employment provided by them. This enumeration also indicated the extent of industrialisation and commercialisation

in the district. The following statement shows the number of selected industrial establishments and the persons engaged therein according to 1971 Census.

STATEMENT VIII-2

Selected Industrial Establishments, 1971

Sl. No. 1	Category 2	No. of Establishments 3	No. of person engaged 4
1	Manufacture of beverages, tobacco and tobacco products ..	1,242	13,089
2	Manufacture of cotton textiles ..	860	11,205
3	Manufacture of non-metallic mineral products ..	1,339	6,055
4	Manufacture of food products ..	2,340	5,687
5	Manufacture of textile products (including wearing apparel other than foot wear) ..	2,993	4,000
6	Other manufacturing industries ..	1,746	4,412
7	Manufacture of wood and wood products, furniture and fixtures ..	1,202	2,569
	Total ..	11,722	47,687

Source : Census of India, 1971, *Establishment Report*, Part III-A, p. 81.

The number of industrial establishments increased from 7,503 in 1961 to 11,722 in 1971. The number of persons engaged also increased from 40,058 to 47,687 during the same period. The manufacture of cotton textiles including ready-made garments numbered 1,803 in 1961 and 3,853 in 1971. The number of persons engaged in these concerns also increased from 4,100 in 1961 to 15,865 in 1971. These concerns were, therefore, the largest in the district and also engaged the highest number of persons. These were followed by concerns engaged in the manufacture of food products, which also increased from 980 to 2,340 and the number of persons therein also rose from 3,108 to 5,687 during the decade. In the former, concerns engaged in the production of edible oils and fats have been included in the manufacture of food products. Manufacture of tobacco and tobacco products increased from 987 to 1,242 and employed 11,007 and 13,099 persons respectively in 1961 and 1971. The latter included manufacture of beverages. Tobacco is the main cash crop of the district.

LEARNED PROFESSIONS

Teachers

The data furnished by the last three Censuses, viz., 1951, 1961 and 1971 give an indication of the increase in the number of teachers in the district. From 5,138 the number of teachers increased to 9,081 in 1961 and to 13,375 in 1971. One of the main features of the post-Independence period has been an expansion of education in the rural areas. Further, education among women has also increased which is reflected in the number of women teachers returned at the Census. There were 638 women teachers in 1951, 2,011 in 1961 and 3,171 in 1971. Of the teachers, those engaged in primary education were the largest, followed by secondary and higher education, respectively. In 1951 Census, no woman was returned as teacher at the university stage. This number increased to 21 in 1961 and 84 in 1971. Though male teachers dominate the teaching field, women teachers captured atleast 25 per cent in 1971. The following statistics of teachers are reproduced from 1971 Census.

Teachers, 1971

Sl. No. 1	Teachers 2	Males 3	Females 4	Total 5
1	Primary Education ..	6,019	2,292	8,311
2	Secondary Education ..	3,023	652	3,675
3	Higher Education ..	973	84	1,057
4	Other type of Education ..	189	143	332
	Total ..	10,204	3,171	13,375

Source : Census, 1971, Part X-C-1, *District Census Hand Book* Kheda District, p. 29.

Lawyers

There were 196 lawyers and advocates, 25 law assistants, 65 jurists, 15 judges and magistrates according to the 1971 Census.

Doctors

In modern times, the medical practitioners occupy a coveted position in the society.

Persons engaged in Medical Professions, 1961-71

Sl. No. 1	Group 2	Males		Females		Total	
		1961 3	1971 4	1961 5	1971 6	1961 7	1971 8
1	Physicians, Surgeons and Dentists	659	907	37	40	696	947
2	Nurses, Pharmacists and other Medical and Health Technicians	724	351	291	329	1,015	680
	Total	1,383	1,258	328	369	1,711	1,627

The above table shows figures of persons engaged in the medical profession according to the 1961 and 1971 Censuses. However, for 1971 Census, figures for urban areas only are available. The table shows increase in the strength of doctors and health personnel during the decade, as even excluding the rural areas there were 1,627 persons in this profession. The table also shows that the number of lady doctors has increased to 40 in urban areas only whereas the figure was 37 for the whole district in 1961.

PUBLIC ADMINISTRATION

Public administration jobs especially in the Government departments are highly favoured because they are secured jobs. The 1961 Census has returned 1,692 executive officials engaged in administration in the whole district, whereas similar personnel for 1971 Census was 1,091 only for the urban areas of the district (because figures for rural areas are not available). This compares favourably well.

Amenities to Public Servants

Besides providing such allowances as dearness allowance, house-rent and compensatory allowance, the State Government has also made provisions for granting loans to Government servants for constructing residential buildings. Similarly loans are also granted to Government servants for purchasing fans and bicycles. Government servants drawing pay of Rs. 500 and above are also granted loan upto a prescribed limit for purchase of scooter. Residential accommodation is also made available to Government servants wherever possible. Moreover, Government servants are given free medical treatment at Government hospitals and dispensaries. They are also allowed reimbursement of expenses incurred for medical treatment at institutions authorised by the Government. In addition to this, concessions of leave on average pay for a period of one year and extra-ordinary leave for another year are also available

to the Government servants suffering from T. B. The Government also pays certain charges like the sanatorium and in certain cases, a fixed amount is paid for specialised diet, medicines and injections prescribed for the recovery of T. B. patients during the period of convalescence.

In addition to the above benefits, Government servants are now entitled to travel concessions at specified intervals for visiting their home town. They are also allowed to encash the whole or part of the earned leave surrendered to Government for a maximum of 30 days, once in every two years. This scheme came into force from January, 1971.

The Central Government and the statutory corporations like the Life Insurance Corporation have similar schemes to provide relief to their employees.

Occupations and Social Change

There are certain occupations which are strictly hereditary in letter and spirit. The winds of change have, it seems, no perceptible effect. Such occupations are confined to blacksmithy, pottery, tailoring, bakery, carpentry and to some extent hair-cutting while tailoring has come under the influence of change in pattern in the occupations and the persons of other castes follow tailoring as an occupation. In the same way, the son of blacksmiths, etc., do not follow the profession of their forefathers.

There are certain occupations which have widely changed their original perspective. On account of spread of education among the masses, there has been a great metamorphosis in the occupational structure. The work of social reformers including Mahatma Gandhiji has largely fructified in relation to spread of education among women who have become very much sensitive and conscious of their rights and privileges. The social taboo attached to female education has become a thing of the past. In the past, the occupation of nurses and midwives was confined to few from the lower sections of the society and Christians. This does not obtain today. There are now more nurses, midwives and lady doctors and female teachers in large number at the hospitals and at the primary, secondary and the University stages. These facts largely emerge from the figures returned by the Census.

SELECTED MISCELLANEOUS OCCUPATIONS

The information furnished by Anand, Nadiad, Khambhat, Umreth, Borsad, Kapadvanj and Petlad Municipalities is embodied in the Statement VIII-3 appended to the chapter.

The statement reveals that occupations accounting for sizeable percentage in order are, hotels, lodging and boarding houses, restaurants and aerated waters (20.82 per cent), tailoring (19.60 per cent), *pun-bidi* (15.13 per cent), and hair-cutting saloons (10.93 per cent), which are among popular occupations and jointly accounted for 66.48 per cent. Less than 10 per cent of the establishments were reported to be goldsmiths, cycle-repairing, sweetmeat and *farsan*, flour-mills, laundries, dyeing and printing, bakeries and mattresses and pillow makers in these towns.

As regard the number of persons employed in these occupations, hotels, lodging and boarding houses, restaurants and sweetmeat and *farsan* shops accounted for the highest percentage of workers (36.87 per cent) and the lowest in mattresses and pillow makers (1.06 per cent).

Considering their prominent urban characteristics, Anand and Nadiad towns were selected for assessing the working of certain selected occupations in these towns.

A sample survey of selected occupations one each in the large, medium and small categories in the towns was undertaken in September, 1973. The selection of the occupations was made on the basis of income derived by each of them so as to give a broad picture of the occupations. The results of the survey are briefly stated below.

Hotels, Lodging and Boarding Houses, Restaurants and manufacture of Aerated Waters—There are 262 establishments which engaged 944 persons inclusive of 10 women and 54 children. The survey disclosed that these establishments were mostly managed by the owners themselves, but the bigger ones employed workers on wages. Generally the rates of wages paid to male members are higher as compared to females and children, the lodging and boarding houses engaged female and child labour to do the job of cleaning and serving the dishes. Most of them were housed in rented premises and paid rent ranging from Rs. 30 to Rs. 1,600 individually. The gross earnings of individual establishments ranged between Rs. 300 to Rs. 25,000 p. m., depending upon the size, location, popularity, delicious varieties served and treatment offered to customers. It was reported by the owners of aerated waters that their business had been adversely affected by the introduction of new beverages by the established manufacturers. There is no association in these occupations.

Tailoring—There were 197 tailoring units which employed 228 persons. A majority of them were one-man establishments, though taking minor work such as fixing of buttons, repairing of garments, etc., on daily wages was not uncommon with them. Sometimes members of the family were also engaged on such works to meet rush of customers for occasions like

marriage and festivals. Some of these establishments were housed in owned premises. The gross earnings of an individual establishment varied from Rs. 800 to Rs. 74,800 per month depending upon its popularity and quality of garments sewed. On account of change in the pattern of wearing garments among the fair sex, the business of tailors catering to womens' dresses was on the whole prosperous.

Hair-cutting Saloons—There were 134 hair-cutting saloons scattered in different localities and mostly run as proprietary concerns. A majority of them were housed in rented premises, paying rent ranging from Rs. 15 to Rs. 175 per month. The gross income of an individual concern was reported to vary from Rs. 300 to Rs. 800 per month depending upon the location, size and skill and treatment given to customers. There is an association of the owners of the hair-cutting saloons in the Anand and Nadiad towns respectively. It was reported by the owners that on account of recent trends among the young generation in the hair style their business had been adversely affected.

Goldsmithy—There were 95 establishments in Anand and Nadiad. A majority of them employed family members. These shops were housed in premises, on a monthly rent varying from Rs. 35 to Rs. 1,000. The gross monthly income of an individual goldsmith varied from Rs. 4,000 to Rs. 15,000 per month. Those who sold prepared ornaments had even larger monthly incomes during the marriage season and in festivals like Diwali, etc., though it was reported to have been adversely affected on account of the promulgation of the Gold Control Order by the Government of India in 1963. There is no association of the goldsmiths.

Sweetmeat and farsan Shops—There were 22 establishments preparing items of sweetmeat and spiced and salty eatables. The business of these concerns is mostly seasonal and becomes brisk during the marriage season and in festivals like Diwali, Holi, etc. The gross monthly income of an individual shop varied from Rs. 1,000 to 12,000, depending upon size, situation, popularity and quality of products. Only big shops employed salaried persons for preparation of various items. Elsewhere, the family members were employed for doing subsidiary work, and also run the shops in the absence of owners. There is an association known as the "*Nadiad Mithai and Farsan Merchants' Association*" at Nadiad.

Bakeries—There were 19 bakeries employing 44 persons. The survey disclosed that the monthly turnover of an individual concern varied from Rs. 400 to Rs. 15,000 showing greater use of bread, biscuits and other bakery products among the people. The monthly rent paid by individual shop varied from Rs. 50 to Rs. 300. There is an association of bakery owners in the Anand town only.

Pan-bidi—There were 169 *pan-bidi* shops. These shops are the best examples of one-man establishments on sole proprietorship basis. These units kept and sold additional items like tobacco, perfumery, cigarettes, confectionery, wax candles and other sundry articles as well. It was observed that most of these were housed in rented premises, each on a monthly rent varying from Rs. 30 to Rs. 55 p. m. The gross earnings of an individual establishment varied from Rs. 1,100 to Rs. 20,000 per month depending upon its size, location and popularity. Some of the very large concerns among them, also sold betelnuts and tobacco to the people. There was no association of the *pan-bidi* shop-keepers in these towns.

Flour Mills—There were in all 41 flour mills which employed 81 persons. Most of them were sole proprietary concerns but the large units employed workers or relatives to meet the demand from the public. The gross monthly earnings of an individual establishment varied from Rs. 400 to Rs. 1,000. The flour mills were found scattered in different localities and the rent paid by an individual owner amounted to Rs. 50 and above per month depending upon its location.

Cycle Repairing—There were 106 establishments employing 200 persons. Such a large number of concerns indicates the increased use of bicycles made by the public in these towns. Some of the big concerns were reported to sell new bicycles, and also supply them on hire, besides attending to repairs. A majority of them was housed in rented premises, for which monthly rent paid by each of them varied from Rs. 75 to Rs. 300 p. m., depending upon its size and location. The net monthly earnings of an individual concern varied from Rs. 500 to Rs. 4,000. The concerns which sold new bicycles had even larger turnover. There is an association called "Anand Cycle Dealers' Association" at Anand.

Mattresses and Pillow Makers—There 28 establishments reported to be functioning at Anand and Nadiad. They were organised on a proprietary basis. The survey revealed that the gross monthly income of an individual establishment varied from Rs. 300 to Rs. 10,000. These shops were not set up in one locality of the town and were housed mostly in the owned premises. There was no association of the owners in these towns.

Laundries—There were 37 laundries concentrated in thickly populated areas. They were mostly proprietary concerns and were housed in rented premises for which rent paid by individual shop varied from Rs. 50 to Rs. 395 depending upon the size, location, popularity and rates of washing, dry-cleaning and ironing charged by each of them. The gross monthly income of an individual establishment varied from Rs. 600 to Rs. 2,400. There were no associations of the owners in these towns.

EMPLOYERS' ORGANISATIONS

Since the inauguration of the Five Year Plans, there has been a great expansion of employment in the public service at all levels including the Central Government, State Government and the local institutions like the municipalities and panchayats, as large manpower was required for implementing various development schemes. These employees have formed their respective unions with a view to redressing their grievances. The State Government employees have formed an organisation called the "Gujarat Rajya Karmachari Mahamandal" with branches in the districts affiliated to the Mahamandal at the State level. There is a similar association of employees in the Panchayat.

The employees engaged in the Municipalities of Kapadvanj, Nadiad, Petlad, Khambhat, Borsad, Anand and Umreth have also formed their respective organisations which are affiliated to the "Kheda Jilla Municipal Employees' Union" which was established in the year 1959 at Nadiad. The Union had 466 members as on 31st March, 1973.

The aim of the Union is to seek solution of the problems of the employees, to seek legal advice wherever necessary and help to establish amicable settlement of disputes. The Union also directs its energies to improve social, economic and political conditions of its members.

The following are details of staff unions in the Kheda district.

Sl. No.	Name of the Union	Date of Registration	App- roximate member- ship
1	2	3	4
1	Talati-cum-Mantri	29th September, 1970	377
2	Gram Sevak	30th December, 1971	157
3	Junior Clerks	28th September, 1972	150
4	Technical Servants	30th March, 1972	200
5	Class III Servants' Association ..	April, 1973	..
6	The Kheda Jilla Municipal Employees' Union	24th March, 1959	466

Source :

- (1) District Development Officer, Nadiad.
- (2) President, Kheda Jilla Municipal Employees' Union, Nadiad.

STATEMENT VIII-1

Number of Persons Engaged in Selected Occupations (Urban Area only)

Sl. No. 1	Occupations 2	1961 3	1971 4
1	Physicians, Surgeons, Dentists, (including Veterinary Surgeons), Medical and Technical Persons ..	390	952
2	Nursing and other Medical and Health Technicians ..	583	680
3	Teachers	3,293	4,987
4	Jurists	325	301
5	Arts, Letters and Science and related workers (including Life Scientists and Social Scientists and professional workers in ordained and non-ordained services) ..	9,908	2,213
6	Salesmen, Shop Assistants, Hawkers and Related Workers	17,858	7,701
7	Tailors, Dress Makers, Sewers and Related Workers ..	3,089	3,302
8	Jewellery and Precious Metal Workers	1,880	3,667
9	Food and Beverage Processors, Millers and Related Workers	1,551	2,089
10	House-keepers, Cooks, Waiters and Related Workers ..	1,808	2,067
11	Hair-dressers, Barbers and Beauticians	783	967
12	Launderers, Dry-cleaners and Pressers, n. e. c. ..	518	561
13	Administrative, Executive and Managerial Workers, including Executive Officials of Government ..	3,686	200
14	Clerical and Related Workers	8,851	891
15	Farmers, Fishermen, Hunters, Loggers, and Related Workers	1,711	463
16	Miners, Quarrymen and Related Workers	177	444
17	Workers in Transport and Communications	3,853	296
18	Craftsmen, Production Process Workers, Service and Related Workers	48,976	195
19	Workers not classified by Occupations	48	801
	Total	109,088	32,777

n. e. c.—Not Elsewhere Classified.

Source :

District Census Handbook 1961, Kaira District, (1964), pp. 47-61 and Census 1971, B-V-Part-A (Urban), (Provisional figures).
Figures for rural areas for 1971 Census are not available.

STATEMENT VIII-3

Persons Engaged in Certain Occupations in Municipal Towns, 1973

Sl. No.	Occupations	Number of establishments	Percentage to total number of establishments	Persons employed inclusive of employer			Percentage to total number of persons employed	
				Males	Females	Children		
1	2	3	4	5	6	7	8	9
1	Bakeries ..	44	1.53	97	..	3	100	2.04
2	(a) Hotels, (b) Lodging and Boarding (c) Restaurants, (d) Aerated waters ..	600	20.82	1,443	11	95	1,549	31.54
3	Sweetmeat and far-sans ..	139	4.82	254	..	8	262	5.33
4	Pan-bidi ..	436	15.13	509	..	5	514	10.47
5	Hair-cutting saloons ..	315	10.93	445	..	6	451	9.18
6	Flour mills ..	135	4.68	242	..	3	245	4.99
7	Goldsmiths ..	229	7.95	283	..	..	283	5.76
8	Laundries ..	105	3.64	203	3	3	209	4.25
9	Cycle repairing ..	208	7.22	372	..	2	74	7.62
10	Tailoring ..	565	19.60	769	2	17	788	16.05
11	Mattresses and pillow makers ..	40	1.39	52	..	..	52	1.06
12	Dyeing and printing ..	66	2.29	84	..	..	84	1.71
	Total ..	2,832	100.00	4,753	16	142	4,911	100.00

Source :

Chief Officers, Borsad, Anand, Kapadvanj, Khambhat, Petlad, Nadiad and Umreth Nagarpalikas, Kheda District.

CHAPTER IX

ECONOMIC TRENDS

LIVELIHOOD PATTERN

The general population has been divided into workers and non-workers. Out of the total population of 1,977,540 and 24,51,387 persons in the district, those who were engaged in some kind of economic activity numbered 684,038 and 715,161 or 34.59 and 29.17 per cent as against the State average of 41.07 and 31.45 per cent respectively in the 1961 and 1971 Censuses.

The workers were, on the basis of economic activities pursued, classified into the nine categories by the 1961 and 1971 Censuses given in the statement IX-1 at the end of the chapter.

These figures reveal that males predominate as compared to females in the working population. Moreover 72.08 per cent in 1961 and 72.18 per cent in 1971 were engaged in agricultural pursuits as against 68.09 per cent (1961) and 65.60 per cent (1971) in whole State. The economy of this district is thus agricultural. The remaining categories of workers accounted for 27.92 per cent of the total working population in the district in 1961 and 1971 respectively.

The following Statement IX-2 shows the distribution of workers in the rural and urban areas according to the 1961 and 1971 Censuses.

STATEMENT IX-2

Category of Workers, Rural/Urban Distribution, 1961 and 1971

Sl. No.	Category of workers	Percentage of population					
		Working population		Rural population		Urban population	
		1961 3	1971 4	1961 5	1971 6	1961 7	1971 8
1	2						
	Total Workers ..	34.59	29.17	33.27	29.50	27.39	25.94
	(a) Agricultural pursuits ..	24.94	21.07	29.93	25.17	4.13	4.49
1	As Cultivators..	18.99	14.11	22.84	17.00	2.95	2.46
2	As agricultural Labourers ..	5.95	6.96	7.09	8.17	1.18	2.03

STATEMENT IX-2—concl'd.

Sl. No	Category of workers	Percentage of population					
		Working population		Rural population		Urban population	
		1961	1971	1961	1971	1961	1971
1	2	3	4	5	6	7	8
	(b) Non-agricultural pursuits	9.65	8.10	6.34	4.70	23.26	21.62
1	In mining, quarrying, live-stock, fishing, plantations, orchards and allied activities...	0.23	0.44	0.22	0.46	0.27	0.37
2	At household industry ..	2.11	0.72	2.10	0.61	2.12	1.11
3	In manufacturing other than household industry ..	1.66	1.94	0.69	0.98	5.66	5.76
4	In construction ..	0.32	0.27	0.24	0.13	0.64	0.86
5	In trade and commerce ..	1.59	1.74	0.85	0.80	4.64	5.49
6	In transport, storage and communications ..	0.48	0.63	0.25	0.36	1.42	1.71
7	In other services ..	3.26	2.36	1.99	1.36	8.51	6.33

It is natural that agricultural pursuits preponderate in the rural areas, where cultivation of land is the prime economic activity of the people. But in the urban areas, it is the non-agricultural pursuits which claimed 23.26 and 21.62 per cent of workers in 1961 and 1971 respectively. This shows that the pressure of population on land is proportionately higher in this district because the district has no deposits of coal, iron, etc., which are so very essential for industrial development of the district. Slow pace of urbanisation and non-availability of cheap electricity are among other factors of inadequate industrialisation in the district.

NON-WORKERS

The number of non-workers, i. e., those not engaged in any economic activity in this district, was 1,293,502 or 65.41 and 1,736,226 or 70.83 per cent respectively as against the State average of 12,158,762 or 58.93 and 18,301,929 or 68.55 per cent during the 1961 and 1971 Censuses. The higher percentage of non-workers could be attributed to women and children who are not engaged in any economic activity. Further women from upper classes and castes generally prefer household duties only.

PRICES

Price mechanism is influenced by the law of demand supply. Its impact is felt on the entire economy and is reflected in the levels of living

of the people of a region. The present Kheda district as an economically viable district came into existence after merger of the princely States and estates. It is, therefore, difficult, if not impossible, to attempt systematic analysis of the prices on a comparable basis. An attempt has, however, been made to give below details on prices available from the former *Bombay Gazetteer*.

The old *Kaira and Panch Mahals Gazetteer* gives information about prices prevailing during the years 1790 to 1877 in the following terms.

"For the first thirty-four years, the figures refer only to one portion of the district, the Matar sub-division. Since 1824 they are supposed to represent average prices over the whole district. Taking the staple grain, millet or *bajri*, the average rupee price during the whole period of 88 years is 51 pounds, or excluding seven years of abnormally high and five years of abnormally low prices, an average of fifty pounds. The seven years of highest prices were fifteen pounds in 1821 and 1864, seventeen pounds in 1877, eighteen pounds in 1790, nineteen pounds in 1863, and twenty pounds in 1813 and 1869. The years 1863, 1864 and 1869, when the high value of millet was due to the cheapness of money rather than the want of grain were the times of greatest agricultural prosperity. 1790, 1812, 1813 and 1877 were years of famine or scarcity. The cheap years, of which there have been five, eighty-two pounds in 1856, eighty-four in 1855, eighty-five in 1848, 100 in 1831, and 120 in 1832, have been times of complaint and agricultural distress. Excluding the years of special scarcity, the whole series may be roughly divided into eight periods. From 1791 to 1799, a time of cheap grain, with an average price of sixty-nine pounds, from 1800 to 1811, a times of moderate and most steady prices scarcely varying from fifty-five pounds, then, after the scarcity in 1812 and 1813, five years (1814-1818) of moderate prices varying from forty-six to sixty-five and averaging fifty-nine pounds. Again, after the scarcity in 1819, follow seven dear years (1820-1826), prices varying from thirty-eight to forty-five and averaging forty-one pounds. Next, for six years (1827-1832), a rapid fall in prices ranging from fifty-eight in 1827 to 120 in 1832 and averaging eighty-two pounds. Then ten dear and changeable years (1833 to 1842), prices varying from thirty to sixty and averaging forty-six pounds. Then sixteen years (1843-1858) of low prices varying from fifty-two to eighty-five and averaging sixty-six pounds, and lastly, eighteen years (1859-1876) of high prices varying from fifteen to fifty-two and averaging thirty pounds."¹

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panch mahals*, (1879), pp. 63-64.

Source : *Balasinar State, Annual Administration Reports*, (1902-03) p. 2, 1905-06, p. 8; 1910-1911, p. 7; 1915-16, p. 12; 1920-21, p. 12; 1927-1928, p. 10; 1940-41, p. 18; 1942-43, p. 16.

(ii) From 1895 to 1945

Vadasinor State—The prices prevalent in the Vadasinor are tabulated in the attached Statement IX.3. The prices of agricultural commodities like *bajri*, *mug*, *gram*, *tuver* (pulse), rice, maize and *adad* (pulse) were lower in 1902-1903 compared to the years 1897-98 and 1898-99 as these were years of famous *Chhapanio* famine. On account of very low prices of foodgrains the cultivators did not derive any appreciable profit out of their crops. In 1905-06 prices of foodgrains rose considerably. On account of large exports of foodgrains and sesamum, there were scarcity conditions in other areas of Gujarat. But in 1910-11 prices of maize, *bavto*, wheat, gram and other pulses fell considerably, while those of *bajri* had slightly risen. World War I had erupted in the year 1914. Prices of staple foodgrains ruled high during the year 1915-16 due to scanty rainfall in the previous year, which blighted the prospects for good harvests. The following years 1920-21 saw a slight reduction in prices of essential commodities. But this reduction did not provide relief to persons with fixed incomes. In 1927 prices were a little higher as compared to the year 1928 when *bajri* was sold at 20 *seers* per rupee instead of 18 *seers* and 20 *tolas* in 1927, *mug* was sold at 16 *seers* instead of 10 *seers*, gram was available 25 *seers* instead of 20 *seers*, etc. Then there were years of world slump on account of depression in 1929. The period upto 1933-34 witnessed powerful set-back to agricultural prices and farmers all over the world were the worst affected. Revival in agricultural prices came after the year 1934 and the prices remained more or less steady thereafter till even 1941-42 when the world was in the grip of a conflagration. In the Vadasinor State prices of *bajri*, *mug*, sesamum, maize, etc., had gone down on account of good harvest, but the prices of rice, wheat and grain had increased on account scarcity of rain. Prices had steadily risen. *Bajri* which was sold at 18 *seers* and 33 *tolas* in 1942 was sold at 8 *seers* and 17 *tolas* in 1943, *tur* (pulse), sold at 8 *seers* 16 *tolas* in 1942 was available at 5 *seers* only in 1943 and price of rice and maize had doubled in one year. Wheat was not available in 1942 in the market due to its exports to war fronts in Africa.

STATEMENT IX.3

Prices (Vadasinor State)

Sl. No. of the Article		(Price in Mds, Seers, per Rupee).																	
		1897-98		1902-03		1905-06		1910-11		1915-16		1921		1928		1941		1943	
		Mds. S. T. Mds		S. T. Mds S. T. Mds		S. T. Mds S. T. Mds		S. T. Mds S. T. Mds		S. T. Mds S. T. Mds		S. T. Mds S. T. Mds		S. T. Mds S. T. Mds		S. T. Mds S. T. Mds			
1	<i>Bajri</i>	..	0 26	6½ 1	10 0	..	23	..	27	..	18	..	11 20	..	20	..	36	..	8 17
2	<i>Adad</i> -pulse	..	0 29	5½ 0	25 0	..	23	..	32	..	16	..	9	..	15	..	16	..	10
3	<i>Mug</i>	..	0 29	2 0	34 0	..	28	..	1	..	18	..	9	..	16	..	16	..	12 20
4	<i>Sesamum</i>	..	0 12	5 0	20 0	0 13	..	11	..	13	..	6 20	..	8	..	16	..	5	
5	<i>Baoto</i>	..	0 21	7 1	15 0	..	28	..	1 2	..	21	..	18	..	28	..	5	..	12 3
6	<i>Gram</i>	..	0 17	36½ 1	0 0	..	24	..	1 2	..	21	..	12	..	25	..	18	..	..
7	<i>Tuver</i> -pulse	..	0 14	4 0	22 0	..	15	..	23	..	12	..	8	..	12	..	13	..	5
8	<i>Gram</i> -pulse	..	0 16	21½ 0	30 0	..	20	..	23	..	10	..	8	..	13	..	13	..	5 29
9	<i>Rice</i> 1st sort	..	0 10	0 0	10 20	..	10	..	10	..	10	..	7	..	6	..	11	..	4 28
10	<i>Rice</i> 2nd sort	..	0 14	10 0	16 0	..	12	..	14	..	11	..	7 30	..	8	..	12	..	5
11	<i>Rice</i> 3rd sort	..	0 15	23 0	20 0	..	14	..	16	..	12	..	8	..	12 20	..	13	..	5 29
12	<i>Maize</i>	..	0 21	13 1	10 0	..	24	..	1	..	22	..	16	..	25	..	1	..	11 17
13	<i>Mug</i> -pulse	..	0 14	35 0	24 0	..	24	..	36	..	14	..	6	..	10	..	10	..	8
14	<i>Morwa</i>	..	0 30	6½ 4	0 0	2 20	..	..	..	..	..	..	..	..	..	..	..	..	..
15	<i>Wheat</i>	..	..	..	..	..	..	..	26	..	16	..	11	..	20	..	18	..	..

Source :

Reports on the Administration of the Balasinor State for the years 1902-03, 1905-06, 1910-11, 1915-16, 1920-21, 1927-28, 1940-41, 1942-43

KHAMBHAT STATE

The following table gives the prices of foodgrains prevailing in the former Khambhat State during the years 1938 and 1939.¹

Articles 1	During May, 1938 per maund of 40 lbs. 2	During May, 1939 per maund of 40 lbs. 3
Bajri	1 11	1 9
Kodra	1 0	0 12
Wheat-red	1 7	1 8
Do-white	1 12	1 14
Rice	2 0 to 3 0	1 14 to 3 0
Dal Tuver	2 12 to 3 2	2 8 to 2 12
Math	1 6	1 7
Gram	1 12	2 11

Period from 1945 to 1972

The Second World War ended in 1945. After Independence (1947), the country was partitioned. The national economy was subjected to unprecedented stresses and strains as a result of influx of a large number of refugees from Pakistan. At the same time, to put the country's economy on an even keel, the Five Years Plans were introduced from 1951. They aimed at raising the living standards of the people. These measures had an inflationary impact on the price mechanism as production at various levels did not rise in proportion to the huge investments. Secondly, there has been a general increase in the country's population since 1931 and the consequent large demand on the farm output. On account of II World War and the Five Year Plans, there has generally been an increase in the *per capita* income of people in general and of agricultural classes in particular. Thus on the one hand there has been an appreciable increase in the retention capacity of large cultivators and wholesale traders, on the other, there is a widespread demand for more grains. Thus the ratio of available foodgrains in relation to demand had been unduly and unfavourably tilted to the detriment of buyers. The scarcity necessitated large scale imports from foreign countries. These inbalancing forces had their impact on the prices. However, a short relief came to the people when the Government increased the Bank rate in the 1952 as an anti-inflationary measure. But since 1965,

1. Administration Report of the Cambay State, 1938-39, p. 27.

prices are more acute than ever before. Against this background, the position about the prevailing prices of important agricultural commodities during the years 1949 to 1972 for Kheda, Anand and Khambhat are shown in the Statements IX-11-12 appended to the chapter. A broad analysis is given below.

The wholesale price figures are available for the centres like Kheda, the district headquarters and Anand and Khambhat, taluka centres and are appended to this chapter. The prices prevailing in these centres could be treated representative of the district as a whole. Upto the year 1965 the prices are available for maunds and *seers* and thereafter in quintals. The prices of rice, wheat, *jowar*, *bajri*, *tur* (pulse) and groundnut at Kheda had remained more or less steady but a declining trend was noticed in gram. The increase in prices is not substantial, e. g., the price of rice was Rs. 12.75 in 1949-50 and had risen to Rs. 16.25 per maund in 1960-61. Similarly wheat prices increased from Rs. 18.87 per maund to Rs. 25.89 in 1958-59 but declined to Rs. 18.85 in 1961-62. Gram prices went down from Rs. 21.00 to Rs. 17.15 during the same period. Price of groundnut seeds rose marginally from Rs. 20.69 to Rs. 23.30 between 1949-50 and 1961-62.

The prices of agricultural commodities at Anand reveal that superior variety of rice was sold at Rs. 31.40 per Bangali md. This rose to Rs. 118.15 per quintal in 1965, Rs. 198.00 in 1973 and Rs. 213.50 in 1972. Wheat prices were Rs. 20.78 in 1960, Rs. 67.16 in 1965 and Rs. 98.00 in 1970. Those of *mug* and *bajri* respectively were Rs. 14.88 and Rs. 17.05 in 1960. Rs. 66.44 and Rs. 65.50 in 1965, Rs. 79.00 and Rs. 78.00 in 1970 and Rs. 7800. and Rs. 71.00 in 1972. These prices were more or less steady at Anand. Groundnut oil prices were Rs. 70.70 in 1960, Rs. 270.00 in 1965, Rs. 472.00 in 1970 and Rs. 440.00 in 1972. The price of oil appears to be very high as compared to other essential items.

The data on prices at Khambhat upto the year 1965 are not available. In the year 1967 the price of rice (fine) was Rs. 285.83 per quintal but declined to Rs. 178.00 in 1970 and to Rs. 163.00 in 1971. It rose to Rs. 220.00 in the year 1972. Those of coarse variety of rice went up from Rs. 115.00 in 1968 to Rs. 191.00 in 1972. The price of wheat (white) per quintal was Rs. 116.10 in 1967 and went down to Rs. 100.00 in 1972. Similar trend is noticed in wheat (red), *bajri* and *jowar*. The price of groundnut oil also went down from Rs. 407.08 in 1967 to Rs. 255.00 in 1972. Thus prices of all agricultural commodities were more or less steady during the period from 1967 to 1972 at Khambhat.

WAGES

Wages generally signify all remuneration capable of being expressed in terms of money paid to a person for the work done by him. The level of

wages obtaining at a particular period gives an indication about the prevailing conditions of a region. Price fluctuations generally influence the wage level.

The following extract from the former *Bombay Gazetteer* throw considerable light on the wage structure obtaining in the Kheda region under the occupation of the British Government.

"Under Maratha rule, brick layers, carpenters, blacksmiths and day-labourers were forced to work for the men in power receiving some grain at harvest, but seldom any money payment. Fifty years ago (1828) a town labourer earned 2 annas a day, and a carpenter 4 annas. In 1844 a town labourer earned the same wage as in 1828, a field labourer was, as formerly, paid in kind from three to five pounds of millet, *bajri*, a day, a brick layer earned from 4-6 annas and a carpenter from 6-8 annas. Between 1858 and 1864, when the Bombay, Baroda and Central India Railway line was under construction, and house building was carried on to a large extent over the whole district, the demand for labour increased and the rates rose by about one-half. At present 1878, a labourer's daily wage varied from 2-4 annas according to the urgency of the work. Besides his ordinary wage of from 2-3 annas which is paid in money a field labourer gets two or three millet cakes at midday. Except in the rains, when labour is wanted for weeding and transplanting, the supply of labour from among Kolis, Kachhias, poor Kanbis, Vaghris and Dheds, is in excess of the demand. Town labourers, except for an hour's rest at midday work from eight or nine in the morning to five or six in the evening; field labourers go to work about six in the morning and remain till about six in the evening taking at midday an hour's rest. Thirty years ago a labourer had almost no credit, now he would, without security, be trusted with an advance of from Rs. 15-20. Except the lundas or hereditary servants in the households of well-to-do Rajputs, who, like the Surat Halis, are fed and clothed by their masters, there are no hereditary labourers in the district. In a few sub-divisions the practice of mortgaging labour prevails. The mortgagors, generally poor field labourers, for money advances of from Rs. 20-25 pledge their labour for terms rising to one year. During their time of service, they are fed and clothed and well treated by their masters. Carpenters and brick layers wages vary in the different seasons, the demand being strongest in the hot months, when the cultivators repair and build houses. At present a bricklayer's daily wage varies from 4-6 annas, and a carpenter's from 8-10 annas. One third of an ordinary day's wage is paid for extra work done in the morning from six to nine. In villages besides two pounds of millet, *bajri*, and a quarter of a pound on clarified butter, ghi, a day, carpenter's monthly wage is Rs. 11 and a bricklayer's Rs. 6. For miscellaneous work, such

as repairing field tools, village artisans are every year, at harvest time paid in grain."¹

Khambhat State

The following extract from the *Bombay Gazetteer* show the rates of wages in the State.

"The daily wages are, for skilled labour 12 as., for masons, sawyers, carpenters, and bricklayers, and 10 as., for plasterers; and for unskilled labourers 3 as. To equalize burden of the State demand for unpaid labour, masons, sawyers, bricklayers, and plasterers, bring their wages every evening to the head of their caste, and the whole is equally divided. A carpenter, out of his day's earnings, pays 4 pies, and from this sum 10 as., a day are made over to each carpenter who is working for the Nawab. The balance goes to repair rest-houses and pay for caste feasts. Each unskilled labourer receives 2 as. 9 pies. The other 6 pies is paid by the employer to a state officer who collects the amount from all employers of labour, and from it pays 3 as., to every unskilled worker engaged by the Nawab."²

Vadasinor State

The *Annual Administration Reports* throw considerable light on the wages prevalent within Vadasinor State.

The rates of wages in the year 1905-06 for skilled and unskilled labourers were from 6 to 8 annas and 2 to 3 annas per day respectively.³

The rates of wages during the year 1910-11 were higher than even in the previous year owing to large demand for labour. The wages for skilled labour were from 10 to 12 annas and those for unskilled 3 to 6 annas a day.⁴

The demand for skilled labour continued very great in the two towns on account of the construction of many buildings. Owing to the high cost of living the rates of wages rose higher than last year, i. e., varied from annas twelve to one rupee and four annas per day. The demand for unskilled labour was great and the rates of wages varied from 4 to 6 annas per diem.⁵

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panchmahals*, (1879), pp. 62-63.
2. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. VI, *Rewakantha, Narukot, Cambay and Surat States*, (1880), p. 210.
3. *Report on the Administration of the Balasinor State for the year, 1905-06*, p. 8.
4. *Ibid.*, 1910-11, p. 7.
5. *Ibid.*, 1915-16, p. 12.

The wages of labour both skilled and unskilled continued to be high during the year 1920-21. Owing to the high prices of food grains, the labourers demanded high wages. The wages for both the classes stood at Rs. 1-8-0 to Rs. 1-12-0 for skilled class and Re. 0-10-0 to Re. 0-12-0 for unskilled class. Labour was getting scarce which adversely affected the agricultural operations, on which the State mainly depend.¹

A majority of people was agriculturists, this had led to a scarcity of labourers. Most of the labourers were Mahomedans. The ordinary rate of a coolie was Re. 1 a day and that of a carpenter and a mason Rs. 2-8-0 and Rs. 2-0-0 respectively.²

The majority of the population in villages was agriculturists. They were employed in agricultural pursuits, wood cutting, carting operations, and in collecting the minor products of the forests. This had naturally led to the scarcity of labourers. Most of them were Mahomedans, Dhed and Dharalas, Bhoi and Ods come from outside the State.³ In the year 1940-41 the rates of wages per day, were as follows :

Artisans	Wages	Labourers
	Rs. A. P.	Rs. A. P.
Carpenters	1-8-0	Males 0-7-0
Brick-layers	1-4-0	Females 0-6-0
Tailors	1-8-0	

Source : Balasinor State Administration Report, 1940-41.

Period from 1895 to 1939

The data of wages in the Kheda district from 1895 to 1939 are available from the papers relating to the Second Revision Settlement of the Nadiad, Kapadvanj, Anand, Borsad, Mahamadabad and Matar talukas. They are described below.

Nadiad⁴

"The wages prevalent prior to 1914 are not available. These wages refer to Nadiad proper and are inflated by the higher wages of non-agricul-

1. Balasinor State Administration Report, 1920-21, p. 12.

2. *Ibid.*, 1927-28, p. 10.

3. *Ibid.*, 1940-41, p. 20.

4. Papers relating to the Second Revision Settlement of Kapadvanj Taluka of the Kaira District, (1942), Bombay, p. 9.

tural labour. The wages prevalent at the time of the revision settlement were three annas with three hand cakes. The value of hand cakes may be taken as 1½ annas. Thus the rate would come to Re. 0-4-6 per diem per head. The wages were Re. 0-5-9 to Re. 0-6-6 from 1914 to 1918. Thereafter, they suddenly shot up to Re. 0-8-0 in 1917, and Re. 0-13-6 in 1921 up to the year 1929. The abnormal increase is due to the post-war boom and general rise in prices. During the last decade 1930 to 1939, the wages have more or less stabilized at an average of 8-9 annas per day, i. e., at 80 per cent, above the level of the rates prevalent at the beginning of the current settlement. The New Shorrock Textile Mills at Nadiad attracted a large number of labourers both men and women from the adjoining villages within a radius of 5 miles and hence agricultural labour is comparatively dear at Nadiad and the villages in its vicinity. The rates recorded at Nadiad are higher than those prevailing in the interior villages where labourers are paid 4 to 6 annas per day. The wages paid to a permanent farm hand vary from Rs. 50 to 60 per annum plus food and clothing."

Kapadvanj¹

"The wages refer to Kapadvanj proper ordinary labour and they are inflated by the higher wages of non-agricultural labour. The variations, however, give an accurate picture of conditions in the whole taluka as the wages in interior villages, though lower than those prevailing at the taluka headquarter, rose or fell in harmony with the wages in taluka town. The wages remained stationary upto 1901 but they rose to Re. 0-3-0 per day in 1902, Re. 0-4-6 in 1907 and Re. 0-5-0 in 1913-14. Thereafter, they gradually rose still further till 1916-17 and suddenly shot up to Re. 0-8-8 in 1918-19 and Re. 0-10-0 in 1921-22. There was a fall in 1922-23 but the wages went up again and reached their peak of Re. 0-13-0 per day in 1925 and continued to be between Re. 0-9-0 and Re. 0-11-0 up to 1930-31. The abnormal increase from the year 1917-18 to 1930-31 was due to the post-war boom and the general rise in prices. Since 1931-32 the rates have returned to about normal and the average rate during the last decade is between 6 to 7 annas. This average rate is, however, double the rate prevalent at the last revision which was Re. 0-2-6 plus one meal consisting of 2 scoons and "Dal" costing roughly about Re. 0-1-0 per day. During enquiry at the villages found that labourers employed for field work in the monsoon are paid 4 annas a day and cotton pickers Re. 0-2-0 a day. The wages paid to a permanent farm hand vary from Rs. 40-0-0 to Rs. 50-0-0 per annum plus food and clothing."

1. Papers Relating to the Second Revision Settlement of the Kapadvanj Taluka of Kaira District, (1942), Bombay, pp. 8-9.

Anand¹

"These figures relate to the wages of the taluka headquarter town for ordinary labour and as such, they do not give the correct picture of those of other villages of the taluka.

"The variations, however, give an accurate picture of the conditions in the whole taluka as the wages in the interior villages, though they were lower than those prevailing at the Taluka headquarters, rose or fell in sympathy with the wages in the Taluka Town. The wages remained stationary up to 1915, and thereafter gradually rose till they reached their peak in 1920 at Re. 0-12-11 per day. After this the wages began to decline and the average during the last five years is Re. 0-6-0 per day. The wages prevalent at the time of the last revision were Re. 0-2-6 and one meal costing Re. 0-1-3 making a total of Re. 0-3-9. The average wages of the last five years were Re. 0-6-0, i. e., 60 per cent., above the level of the rates prevalent at the time of the last revision.

"It will be seen on a comparison of the fluctuation in wages and prices that both these rose during the period of the war and the post-war boom and that higher wages of recent years are solely the result of the higher prices of tobacco and *bajri* which are the principal agricultural products of the taluka.

"Labourers employed during the monsoon for field work are paid 4 to 6 annas except in Anand, Umreth and Ode, the population of which is more than 5,000 and which are towns, where the labourers get Re. 0-8-0 per day in the various non-agricultural concerns. Cotton pickers get between 2 and 3 annas. The wages paid to a permanent farm hand vary from Rs. 45 to 60 per annum plus food and clothing."

Borsad²

"The wages refer to Borsad proper for ordinary labour and they are inflated by the higher wages of non-agricultural labour. The variation, however, gives an accurate picture of the conditions in the whole taluka as the wages in interior villages, though, lower than those prevailing at the taluka headquarter, rose or fell in harmony with the wages in the taluka town. The wage remained almost stationary up to 1907-08 but they rose to Re. 0-3-9 per day in 1908-09, Re. 0-4-9 in 1913-14 and Re. 0-5-3 in 1914-15. They remained practically stationary at this level till 1917-18 when they shot up to Re. 0-8-0 and reached Re. 0-12-0 per day in 1919-20. There was a

1. *The Second Revision Settlement Reports of the Anand Taluka, Kaira District, (1942), p. 8.*
2. *Papers Relating to the Second Revision Settlement of the Borsad Taluka of the Kaira District, (1942), Bombay, pp. 8-9.*

fall in 1920-21 and the wages remained between 8-9 annas per day till 1923-24 but went up again in 1924-25 and reached their peak of Re. 0-14-4 per day in 1924-25 and continued at that level till 1927-28 except in the year 1926-27 when they were Re. 0-9-5 per day. In 1928-29 the wages showed a negligible decline of only Re. 0-0-8 but in 1929-30 they went down to Re. 0-7-10 per day. The abnormal increase from 1917-18 to 1929-30 was due to the post-war boom and the general rise in prices. Since 1930-31, the wages have declined still further and the average rate during the last decade is Re. 0-5-3. But even this average rate is double the rate prevalent at the last revision, which was Re. 0-2-6."

Mahemadabad¹

"The complaint about dearth of agricultural labour is universal. The dearth is due to the sharp fall in population since 1891. The shortage is felt seriously at the time of transplantation operations which have to be carried out simultaneously. Scarcity is also felt at the time of harvesting of *Kharif* crops. The lack of adequate supply of field labourers is to a large extent responsible for the extensive area of fallow land."

"As a result of the great war and the famine of 1918 prices of all commodities went up very high. Wages also rose and the scarcity of labour helped to keep them at the level which they reached. Agricultural wages show slight fluctuation in different parts of the taluka and in different seasons of the year. The average daily wages of a labourer employed for transplantation work or for lifting a *kos* from a well come to 9 annas including food which is worth 1 anna, while the daily wages of a labourer engaged for weeding operation or for harvesting crops come to 7 annas including food. The same wages in 1914, were 6 and 5 annas, respectively. It will thus be seen that they have risen by 50 and 40 per cent. Prices of agricultural produce wages must also decrease. But just as they are slow to rise they are also slow to fall. It is, however, anticipated that the wages of agricultural labourers will fall from the next season, but it is doubtful whether the fall will be proportionate to the fall in prices."

A detailed statement showing wage rates in these talukas is given as Appendix to this Chapter.

Matar

"The complaint about dearth of agricultural labour is universal. The scarcity is due to the enormous fall in population since 1891. The shortage is felt seriously at the time of transplantation operations which have to be

1. *Papers Relating to the Enquiry into the Current Revision Settlements of the Matar and Mahemadabad Talukas of the Kaira District, pp. 22-23.*

carried out simultaneously throughout the taluka. It is also felt at the time of harvesting of kharif crops. Lack of adequate labour is largely responsible for the large areas of fallow land. Generally a Dharala cultivator who has 4 to 5 adults in his family can manage to do without hired labour if the holding is not more than 5 acres. Transplantation of rice, however, requires hired labour as it has to be done quickly and Dheds are adept in it. Patidars and Girasias suffer far more in this respect as owing to social customs their women-folk do not help them in agricultural operations."

"The effects of the great war and the famine of 1918 caused a sudden inflation of prices of all commodities. Wages also went up and the scarcity of labourers helped to keep them at the level which they reached. Agricultural wages show slight fluctuations in different parts of the taluka and in different seasons of the year. The average daily wages of a labourer employed for transplantation work or for lifting water from a well come to 9 annas including food which is worth 1 anna, while those of a labourer engaged for weeding operations or for harvesting crops come to 7 annas including food. The same wages in 1914 were 6 and 5 annas, respectively. It will thus be seen that wages have risen by 50 and 40 per cent. Prices of agricultural produce have dropped enormously during last 4 months but wages have not yet shown any tendency to decline. It is, however, anticipated that they will fall from next season though it is doubtful whether the fall will be proportionate to that of prices of agricultural products."¹

Post-War Period (1945-1973)

The foregoing pages have shown the trend of wages in the district under the occupation of British Government, princely States of Khambhat and Vadasinor and in the talukas like Kapadvanj, Nadiad, Borsad, Mahemadabad and Anand upto 1945. The position in respect of wages in the post-war period which also coincides with that of Independence and after is dealt with below.

After Independence and the subsequent integration of the princely States into the Indian union, the wage trends prevailing in other parts of the country began to be felt in this part also. As a result, the remuneration paid to different categories of workers came to be governed by the general law of supply and demand, nature of work done and the dexterity and aptitude shown by labour.

The average daily wages for different categories of agricultural workers in the district during 1950 to 1973 are given in Statement IX-13 appended to the chapter. The statistics show that there was a general increase in the wages both for skilled and unskilled workers during this period.

1. *Papers Relating to the Enquiry into the Current Revision of the Matar and Mahemadabad Talukas of the Kaira District*, p. 8.

STANDARD OF LIVING

In general, the standard of living of the people is dependent on their income and is reflected in the pattern of their expenditure. In order to find out the prevailing standard of living, a study of the family budgets of different strata of society is useful as it reveals the economic and social well-being of these people. With this view, a family budget survey of some selected income groups of families in different strata of society, both in the urban and rural areas of this district, was conducted between June and October, 1973. The following account is based on the results obtained from the survey.

As regards the urban survey, two centres selected, viz., (1) Nadiad and (2) Khambhat (Cambay). For the rural survey, one village from each of the ten talukas was selected so as to give a broadly representative picture of the standard of living in rural areas.

Rural Sector

It has to be noted that the standard of living in the rural areas differs to a great extent from that obtaining in the urban areas. To begin with, the assessment of the standard of living in rural area is itself difficult. This is because of the predominant agricultural characteristics of the economy as the majority of people living in the rural areas are cultivators. They consume foodgrains, vegetables, etc. produced on their own fields. Their value in terms of money is therefore, not easily determinable. Kheda district is agriculturally very prosperous and is a chief producer of tobacco and cotton which are the principal cash crops. However its production of food crops is also considerably high. As a rule, therefore, the cultivators do not normally purchase foodgrains from the market and to that extent there are no money transactions. Again, a number of small cultivators are also engaged in supplementary occupations such as livestock, dairying, etc. Moreover, as a rule, the cultivating class was found to be a little more hesitant to supply exact and correct data about their income and expenditure. The results obtained in this survey should therefore be studied in the background of these limitations.

For the purpose of this survey, the families in rural areas were divided into two main groups, viz., (1) Agriculturists, and (2) Non-Agriculturists. The Agriculturists were again divided into three categories according to the size of their holdings. All those having less than five acres of land holdings were grouped under small cultivators; those possessing more than five but less than 25 acres were termed as medium cultivators and those having more than 25 acres of land were grouped as large cultivators. Non-agriculturists included casual labourers, village artisans, school teachers, traders, etc.

Cultivating Classes

It would be helpful to study the size of the landholdings of the various groups, before examining the family budgets of the cultivating classes. The details about the number of landholders and the area of their holdings in 1971-72 are given in the following statement.

STATEMENT IX-4**Size of Landholdings, 1971-72**

Sl. No.	Size of holdings	No. of holders	Percentage to total holders	Area held in acres	Percentage to total area held
1	2	3	4	5	6
1	Upto 5 acres	2,09,982	75.15	5,12,358	39.30
2	Above 5 and upto 25 acres	65,172	23.32	6,96,152	53.40
3	Over 25 acres	4,268	1.53	95,169	7.30
	Total	2,79,422	100.00	13,03,680	100.00

Source :
Collector, Kheda District, Kheda.

The above statement reveals that a very large majority, more than 75 per cent of cultivators, are small land holders. However, they held between them only 39 per cent of the total cultivated land. Only 1.53 per cent of the total landholders are large cultivators who possess between them nearly 7.30 per cent of the total land, each one of them having more than 25 acres. About 23 per cent of the total landholders are medium cultivators each cultivating more than 5 acres but less than 25 acres of land. More than half of the agricultural land is being cultivated by such medium land holders.

The Small Cultivators—This group of cultivators forms the lowest wrung of the agricultural class in the rural areas. To study their standard of living, 49 families from this group were selected. As their holdings were not economic, they had to supplement their income by working as labourers also. The average size of a family in this group was seven of whom two were earners. The average annual income of a family was estimated at Rs. 3,264 and the expenditure at 4,872. However, only 14 families reported surplus budgets. They were those having

fertile area of cultivated land with high yield of cash crops especially, tobacco. The rest were heavily indebted. Their debt varied from Rs. 500 to Rs. 5,000. On the whole, they lived a simple life. Their requirements were few and simple. About 60 per cent of their total expenditure was spent on food, nearly 11 per cent on clothing and 5 per cent on *bidi*, tea, etc. They spent about 5 per cent on social customs and on religious ceremonies, 4 per cent on medicine, 2 per cent on travel and about 1 per cent on education. About 75 per cent of the families lived in their own houses which were small in size and inadequately ventilated.

The Medium Cultivators—The medium cultivators are those who possess more than 5 acres but less than 25 acres of land. They formed nearly 23.32 per cent of the total agricultural population and held between them nearly 53.40 per cent of the cultivated land. Of the 51 families surveyed from this group, only 13 had surplus budgets, while the remaining 38 had deficit budgets. The debt was mainly incurred for agricultural purposes or for incurring expenditure on social customs. A family on an average consisted of seven members of whom two to three were earners. The main source of their income was farming. The expenditure pattern of this group showed that more than half of their total expenditure was spent on food. Clothing accounted for 15 per cent. Education accounted for about 4 per cent while expenditure on social customs claimed nearly 8 per cent. Tea, *bidi* and tobacco accounted for about 5 per cent. Many of them hired servants to work on the field. This accounted for about 5 per cent of their expenditure. It was found that almost all the families lived in their own houses.

The Large Cultivators—The group of large cultivators includes agriculturists with land holdings of more than 25 acres. The large cultivators constituted only 1.53 per cent of the total landholders and possessed among them 7.30 per cent of the total cultivated land. From this group, 34 families were surveyed, 14 of whom reported surplus budgets, while the remainder reported deficit budgets. More than fifty per cent of the families were reported in debt. The debt was incurred mainly for agricultural purposes. On an average, the number of members in a family was 9, of whom 4 to 5 were earners. The average income of a family under this group was calculated at Rs. 11,326. The average expenditure per family came to about Rs. 12,052, showing a deficit of Rs. 726 every year. Their expenditure on food could not be calculated precisely, as their food requirements were mostly met from their own produce. However, it was found that on an average, they spent 38 per cent of their total expenditure on food. The expenditure on clothing worked out to nearly 15 per cent. Their expenditure on social obligations and religious ceremonies was nearly 5 per cent. They spent a little less than 4 per cent on education. Tea, *bidi*, and tobacco accounted for another 5 per cent. The hired labour also cost them about

6 per cent of their total expenditure. All the families owned houses. This group of families, was reported to live a fairly comfortable life as compared to the previous two groups.

Non-cultivating Classes

This class includes labourers, village artisans, small traders and salaried people living in rural areas. Of the 44 families surveyed from this class, 31 reported deficit budgets, while the rest just managed to make both ends meet. Nearly 75 per cent of them were in debt, the highest debt reported being Rs. 6,500. The debts were mostly incurred either for building a house or for meeting a social obligation. Their average annual income was about Rs. 3,000 while their average expenditure was Rs. 3,400. They spent nearly 60 per cent on food, 9.24 per cent on clothing, 4.50 per cent on tea, *bidi*, tobacco, etc., 6.50 per cent on social and religious customs, 4 per cent on education, about 1 per cent on medicine and the remainder on miscellaneous items such as fuel and lighting, house repairs, etc. It was found that compared to village artisans and small traders the salaried people suffered more due to rising prices and their limited income.

Urban Sector

The centres selected for the urban survey were (i) Nadiad and (ii) Khambhat.

The urban population of the Kheda district according to the 1971 Census is 4,89,030 which forms 19.95 per cent of the district population. The corresponding proportion of urban population in the State is 28.08 per cent. The district has 16 towns of which Nadiad is the biggest having a population of 1,08,269 or 22.14 per cent of the total urban population of the district. Nadiad acquired the status of a city for the first time at the 1971 Census. It is the biggest urban centre in the district but it is the smallest of the 7 cities of the Gujarat State with a population of more than one lakh. Besides being the biggest centre, Nadiad occupies an important place as an educational and administrative centre of the district. It is also an important trade and industrial centre. The second biggest centre in the district is Khambhat with a population of 62,097 persons. It is one of the most ancient towns of the district and is famous since long for its handicrafts and of late due to the discovery of oil and natural gas.

The survey examined three groups of families in each of the two centres.

- (1) Group-I (Families having an annual income of less than Rs. 2,500)
- (2) Group-II (Families with an annual income between Rs. 2,501 and Rs. 5,000) and
- (3) Group-III (Families having annual income of more than

Rs. 5,000). Special care was taken to make the survey as representative as possible by covering persons engaged in various occupations and services.

Group I (Annual Income less than Rs. 2,500)—This group represents the lower-most stratum of the urban population and includes a vast majority of the city population composed of unskilled and semi-skilled labourers, *gumastas*, petty shop keepers, petty artisans, peons, etc. 16 families were surveyed from this group. The average size of the family was of 5 members of whom only one was earner. The average annual income per family was Rs. 1,473. The annual expenditure averaged to Rs. 1,955 showing an average annual deficit of about Rs. 500 per family. The survey revealed that the bulk of the expenditure amounting to nearly 65 per cent of the total was spent on food. The food which they consumed was reported to be inferior in quality. Clothing accounted for a little more than 10 per cent. Thus, food and clothing, their main requirements, accounted for about $\frac{3}{4}$ of their total expenditure. Hardly anything was thereafter left for other items of expenditure. They had to spend nearly 3 per cent on medicine and an equal proportion on social obligations. Nearly 4 per cent was spent on tea, *bidi*, etc., about 7 per cent on fuel and lighting, nearly 3 per cent on toilet soap, hair oil, etc., and about 2 per cent on housing. Education accounted for barely one per cent. The living conditions of the people were hardly comfortable as the essential requirements of the daily life left them with almost nothing to spend on items other than bare necessities of life. All except one of the families surveyed, were in debt, and did not have any savings to fall back upon in times of difficulty. Almost all of them lived in rented houses which were very small in size. The level of literacy was also very low though all families surveyed sent their children to school. They could, thus take advantage of the policy of free primary and secondary education implemented by the Government of Gujarat.

Group II (Annual Income between Rs. 2,500 and Rs. 5,000)—This group represents a typical middle class family. It is composed of school teachers, clerks, small traders, skilled and semi-skilled workers, petty shop keepers and others such as persons self-employed in small occupations. 23 families were surveyed from this group. They had an average size of 6 family members of whom only one was earner. The average annual income per family was Rs. 3,350. The average expenditure was Rs. 4,785 showing deficit of nearly Rs. 1,435 per family. The pattern of expenditure in this group was not much different from that of the previous income group. On an average nearly 60 per cent was spent on food items, 9.68 per cent on clothing, 2.50 per cent on religious and social obligations, 4.75 per cent on medicines, nearly 5 per cent on housing, about 4 per cent on fuel and lighting and about 2.50 per cent on soap, hair oil, etc. Their expenditure on medicine was the highest among all groups both in the rural and urban areas. Their expenditure on education accounted for 3.58 per cent. They

spent 1.25 per cent on entertainments. These variations as compared to the former group partially reflect a higher social status of this class of people that call for greater expenditure on education, social occasions, medical treatment, etc. This also indicates, to some extent, their ability to spend a little more on such items. However, economic condition of this class is very greatly affected by rising prices as their earning capacity being limited (almost all families had only one earning member) they could hardly make both their ends meet in abnormal conditions of soaring prices such as the one that prevailed at the time of the survey. As noted earlier, in the majority of the cases the expenditure exceeded the income. The deficit was met by disposing of property or mortgaging ornaments or by incurring debt or by postponing the payment of monthly bills, by turn.

Group III (Annual Income more than Rs. 5,000)—This group is composed of higher paid public servants, shop keepers, merchants, technicians, medical practitioners, etc. They normally lived fairly comfortable life as they were economically happy. 21 families were selected from this group. The family on an average consisted of 7 members of whom two were earners. Most of the family members were reported as educated. Their total income averaged to Rs. 9,815 while their total annual expenditure worked out to Rs. 9,460 showing an average annual saving of Rs. 355. A large majority of families in this group had either surplus of balanced budgets. Only four families reported that they were in debt. On an average, a family under this group spent nearly 47 per cent on food, 9.85 per cent on clothing, 6.20 per cent on education and nearly 3 per cent on social obligations. Thus, their expenditure on education was the highest among all groups surveyed both in the rural and urban areas of the district. Similarly their expenditure on entertainments was also the highest, being nearly 3 per cent. They spent 3.20 per cent on medicine, 2.50 per cent on toilet, soap, hair oil, etc., and an equal amount on sweetmeats, fruits, etc. A majority of them lived in hired premises and paid quite a high rent, in some cases more than Rs. 200 per month. 25 per cent of the families surveyed reported that they lived in their own houses. They lived in spacious houses and had a number of costly household equipments and items of furniture, etc. As against other two groups, all families in this group had employed full time or part-time domestic servants.

General Level of Employment

The 1961 Census for the first time made actual assessment of total working force and its distribution into main sectors of the economy. The comparison with the previous Census data would be helpful in determining the extent of shift of population from one sector to another, as shown in the following Statement IX-5.

STATEMENT IX-5

Percentage Distribution of Working Force by Sector between 1951 and 1961

PRIMARY SECTOR							
Total		As cultivator		As agricultural labourer		In mining, quarrying, livestock, forestry, fishing, hunting, plantations, orchards and allied activities	
1951	1961	1951	1961	1951	1961	1951	1961
76.01	72.75	49.19	54.89	24.61	17.19	2.21	0.67
SECONDARY SECTOR							
Total		At household industry and in manufacturing other than household industry				In construction	
1951	1961	1951	1961	1951	1961	1951	1961
7.91	11.83	7.27			10.90	0.64	0.93
TERTIARY SECTOR							
Total		In trade and commerce		In transport, storage and communication		In other services	
1951	1961	1951	1961	1951	1961	1951	1961
16.08	15.42	4.62	4.60	0.91	1.40	10.55	9.42

Source : Census of India 1961, Vol. V, Gujarat, Part I-A (iii), *General Report on the Census, Economic Trends and Projections*, (1965), pp. 12-13.

In this district, out of the total working force, 72.75 per cent was engaged in the basic sector concerning cultivation and mining, quarrying, forestry, etc. In comparison to 1951, there has been a slight decline in the working force engaged in the primary sector but there is corresponding increase in the working force in the secondary and the tertiary sectors.

Even in the primary sector, there is a decline among persons working as agricultural labourers and in mining, quarrying, plantations, etc. The reason is that the district has only 3.5 per cent of land under the forests. Further the districts' mineral wealth is limited to bauxite and lime-stone found in the Vadasinor and part of Kapadvanj talukas. There is, however, an increase of 5.70 per cent as cultivators in the decade. This may be due to the implementation of the land reforms measures, whereunder occupancy rights were conferred upon tenants.

In the secondary sector, the total working force has increased by 3.92 per cent during 1951-61. This is reflected in the number of persons working in industry, both household and manufacturing and in construction. But in the tertiary sector there is a slight decline in the total working force which was confined to trade and commerce and other services.

The following Statement IX-6 shows variations in employment of the working population in different industrial categories during 1951-61.

STATEMENT IX-6

Variation in Working Population by Industrial Categories between 1951-1961

Sectors 1	District		Increase or decrease 1951-1961 4	Percentage increase or decrease 1951-1961 5	Gujarat State
	Working Population				Percent- age incre- ase or decrease
	1951 2	1961 3			1951-1961 6
All Sectors	602,513	684,038	(+) 81,525	(+) 13.53	(+) 28.91
Primary Sector	457,989	497,657	39,668	(+) 8.66	(+) 33.13
As cultivator	296,367	375,457	(+) 79,090	(+) 26.69	(+) 53.09
As agricultural labourers ..	148,294	117,624	(-) 30,670	(-) 20.68	(+) 2.17
In mining, quarrying, lives- tock, forestry, fishing, hunt- ing, plantations, orchards and allied activities ..	13,328	4,576	(-) 8,752	(-) 65.66	(-) 55.62
Secondary Sector	47,671	80,933	(+) 33,262	(+) 69.77	(+) 63.07
At household industry and in manufacturing other than household industry ..	43,811	74,535	(+) 30,724	(+) 70.12	(+) 61.87
In construction	3,860	6,398	(+) 2,523	(+) 65.75	(+) 79.21
Tertiary Sector	96,853	105,448	(+) 8,595	(+) 8.87	(-) 1.30
In trade and commerce ..	27,859	31,441	(+) 3,582	(+) 12.85	(+) 0.40
In transport, storage and communications ..	5,456	9,586	(+) 4,130	(+) 75.69	(+) 59.30
In other services	63,538	64,421	(+) 883	(+) 1.38	(-) 8.59

Source :

Census of India 1961, Vol. V, Gujarat, Part I-A (iii), General Report on the Census, Economic Trends and Projections, (1965), pp. 10-11.

The total working force in all the sectors increased by 13.53 per cent between 1951 and 1961 in the district as against the State average of 28.91 per cent. In the primary sector, the average decennial growth is of the order of 28.68 per cent, but there is decline in working force employed as agricultural labourers, on account of the implementation of land reforms laws.

In the secondary sector, the average working force increased by 69.77 per cent. Of these, a majority was found engaged in household industry and in manufacturing other than household industry and in construction activities on account of implementation of the Five Year Plans.

In the tertiary sector, the average increase is confined to the workers engaged in transport, storage and communications services.

EMPLOYMENT EXCHANGE

The Government of India has opened the Employment Exchanges at important centres throughout the country from July 1945 to assist in the resettlement of ex-service personnel and discharged War workers. Now a days, the National Employment Service is available to all the persons who wish to register themselves for employment assistance and to all employers who desire to make use of it.

The Employment Exchange at Nadiad was established in the year 1959 under the control of the Director of Employment of the Government of Bombay.

The functions of the employment exchange have been divided into three sections, as shown below.

(1) The exchange side gives assistance to registrants according to their qualifications and aptitude, and collects information about vacancies,

(2) The employment market information unit carries out surveys on employment, and

(3) The vocational guidance unit provides vocational guidance and counselling to job seekers in choice of their careers, collects data regarding training facilities and arranges career talks, distributes career pamphlets/charts, etc., to institutions.

A separate employment bureau has been started at Vallabh Vidyanagar from 1965 to provide guidance and facilities to the students of the Sardar Patel University.

The following Statement IX-7 gives the Employment Exchange Statistics of the district for the period 1969 to 1973.

STATEMENT IX-7

Employment Exchange Statistics from 1969 to 1973

Year	No. of candidates registered	No. of candidates placed in employment	No. of live register at the end of each period	No. of employers using exchange	No. of vacancies notified
1	2	3	4	5	6
1969	11,662	992	8,840	388	1,473
1970	13,810	835	11,757	488	2,084
1971	15,224	1,408	16,017	586	2,308
1972	15,964	1,096	17,020	600	1,976
1973 (upto 31.3.1973)	3,820	324	71,083	191	701

Source : District Employment Officer, Nadiad.

The statement reveals that the exchange has made remarkable progress. The number of candidates registered increased by 36.89 per cent. Similarly those on the live register increased by 93.25 per cent. The number of persons placed in employment through the exchange medium were the highest in 1972. Similarly, number of vacancies notified by the employers have also increased.

NATIONAL PLANNING

The National Planning Committee of the Indian National Congress in the pre-Independence days created an atmosphere for the planned development in the country on the achievement of Independence. The Constitution of India provided for the establishment of a Welfare State for the people based on the Directive Principles which promise equality of income and opportunity to all citizens in the country. Thereafter, the First Five Year Plan was launched in 1951. It aimed at achieving a balanced growth of the economy and also assured improvement in the standard of living of the people. For economic advancement of the country, it laid down definite

schemes, with targets of progress in various sectors of the economy and resolved to make stimulated efforts to achieve them within a specified period. It opened up new avenues of gainful employment for the masses and helped ensure a richer and fuller life to the people. It was followed by the Second, Third and Fourth Five Year Plans.

Perspective Planning

The Perspective Plan of Gujarat State 1974-84 coinciding with the Fifth and the Sixth Plans has been prepared keeping in mind the requirements of finance, inputs, infrastructure, necessary institutional and organisational change, requirements of know-how, personnel, employment and output targets and the possible impact of these variables on different regions of the economy of Gujarat.

Such a long-term perspective is indispensable for achieving notable success in the Annual and the Five Year Plans. Various sectors of economy like agriculture, industry, power, transport and social services have to be properly dovetailed and inter-linked with considerable care and attention. It was, therefore, decided during the President's rule in Gujarat that a ten-year Perspective Plan should be prepared on an emergency basis. The reconstituted State Planning Advisory Board appointed several Working Groups in July, 1971 for preparing the outline of the Perspective Plan for the sectors allotted to them. A Steering Group was also set-up to co-ordinate the Reports of the Working Groups and prepare a consolidated Perspective Plan for the State. The Working Groups submitted their Reports by the middle of November, 1971, and were considered by the Steering Group by the end of November, 1971. The outlines of the Plan were finalised at its second meeting in January, 1972.

In accordance with the general pattern of national planning in India, the basic objectives set out for the Perspective Plan of Gujarat are : (1) full employment of the available manpower and natural resources, (2) maximum production in agriculture and industry, (3) equitable distribution of wealth among different segments of the population, specially the weaker sections, (4) balanced development of all regions, and (5) self-reliance in agriculture and industry with maximum import substitution.

A long-term perspective worked out in sufficient detail brings out the inter dependence between the different sectors of economy and helps in a clearer understanding of possible obstacles to the growth of the economy. It also enables a developing country to take consistent and timely decisions regarding the optimum uses of its resources, economies of scale and location and regional distribution of economic activities.

Perspective Planning is not a magic wand which can cure all the ills of a developing economy faced with all types of shortages and tensions. It is a *modus operandi* which facilitates smooth, and meaningful operation of the planning processes and helps to devise remedial measures in the course of experience gained by making adjustments for unforeseen difficulties and unpredictable fluctuations in the economy.

During the First Five Year Plan period, Gujarat did not exist as a separate State. At that time, Saurashtra and Kachchh were separate entities while the rest of the area comprising the present Gujarat State formed part of the former Bombay State. On the formation of a bigger bilingual Bombay State in 1956, the areas comprising the present Gujarat State were included in it. The Bombay State was, however, bifurcated during the course of the Second Five Year Plan and Gujarat State came into existence in May, 1960 towards the fag end of the Plan. Despite various strains and stresses in the initial stages, the Second Plan of Gujarat was completed with considerable success. The Third Five Year Plan was the first co-ordinated effort for the development of all the areas of Gujarat. The implementation of the Third Plan also proved to be quite satisfactory. With a sizeable improvement in the State's resources, the Fourth Plan was formulated for achieving further development in Gujarat.

District Planning—It is evident that Plan formulation exclusively at the State level cannot possibly take fully into account the variety of conditions existing in the different regions of the State. The importance of district planning has thus been recognised for ensuring the rational utilisation of resources, reduction of intra-State imbalances as well as proper co-ordination and implementation of development programmes.

With the establishment of Panchayati Raj from April, 1963, the State Government has devolved part of its authority to the Panchayati Raj institutions as a measure of democratic decentralisation.

The District Panchayats were called upon to formulate detailed proposals in respect of district level schemes whether transferred to Panchayats or retained by Government. It was implied for the District Panchayats to treat a scheme as a district level scheme, if its targets were amenable to district-wise break-up. Further the percentage distribution of the expenditure incurred during the past few years on district level schemes under different sectors of development served as a reasonable criterion for working out tentative sectoral break-up of the district-wise outlay.

To help the District Panchayats in the matter of timely formulation of the Plan proposals, an Official Committee was appointed to study the

problems of planning machinery at the district level both in the District Panchayat and in Government and to make suitable recommendations.

Government has recently appointed a District Planning Board in each district with the District Panchayat President as Chairman. Besides the members of Parliament and the State Legislature from the district, the District Collector and the District Development Officer are its members. The duties and functions of the District Planning Board are as under :

1. To study the socio-economic situation of the District continuously.
2. To render advice in the formulation of Five Year Plans.
3. To formulate well-planned and realistic programmes and schemes for ensuring balanced development in different spheres.
4. To give advice to raise financial resources of all the three tiers of Panchayats.
5. To suggest model schemes so as to ensure better planning and implementation of the local level schemes from Panchayats' own funds, and
6. To undertake a regular and effective review and evaluation of all the district level schemes and programmes.

Under the Plans, the State and district plans are thus formulated keeping in view the concept of the Welfare State and are implemented through the district administrative machinery which has been geared and greatly strengthened to meet the tasks of development. For each scheme of development, a target is fixed and the estimates of expenditure are worked-out to achieve the desired social and economic goals.

As the details about the sectoral expenditure incurred in the district during the First Plan period are not available, it is not possible to analyse the development achieved in different fields in the district. It can, however, be said that First Plan was instrumental in preparing the base for subsequent intensive development of agriculture and irrigation, large, medium and small industries and power, transport and communications and social services like education, health, labour welfare, etc. The implementation of land reforms measures is one of the significant steps of the planning era in the State.

The expenditure incurred from the Second Plan onwards upto 31st March, 1972 on different sectors of the economy is shown in the following Statement.

STATEMENT IX-8

Expenditure Under the Plans, Upto 31st March, 1972

Sl. No.	Name of the Head	IIInd Plan Expenditure in Rs.	IIIrd Plan Expenditure in Rs.	Annual Plans Expenditure in Rs.	IVth Plan Expenditure in Rs. 1969-1972
1	2	3	4	5	6
1	Agricultural programmes	5,49,93,205	18,99,609	28,37,314	35,82,455
2	Land Development	N.A.	6,12,913	6,68,259	9,45,503
3	Minor Irrigation	N.A.	31,74,710	63,34,165	45,97,528
4	Warehousing and Marketing	N.A.	N.A.	3,20,719	2,08,170
5	Animal Husbandry	N.A.	6,88,115	17,49,668	7,76,749
6	Forest	N.A.	85,234	34,061	N.A.
7	Soil Conservation	N.A.	N.A.	27,36,134	14,46,344
8	Fisheries	N.A.	1,03,315	1,14,360	N.A.
9	Community Development, Rural Development, etc.	N.A.	85,76,557	44,19,759	21,94,007
10	Co-operation	N.A.	22,36,045	3,86,054	30,75,888
11	Irrigation and Power	7,99,18,898	2,60,60,000	N.A.	N.A.
12	Industry and Mining	2,08,131	6,13,456	3,98,826	7,56,073
13	Transport and Communi- cations	1,36,27,309	1,02,17,889	69,21,924	99,98,085
14	Education	25,97,292	80,44,267	65,78,146	44,22,774
15	Health	20,93,518	57,54,176	33,42,743	93,70,766
16	Housing	3,87,727	4,34,598	42,604	4,22,560
17	Other Social Services	4,46,133	12,29,407	8,93,283	5,94,034
18	Scientific and Industrial Research	16,766	1,54,950	N.A.	N.A.
19	Information and Publicity	N.A.	N.A.	13,626	7,770
20	Statistics	N.A.	N.A.	1,507	25,529
21	Dairy and Milk Supply	N.A.	N.A.	N.A.	85,394
22	Miscellaneous	N.A.	30,005	N.A.	N.A.
Total		15,42,88,979	6,99,16,246	8,77,93,152	4,25,18,689

N. A. = Not available.

Source : The District Development Officer, Nadiad.

The statement reveals that a total of Rs. 30.45 crores was spent from 1956-57 to 1971-72. Of these the Second Plan accounted for 50.66 per cent, the Third Plan 22.95 per cent, the Annual Plans 12.41 per cent and the Fourth Plan 13.96 per cent respectively.

In the Second Plan, importance was given to the execution of schemes under irrigation and power. The expenditure incurred amounted to 51.79 per cent. Augmenting of water resources for increasing the farm output and generation of power for industrial uses and as well as pumps and electric motors installed on the wells were of prime necessity. Agricultural programmes accounted for 35.64 per cent of expenditure followed by development of transport and communications facilities 8.83 per cent.

In the Third Plan importance was attached to irrigation and power, transport and communications, community and rural development, education, health, minor irrigation and co-operation. These heads jointly accounted for 92.63 per cent of expenditure under the Third Five Year Plan.

Under the Annual Plans priority was assigned to the development of transport and communications, education, minor irrigation, community development, health, agricultural programmes including animal husbandry and soil conservation. The percentages of each head respectively are 18.31, 17.40, 16.76, 11.69, 8.84 and 19.37.

In the Fourth Plan upto 31st March, 1972 expenditure to the tune of 4.25 crores was incurred. Of these, development of transport and communication facilities accounted for 23.51 per cent, health 22.05 per cent, minor irrigation 10.81 per cent, education 10.40 per cent and agricultural programmes 8.42 per cent respectively.

Thus it can be seen that irrigation and power including minor irrigation, transport and communications, agricultural development, education and health were implemented on a priority basis.

As stated above out of the total investments in the district under the Plans, all types of irrigation schemes and generation of power accounted for 39.43 per cent of the total expenditure. Agricultural programmes including land development, soil conservation accounted for 22.89 per cent. The outlay on the development of transport and communications facilities amounted to 18.38 per cent. These three sectors jointly claimed 75.70 per cent. Social services like education and health respectively claimed 7.10 per cent and 6.75 per cent of expenditure respectively.

Sources :

- (1) Government of Gujarat, *Perspective Plan of Gujarat*, (1974-84).
- (2) *Draft Fifth Five Year Plan*, Government of Gujarat, (1974-84), 1973.

COMMUNITY DEVELOPMENT PROGRAMME

For the development of socio-economic life of teeming millions of India, a novel experiment, popularly known as the "Community Development Programme" to be implemented by the rural folk themselves through self and mutual help with assistance from local leadership was inaugurated from 2nd October, 1952. The programme aims at securing a co-ordinated development of rural life as a whole. The programme includes development of agriculture, minor irrigation, rural health and sanitation, village roads, education and small-scale industries, etc.

In this district, community development programme was initiated on 2nd October, 1953 with the inauguration of Nadiad, Mahemadabad and Kapadwanj blocks.

The community development is altogether a new and scientific endeavour for an integrated approach to the problems of rural development based on public participation and working through representative institutions of the people.

In the beginning, three types of development blocks known as the National Extension Services, Community Development and Post-Intensive blocks were conceived, which marked three different phases of development in the rural areas. The National Extension Service was a preparatory period when the area was prepared for receiving a heavy dose of development during the next stage of Community Development. It was envisaged that thereafter the development generated would be maintained.

It was felt that community development programme failed to evoke and enlist the participation of the people in implementation of the development schemes, because the local institutions could not be developed to the extent desired. There was very little of enthusiasm from the public as was expected. The whole implementation presented a picture of imposition from outside instead of coming from within the masses. Thus the aspirations expected to be aroused by this programme did not come up. In 1957, the Planning Commission, therefore, appointed the Balwantray Mehta Committee to examine the working of the community development programme and related matters and to recommend measures for improving its quality and content. The Committee recommended organisational changes. In pursuance of its recommendations, the distinction between the N. E. S. stage intensive development stage, and the post-intensive stage was abolished from 1st April, 1958 and all the blocks under all-India programme except blocks in the community development stage, which had then not completed three years, were classified into stage I and stage II blocks, with the revised financial pattern and the periods of operation. The community development blocks on completing stage I period would enter stage II. A stage I block

has a five year period of operation with a ceiling of expenditure of Rs. 12 lakhs. It is the intensive development phase in which the people's participation is to be promoted as a means of community development by a closer association of gram panchayats with the formulation of plans for their respective areas. The degree of success attained during the first stage would be evidenced by the growth and functioning of self-reliant rural communities which was the basic objective of the programme. After completing stage I, the blocks would enter stage II and then the post-stage II of the programme.

On 31st March, 1973, there were 10 community development blocks in the district. Of these two were stage II blocks at Borsad and Petlad and eight post-stage II blocks at Khambhat, Matar, Anand, Vadasinor, Thasra, Nadiad, Mahemadabad and Kapadwanj. Detailed particulars of starting of each blocks, expenditure incurred and people's contribution, etc., upto 31st March, 1973 are given in the following Statement.

STATEMENT IX-9
Community Development Programme, upto 31st March, 1973

Sl. No.	Name of Block/Taluka	Date of starting the block	Total Expenditure incurred upto 31-3-1973 Rs.	Total contribution by the people upto 31-3-1973 Rs.
1	2	3	4	5
A. COMMUNITY DEVELOPMENT STAGE II BLOCKS				
1	Borsad, taluka Borsad	.. 1st April, 1960	48,86,911	4,79,066
2	Petlad, tauka Petlad	.. 1st April, 1960	37,47,265	80,207
	<i>Total of stage II blocks</i>	..	86,34,176	5,59,273
B. COMMUNITY DEVELOPMENT POST-STAGE II				
1	Nadiad, taluka Nadiad	.. 2nd October, 1953	22,21,694	6,13,603
2	Mahemadabad, taluka Mahemadabad	.. 2nd October, 1953	28,25,142	9,81,216
3	Kapadwanj, taluka Kapadwanj	.. 2nd October, 1953	59,04,245	9,80,830
4	Vadasinor, taluka Vadasinor	.. 2nd October, 1954	14,85,596	3,50,125
5	Thasra, taluka Thasra	.. 2nd October, 1955	42,34,665	8,06,783
6	Anand, taluka Anand	.. 1st April, 1958	46,75,312	11,02,816
7	Khambhat, taluka Khambhat	.. 1st April, 1959	28,93,373	3,76,722
8	Matar, taluka Matar	.. 2nd October, 1959	22,35,311	2,67,300
	<i>Total of post-stage II blocks</i>	..	2,64,75,338	54,79,295
	Grand Total	..	3,43,09,514	60,38,568

It will be seen that, the entire district has been covered by the community development programme. The total expenditure incurred on these blocks upto 31st March, 1973 was Rs. 343 lakhs and people's contribution was Rs. 60,38,568.

The details about physical achievements upto 31st March, 1973 for the schemes undertaken under the programme are given in Statement IX-14 appended to the Chapter. It illustrates the fact that the development programme have created among the people, requisite consciousness about the needs and aspirations for their betterment.

TRENDS OF DEVELOPMENT

Economic progress of a region depends on a number of factors such as the availability of the natural resources, fertile soil, mineral wealth, forests, etc., and facilities for their exploitation. Further, the availability of technical know-how, adequacy of financial resources, environmental climate, etc., are other essential factors for the development.

With the promulgation of the Democratic Republican Constitution in 1950, the State has become a Welfare State. It has to play a parental role in fostering economic development. The planning era commenced with the launching of the First Five Year Plan in 1951. The aims and objectives enunciated in its preamble aroused among the masses hopes and aspirations for betterment in their living standards, etc.

The former princely States were integrated with the rest of the country and viable units formed. Thus when the First Five Year Plan was launched, there were no vestiges of feudalism. As a result, reforms measures and other enactments were uniformly applied to all the areas. In the Gujarat State, occupancy rights were conferred on tenants in order that they may have a stake in the land they tilled, with a view to increasing agricultural production.

Kheda district has witnessed planning era from 1951-52 onwards. Considerable socio-economic progress has been made during the course of planning. Several factors are responsible. The soil of the district is the most fertile in the whole of the State. The people are also industrious and resourcefull. Planned development has helped to change the entire perspective of the district. The following narration helps to illustrate the progress made in different fields in the district.

The district has urbanised tremendously after the onset of planning. There are at present 17 towns with a total population of 489,030 according to 1971 Census. The rural population comprised 1,962,357 persons according to this Census.

Agriculture has been the mainstay of economic development, as 71 per cent depend on agriculture and allied activities. The farmers of the district are progressive and have adopted modern techniques of cultivation, use of improved seeds and chemical fertilisers, the use of which was not known before Independence. Improved hybrid varieties have increased the outturn of crops in the district. In this respect, the following figures are illustrative.

Category		1949-50	1969-70
Area under foodgrains	..	358,500 hectares	383,200 hectares
Area under cash crops	..	63,100 "	120,900 "
Area under irrigation	..	21,600 "	129,900 "
Area under forests	..	0.21 per cent	1.68 per cent
Foodgrains production	..	240,100 tonnes	446,600 tonnes
Cash crops production	..	54,900 "	138,400 "
Tractors (No.)	..	117	1,760
Total cattle wealth (No.)	..	N.A.	841,479
Wells	..	"	16,490 used for irrigation
Tanks	..	"	6

N. A = Not available.

Canals from Meshvo and Mahi rivers also provide irrigation facilities to 50,618 hectares of land. On completion of the Kadana project, 1,828 hectares more would be brought under irrigation.

The concept of co-operation is best illustrated in the Kheda district. Since Independence, great stress has been laid on covering all the villages under co-operation. As a result of these efforts, a hundred per cent coverage has been made in respect of villages in the State. In this district the number of primary agricultural credit societies rose from 251 in 1951-52 to 647 in 1971-72. The Amul Dairy, which is the largest of its kind in Asia has completed 25 years of its existence and has helped distribution of pasteurised milk, butter, pure ghee, etc., by improving the qualities of buffaloes by providing them nutritious cattle feed, for which a factory to produce *Amul Dan* has been established at Kanjari. The milk yield per buffalo has been increased to 20.1 litres a day. The Kaira District

Co-operative Milk Producers' Union also gives reasonable returns to milk producers at Rs. 4 to Rs. 5 a day against a very meagre return before the formation of milk producers' society.

As the district is mostly dependent on agriculture, agro-based industries have developed. There were practically no industries before Independence. The district is noted for exports of tobacco and its products. Oil crushing, ginning and pressing, and rice husking are the main agro-based industries in the district. Cotton textile industry is concentrated in Petlad, Nadiad and Khambhat. A number of industries have developed around Anand and Nadiad. Cement manufacture is found at Sevaliya whereas electrical accessories, soap industry, steel furniture industries have developed around Nadiad. At the end of the Third Five Year Plan, there were 458 factories under the Factories Act 872 small industries. There are four industrial estates for the development of small industries. Infrastructure facilities like electricity, water, roads, etc., have been provided. Of these three are owned by Government and one is privately owned near Mahemadabad. Kheda district has become famous for its oil and gas finds in Khambhat and Matar talukas. 17 wells have been drilled from which oil and gas have been obtained. Dhuvaran Thermal power station has been instrumental in increasing industrial production and also rural electrification. A total of 472 villages have been electrified till March 1972.

There exists good prospects for establishment of agro-based industries like cotton-seed oil, rice bran extraction, potato flour, soda ash, surgical cotton and chemicals, rice pulp straws, special grade paper, cigarettes, nicotine acid, petro-chemicals, etc., mineral based industries for exploitation of bentonite, china clay, lime stone and oil and natural gas, and marine based industries for development of bye-products of salt. Financial accommodation is provided by commercial banks also. Their number has increased from 6 in 1947 to 116 in 1970. Besides, the statutory corporations established by the State and Central Governments meet credit requirements of industries large, medium and small. They tender technical advice too.

A net work of roads has been constructed in the district for movement of passengers and goods. As no new rail-lines have been laid, there has not been any expansion in railway kilometerage. The proposed Bhavnagar-Tarapur railway may be constructed in future. The road kilometerage has increased from 460 km. in 1947 to 1736 km. in 1971-72. Road Transport buses and trucks ply on these roads for movement of passengers and goods. The entire district has been covered by the State Transport buses. Posts and telegraphs communications have been increased from 410 in 1961 to 569 in 1973. Telephone facilities are available practically at all important places with trunkline alignments.

In the field of education, the district houses a university at Vidyanagar near Anand with colleges like arts, science, commerce, engineering and agriculture affiliated to it. The number of colleges increased from 3 in 1947 to 47 in 1971. The number of primary schools rose from 961 in 1947 to 1624 in 1971-72. This shows the remarkable expansion in the field of education in the district after Independence.

This is the emerging profile of the district which has fortuitously reciprocated doses of development poured into it during the course of planned development. It can look for still better future and increase in the prosperity of its people.

STATEMENTS

STATEMENT IX-1

Category of Workers and their Percentage, 1961 and 1971

Sl. No.	Category of Workers	Working population								Percentage to total workers	
		Males		Females		Total					
		1961	1971	1961	1971	1961	1971	1961	1971	1961	1971
1		3	4	5	6	7	8	9	10		
1	As cultivators..	..	..	309,420	337,203	66,037	8590	375,457	345,793	54.89	48.35
2	As agricultural labourers	..	..	74,592	134,480	43,032	35,904	117,624	170,384	17.19	23.82
3	In mining, quarrying livestock, forestry, fishing, hunting, plantations, orchards, and allied activities	..	..	..	..	..	..	..	..	..	..
4	At household industry	..	..	3,185	10,083	1,391	954	4,576	11,037	0.67	1.54
5	In manufacturing other than household industry	..	..	25,219	16,239	16,580	1,350	41,799	17,589	6.11	2.46
6	In construction	..	..	5,474	45,760	2,207	1,784	32,736	47,544	4.79	6.65
7	In trade and commerce	..	..	29,818	41,526	1,623	1,221	31,441	42,747	4.00	5.98
8	In transport, storage and communications	..	..	9,411	15,216	175	372	9,586	15,588	1.40	2.18
9	In other services	..	..	53,613	50,448	10,808	7,264	64,421	57,712	9.42	8.07
	Total	..	..	541,261	657,269	142,777	57,892	694,038	715,161	100.00	100.00

Source :

1. *District Census Handbook* 1961, Kheda District, p. 26, Part II, p. 22.2. Census of India 1971, *Administrative Atlas*, Part IX-A, (1972), p. 76.

STATEMENT IX-10

Wholesale Prices in the District, 1949-50 to 1961-62

Year	Rice	Wheat	Jowar	Bajri	Barley	Ragi	Maize	Kodra	Tur dal	Gram	Cotton	Ground-nut
1	2	3	4	5	6	7	8	9	10	11	12	13
1949-50	12.75	18.87	11.00	12.00	..	9.25	..	12.44	17.00	21.00	37.69	20.69
1950-51	12.75	18.87	11.00	12.00	..	..	9.25	14.06	19.56	21.75	38.75	21.50
1951-52	12.75	18.87	11.00	12.00	10.75	12.25	9.25	12.94	18.00	17.69	25.50	16.37
1952-53	16.00	18.94	11.00	12.00	10.00	15.50	11.00	13.06	18.81	18.50	32.00	14.50
1953-54	15.00	14.00	11.00	10.00	..	13.56	10.00	8.50	19.00	16.00	32.00	18.81
1954-55	10.06	14.87	7.81	7.87	..	9.57	6.19	4.62	12.75	7.31	32.62	10.50
1955-56	13.00	13.00	9.44	9.96	..	7.62	5.00	6.37	..	14.19	42.00	9.00
1956-57	10.54	11.83	..	13.77	..	7.62	8.50	6.78	..	10.01	22.94	13.50
1957-58	15.00	20.00	11.75	12.40	..	11.17	12.00	9.72	20.70	12.87	30.03	17.00
1958-59	16.13	25.89	16.00	12.30	..	10.32	15.00	8.70	30.80	15.40	45.40	18.14
1959-60	16.00	18.91	14.50	16.40	..	10.32	10.50	11.34	..	13.92	44.92	18.29
1960-61	16.25	19.95	15.08	15.55	..	10.00	10.50	9.90	28.75	16.16	40.37	19.30
1961-62	14.17	18.85	16.50	14.17	..	..	11.25	..	..	17.15	..	23.30

NOTE : Prices are in Rs. and Nps. per maund of 82.2/7 lbs.

Source : Gujarat State Directorate of Agricultural : *Basic Agricultural Statistics of Gujarat State* to the period 1949-50 to 1961-62.

STATEMENT IX-11

Wholesale Prices at Anand, 1960-72

Sl. No. 1	Commodity 2	Average Prices for the year			
		1960 3	1965 4	1970 5	1972 6
1	Rice (fines) ..	31.40	118.15	198.00	213.50
2	Rice (Medium) ..	28.79	N.A.	187.00	194.00
3	Rice (course) ..	25.97	N.A.	135.00	N.A.
4	Wheat (red) ..	22.60	87.23	93.00	97.00
5	Wheat (white) ..	20.78	67.16	98.00	N.A.
6	Jowar ..	14.88	65.50	78.00	71.00
7	Bajara ..	17.05	66.44	79.00	78.00
8	Gram (dal) ..	19.22	126.89	123.00	146.83
9	Mug ..	21.09	N.A.	127.00	128.00
10	Udid-dal ..	17.23	N.A.	127.00	N.A.
11	Groundnut oil ..	70.70	270.00	472.00	440.00
12	Tobacco ..	N.A.	N.A.	490.00	520.00

N.A.=Not available.

NOTE : Prices in Rs. Nps. per B. Mds. for the year 1960.
Prices in Rs. Nps. per quintal for the year 1965, 1970 and 1972.

Source :
The District Development Officer, Nadiad.

STATEMENT IX-12

Wholesale Prices at Khambhat, 1967-72

Sl. No. 1	Commodity 2	1967 3	1968 4	1969 5	1970 6	1971 7	1972 8
1.	Rice (fine) ..	285.83	170.00	204.00	178.00	163.00	220.00
2.	Rice (Medium) ..	220.62	155.00	191.00	154.00	148.00	218.00
3.	Rice (course) ..	N. A.	115.00	125.00	140.00	149.00	191.00
4.	Wheat (Red) ..	112.62	90.00	95.00	99.00	102.00	100.00
5.	Wheat (White) ..	116.10	100.00	105.00	N. A.	85.00	100.00
6.	Jowar ..	97.18	70.00	75.00	70.00	75.00	N. A.
7.	Bajara ..	101.25	80.00	75.00	72.00	60.00	85.00
8.	Gram (Dal) ..	223.75	110.00	120.00	113.00	125.00	160.00
9.	Mug ..	N. A.	100.00	115.00	144.00	138.00	185.00
10.	Udid-dal ..	N. A.	N. A.	N. A.	N. A.	N. A.	N. A.
11.	Groundnut oil ..	407.08	330.00	357.00	425.00	370.00	255.00
12.	Tobacco ..	N. A.	580.00	470.00	485.00	495.00	575.00

N.A.=Not available.

NOTE : Prices in Rs. Nps. per quintal.

Source :
The District Development Officer, Nadiad.

STATEMENT IX-13

Wages in the Kheda District for the Years 1950-51, 1955-56, 1961-62, 1965, 1969, 1970, 1971 and 1973

Sl. No.	Type of Labour	Kheda										Anand			Khamdhav		
		1950/51			1955/56			1961/62			1965	1969	1973	1970	1971	1973	
		Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	
1	2	3	4	5	6	7	8	9	10	11							
1 Skilled Labour :																	
	(a) Carpenter	..	..	4.56	4.29	4.63	6.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	
	(b) Blacksmith	..	..	4.19	3.82	4.22	5.50	6.50	7.50	8.00	8.00	8.00	8.00	8.00	8.00	8.00	
	(c) Cobbler	..	..	3.52	3.36	3.83	4.00	5.00	7.50	N. A.	N. A.	N. A.	N. A.	N. A.	N. A.	N. A.	
2 Field Labour :																	
	(a) Man ..	..	..	2.35	1.76	1.74	2.50	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
	(b) Woman	..	..	..	..	..	2.00	2.50	2.50	2.00	2.00	2.00	2.00	2.00	2.00	3.00	
	(c) Child ..	..	..	..	..	..	2.00	2.50	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	
3 Ordinary Labour :																	
	(a) Man ..	..	..	1.89	1.57	1.88	2.50	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
	(b) Woman	..	..	..	..	..	2.00	2.50	2.50	2.00	2.00	2.00	2.00	2.00	2.00	3.00	
	(c) Child ..	..	..	..	..	..	2.00	2.50	2.50	1.00	1.00	1.00	1.00	1.00	1.00	2.00	

DISTRICT GAZETTEER : KHEDA

4 Herdsmen

(a) Man ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(b) Woman	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(c) Child ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

N.A. = Not available.

(Bk) H-50-62. (Lino)

STATEMENT IX-14

Physical Achievement of Community Development Blocks upto
31st March, 1973 (since Inauguration)

Sl. No. 1	Name of Items 2	Units 3	Achievement 4
1	<i>Agriculture :</i>		
(a)	Distribution of improved seeds	Qutla.	6,67,770
(b)	Distribution of fertilisers	..	43,63,176
(c)	Distribution of improved implements ..	No.	25,369
(d)	Agricultural demonstrations	No.	20,905
2	<i>Animal Husbandry :</i>		
(a)	Improved breed of animals supplied ..	No.	1,776
(b)	Improved breed of birds supplied	No.	8,905
(c)	Animals castrated	No.	4,253
(d)	Animals artifically inseminated	No.	92,508
3	<i>Minor Irrigation :</i>		
(a)	Kutcha wells constructed, repaired or renovated	No.	3,708
(b)	Pucca wells constructed, repaired or renovated ..	No.	5,617
(c)	Tanks constructed, repaired or renovated ..	No.	14
(d)	Tubewells and pump sets installed	No.	2,724
(e)	Others	No.	953
(f)	Net additional area likely to be irrigated ..	(hectores)	81,284
4	<i>Health and Rural Sanitation :</i>		
(a)	Primary Health centres started	No.	25
(b)	Rural latrines constructed	No.	10,438
(c)	Drinking water wells constructed or renovated ..	No.	658
(d)	Disinfections of drinking water wells	No.	3,396
(e)	Hand pump installed	No.	240
5	<i>Social Education :</i>		
(a)	Literacy centres started.	No.	1,258
(b)	Adults made literate	No.	28,930
(c)	Reading rooms and libraries started	No.	574
(d)	Youth Clubs started	No.	681
(e)	Farmers' unions started	No.	231

STATEMENT IX-14—contd.

Sl. No. 1	Name of Items 2	Units 3	Achievement 4
6	<i>Women's Programme :</i>		
(a)	Mahila Samiti or Mandal Started	No.	224
(b)	Memberships	No.	7,247
7	<i>Communications :</i>		
(a)	Kutcha roads constructed or improved ..	(Km.)	2566.50
(b)	Culverts constructed or repaired	No.	659
8	<i>Village small Industries :</i>		
(a)	Improved Ghanis introduced	No.	..
9	<i>Co-operation :</i>		
(a)	Co-operative societies started	No.	2,081
(b)	Memberships	No.	4,79,358
10	<i>General :</i>		
(a)	Village panchayats established	No.	823
(b)	No. of villages covered	No.	962
(c)	Vikas Mandals or Village Councils started ..	No.	62

PART V—PUBLIC ADMINISTRATION

CHAPTER X

GENERAL ADMINISTRATION

INTRODUCTORY

Public administration, as understood to-day, was not evolved before Independence when the functions of Government were mostly limited to the management of land and preservation of law and order. Land revenue and police administration were the only important departments both in the British province and the princely States. The machinery of the administration, however, differed in different States and estates according to their size, status of the rulers and financial resources of the State. In British province the administrative structure was fairly elaborate and well-knit, while in princely States the form of Government was monarchical, the ruler was repository of all powers, civil and criminal. The Kheda district during British rule was made up partly of lands acquired from the Peshwa in 1802 by the treaty of Bassein and partly of territory transferred by the Gaikwar of Baroda in 1803 and 1807.

The whole Bombay Province was administered by three Commissioners, namely, the Commissioner for the Northern Division with headquarters at Ahmadabad, the Central Division at Poona, and the Southern Division at Belgaum. Kheda was under the Commissioner of Northern Division. Each district was under a Collector, usually a Covenanted civilian, who had under him one or more civilians as Assistant Collectors and one or more Deputy Collectors. Over each taluka was the Mamlatdar, who was also a subordinate Magistrate. The charge of the Assistant or Deputy Collector contained three or four talukas. The Collector and District Magistrate was in charge over the whole district. The Commissioners exercised general control over the district in their divisions. Before Independence, the Kheda district was divided into two sub-divisions, in charge of an Assistant Collector and a Deputy Collector respectively and was composed of the seven talukas of Anand, Borsad, Kapadvanj, Matar, Mahamadabad, Nadiad, and Thasra. The Collector was also an *ex-officio* Political Agent for Cambay State and an Additional Political Agent for Rewa Kantha.¹

With the object of a uniform policy in the matter of administration in order to ensure to the attached units such common benefits as education,

1. *The Imperial Gazetteer of India*, Vol. XIV, *Jainapur to Kara*, 1908, pp. 277, 283-284.

medical-relief, good roads, etc., the Government of India formulated in 1943 a scheme known as the Attachment Scheme whereunder jurisdictional and non-jurisdictional States and estates were merged with the neighbouring area. The areas of former princely States of Cambay, Balasinor, Punadra, Khadal, Ghodasar and the non-jurisdictional estates of Zar and Nirmali, Bhadran and Petlad talukas and 38 villages of Attarsumba taluka of the former Baroda State were merged in this district on 1st August, 1949 as per merger scheme initiated by Sardar Vallabhabhai Patel.

On the bifurcation of bilingual Bombay State, it formed part of Gujarat State from 1st May, 1960. Since then Kheda is one of the districts of Baroda Division of Gujarat State. It was divided into 3 sub-divisions of Anand, Petlad and Nadiad, but afterwards Anand Sub-division was abolished and Nadiad and Petlad Sub-divisions continued to exist.

Administrative set-up of the Baroda State

As mentioned above the Baroda State exercised jurisdiction over the part of the present Kheda district (Petlad taluka and Sojitra peta taulka). The Baroda State followed the pattern of the district administration of the British India with the result that the administrative echelons and hierarchy of the Baroda State conformed to those of the British India. The variation in designations were made to suit local conditions and needs. The district was divided into two sub-divisions (Prants). The offices of Naib-Suba, Vahivatdar, the Munsiff and Fauzdar were located at Petlad.

At the head of the district administration, was the 'Suba' corresponding to the existing Collector of the district. The head of a Vibhag (Prant) was "Naib-Suba" (corresponding to the present Prant Officer, i. e., Assistant or Deputy Collector). Vahivatdar was the head of the mahal and the Mahalkari was in charge of the peta-mahal. At the village level, the Patel was the lowest functionary in the administration. In between Patel and Vahivatdar, there was an intermediate functionary called Tajviidar, who was the counterpart of the present day Circle Inspector.

The Suba was both Collector and District Magistrate and, therefore, he was looking after the law and order problems of the district as well as the matters relating to land revenue, income-tax and other revenues. The Naib-Suba like the present Prant Officer was an Assistant to the Suba whose functions were to inspect the records and work of the mahals and peta-mahals. The Vahivatdar and Mahalkari like the present day Mamlatdar and Mahalkari, were responsible for the collection of land revenue and taxes and maintenance of boundary marks. He was also a Second Class Magistrate with jurisdiction in respect of certain offences. The Tajviidar used to supervise the work of the village Patels and the Talatis in his tappa (circle). The Patel was the Head man of the village in revenue and police matters. He was assisted by the Talati.

The administrative set-up so far as the police was concerned had also a striking resemblance with the present day police set-up. The Police Naib-Suba was the head of the district police like the District Superintendent of Police at present. Police Inspector was in charge of a Vibhag (sub-division), Fauzdar in charge of taluka and Naib-Fauzdar in charge of small Thana.

The District and Sessions Judge was the head of district judiciary. He was helped by the Munsiffs at mahal (taluka) level. The Varishta Court (High Court) was at the State level, having jurisdiction over all judicial offices in the State.

Administrative set-up Balasinor State¹

Balasinor was a tributary and salute State in the Gujarat State Agency. It enjoyed a dynastic salute of 9 guns. Formerly it was in political relations with the Government of Bombay through the Political Agent, Rewa Kantha Agency. In 1933, it was brought into political relations with the Government of India through the Resident for Baroda and the Gujarat States. The State was administered by the Diwan in consultation with the Resident.

For administrative purposes, the State was divided into two mahals, Balasinor and Virpur. Each mahal was under the charge of a Mahalkari. The Mahalkari of Virpur was invested with judicial and criminal as well as civil powers. The mahals were divided into several groups of villages. Each group was under the supervision of a Talati and each village had headman (Mukhi). Each mahal had a Circle Inspector who assisted the Mahalkari in the supervision and collection of revenue.

Cambay State²

The Cambay State was feudatory under political agency of Bombay in Kaira District before 1930. Thereafter, with the establishment of direct relations between the Government of India and the Bombay State since April 1939, the State was included under Gujarat States Agency which was in charge of Resident of Baroda. Thus, the former States of Baroda, Balasinor and Cambay, whose areas wholly or partly, merged into the present Kheda district, came into direct political relations with Government of India, through the agents to the Governor General for the Gujarat State and the Resident of Baroda.

1. *Report on the Administration of the Balasinor State for the year 1943-44*, pp. 1-3.

2. (i) *Administration Report of the Cambay State, 1938-1939*, pp. 3-5.

(ii) *Imperial Gazetteer of India, Vol. IX, Bombay To Central India, 1908*, pp. 202-203.

The State of Cambay consisted of a town of Cambay and 88 villages. The Ruler enjoyed the honour of a salute of 11 guns and was entitled to be received and visited by both Viceroy and Governor of Bombay. The State had adopted most of the British Indian Acts in Bombay Presidency. Besides this, the State had its own limitations, registrations, stamps, municipal and Opium Acts.

The Administration of the State was carried on by the Diwan on behalf of the ruler. Besides Diwan, there were other State Officers, such as Police Superintendent, Nyayadhish, etc.

After Independence—After Independence, the administrative structure was radically changed to meet and fulfil the aims and objectives of the free democratic Government. The administrative structure was changed both in content, size and spirit.

The evolution of the administrative machinery in the present form may be considered into three distinct phases. During the first phase, the entire structure of administration was reorganised on the basis of the district, which became a principal unit of administration with intermediate functionaries at taluka and village levels. During the second phase, attempts were made to give a new form to the public administration in order to implement the ideals of the Welfare State by making the administrative machinery development-oriented and by increasing association of the people in development activities. During the final phase, the administrative set-up was decentralised to suit the changing needs of the times in tune with the socialistic pattern of society. These phases are dealt with below :

With the district as the principal unit of administration, the Collector became the key functionary and the pivot of administration, instead of the principal district officer responsible for the collection of land revenue and maintenance of law and order. He had manifold functions to perform. In the administration of land revenue, he was concerned not only with the maintenance of land records, collection of land revenue and administering the land revenue laws, but also with the implementation of land reforms which were introduced immediately after merger to do away with a medley of special land tenures, levies and perquisites which hampered agricultural production. As the judiciary was separated from the executive, his judicial powers were mainly magisterial and restricted to the maintenance of law and order in the district. On the development side, he co-ordinated the activities of various other departments such as Agriculture, Animal Husbandry, Co-operation and Social Welfare, etc., which were then created at the district and lower levels.

The second phase began with the increasing association of the public with the welfare activities undertaken by the State under the Community

Development Programme in 1952. The Collector was also the Chairman of the District Development Board, which looked after development work in rural areas, particularly in the fields of agriculture, irrigation, community development, co-operation, social education, panchayats, etc. A further step in the direction of popular association and Local Self-Government was taken by the establishment of panchayats in villages or groups of villages with a view to associating the people in the village administration. They were thus enabled to take active interest in works of public welfare and utility and to accelerate the pace of development activities for the amelioration of the conditions and prospects of the village people. The panchayats were also invested with powers to try petty criminal offences and certain civil disputes.

THE PANCHAYATI RAJ

The third phase in the evolution of the administrative structure was reached when the Gujarat Panchayats Act of 1961 was enforced with effect from 1st April, 1963, with a view to decentralising the entire administrative machinery from the district to the village level. The main objective of the Panchayati Raj is to enable the people of each area to achieve intensive and continuous development of the entire population. It comprehends both the democratic institutions and the extension services through which the development programmes are executed. For this purpose, the integrity of the structure of technical and administrative services need to be fully ensured. This revolutionary change in the administrative set-up led to the bifurcation of functions and responsibilities of the Collector, who now retains certain powers in respect of land revenue administration, maintenance of law and order, elections, civil supply and other subjects not transferred to the Panchayati Raj institutions. All the development activities, which were formerly within his charge as well as some of the functions under the Land Revenue Laws, have as will be seen later in the Chapter on 'Local Self-Government' been transferred to the Panchayati Raj bodies constituted under the Gujarat Panchayats Act.

Under this set-up, there are three tiers, namely, the District Panchayat, Taluka Panchayat and Gram or Nagar Panchayat. The principal Executive Officer of the District Panchayat is the District Development Officer, mainly drawn from the Indian Administrative Service. The Taluka Development Officer is likewise the principal officer at the Taluka Panchayat level and the Secretary, Gram Panchayat, is at the village level.

ROLE OF THE COLLECTOR

Formerly, the Collector used to be the pivot of the district administration. He was recognised as the local agent of Government in the district for all purposes. He was the link between the people and the Government. Besides supervising the collection of land revenue, the duties of collection of excise

and other special taxes and the stamp revenue also devolved on him (Collector) as the executive head of the district. Before the Gujarat Panchayats Act, 1961, came into force in April, 1963, he co-ordinated the work of different departments and ensured implementation of the development schemes in the district. But after the introduction of the Panchayati Raj, the collection of land revenue has been entrusted to the Village Panchayats. The Collector still remains responsible for implementation of the land reforms laws and the collection of fees, dues, etc., recoverable as arrears of land revenue under various Acts such as the Bombay Irrigation Act, (1879), the Bombay Entertainment Duty Act (1923), the Bombay Electricity Duty Act, (1958) and the Gujarat Education Cess Act, (1962). There are also other Acts, which provide for recoveries of other Government dues as arrears of land revenue. Under the Bombay Prohibition Act, (1949), the Collector is empowered to issue permit for liquor and drug addicts and recover assessment fees from shops permitted to sell liquor and drugs. He is also the Chairman of the Prohibition Committee of the district. Over and above these major functions, the Collector is entrusted with the work of watching the proper implementation of the district level plan schemes retained with the State after introduction of the Panchayati Raj.

Apart from the Civil functions, the Collector has to perform duties as the District Magistrate under Section 17 (1) of the Bombay Police Act (XXII of 1951). The District Superintendent of Police and the police force of the district are under the control of the police, the Collector as District Magistrate has extensive powers under the Criminal Procedure Code and for proper administration of jails and sub-jails. In his capacity as District Magistrate, he is concerned with the issue of licences and permits under the Indian Arms Act, (1959), the Petroleum Act, (1934), the Explosive Act, (1884) and the Poisons Act, (1919). Under the Factories Act, 1948, the District Magistrate is the Inspector for his district, in which, capacity he has powers of inspection and supervision of factories, magazines, etc.

Prior to 1962, the District Treasury was under the overall charge of the Collector to whom the District Treasury Officer was subordinate. He was responsible for all the cash, stamps, etc., received in the Treasury as also for the proper maintenance of accounts. The sub-treasury establishments at the taluka headquarters formed part of the revenue establishments in the district. But from the 1st April, 1962, the sub-treasury establishment was separated from the Revenue Administration and placed under the administrative control of the Director of Accounts and Treasuries working under the Finance department. The Collector, however, continues to exercise general powers and functions as the head of the district administration. The Treasury, is, thus, under the direct control of the Finance department, though the Collector exercises supervision over it as required under the Bombay Treasury Rules.

Among the *quasi-judicial* functions of the Collector, over and above the hearing of appeals from the Prant Officers under the Land Revenue Code and various other revenue laws, the following may be mentioned : (1) revisional powers under section 23 of the Mamlatdars' Act, which are delegated to an Assistant or Deputy Collector ; (2) functions which the Collectors perform in connection with the execution of Civil Court decrees ; (3) proceedings and awards under section 11 of the Land Acquisition Act, 1894 ; (4) cases under the Bombay Government Premises (Eviction) Act and (5) powers exercised as District Magistrate under the Preventive Detention Act, when it was in force.

Besides the land revenue, the land reforms and magisterial work, the Collector is incharge of various important duties connected with civil supplies, small savings, land acquisition, elections to the State Legislature and Parliament and members of the District Panchayat, Census, etc. As a District Registrar, he controls work of registration of documents within the district, supervises the work of Sub-Registrar at the taluka levels and ensures proper performance of their duties as per the Indian Registration Act (1908). Under the Famine Relief Code, 1951, the Collector is required to keep himself at all times informed about the agricultural conditions within the district, and to organise relief measures and create as far as possible permanent Family Relief Fund on a charitable basis for the relief of the needy persons. With a view to accelerating the tempo of development of industries in the district and achieving more effective co-ordination in providing infrastructure facilities to industries, Government has designated Collector as *ex-officio* Deputy Commissioner of Industries and delegated to him certain powers for allotment of factory sheds and open plots in the Government industrial estates, formulation of the district master plans and co-ordination of activities of various heads of offices and departments. Even after the introduction of the Panchayati Raj, the Collector has to carry out the Jamabandhi audits of Taluka Panchayats and Villages.

The Collector is authorised to purchase or take on lease only protected monuments and to accept gift or bequest for any protected monuments with the sanction of the Central Government.

By virtue of his office as the President of the District Soldiers, Sailors and Airmen's Board, he remains in general contact with army authorities, ex-soldiers and problems of their rehabilitation and welfare.

Collector's Office—The two main branches in the Collector's office are (i) Revenue and (ii) Supply, each of which is under an Assistant/Deputy Collector. The Assistant-Deputy Collector in charge of Revenue is also Resident Assistant/Deputy Collector. The Deputy Collector looking after the supply branch is designated as District Supply Officer.

For the purpose of smooth and efficient administration, the district is divided into two sub-divisions, viz., (a) Nadiad sub-division comprising Nadiad, Matar, Mahamadabad, Kapadvanj, Vadasinor and Thasra talukas and (b) Petlad sub-division comprising Petlad, Khambhat, Anand and Borsad talukas. Both these sub-divisions are headed by an Assistant/Deputy Collector. Their head-quarters are at Nadiad and Petlad respectively. The talukas are placed under the Mamlatdars who work under an Assistant/Deputy Collector of the sub-division.

The Assistant/Deputy Collector is also a Sub-Divisional Magistrate for his sub-division. After the separation of judiciary from the executive, he is not empowered to try criminal cases except certain proceeding under the Criminal Procedure Code. The Mamlatdar is the head of the revenue administration at the taluka level. By virtue of his office, he is a Taluka Magistrate and also a Superintendent of the Taluka Sub-Jail and the Assistant Custodian of the evacuee (Administration of Property) Act, 1949.

Judiciary—Another important department at the district level is the Judicial Department headed by the District and Sessions Judge who exercises jurisdiction in matters, civil, criminal and appellate. Due to the separation of the judiciary from the executive, the Judicial Magistrates are under the supervision and control of the District and Sessions Judge. The Collector as District Magistrate exercises certain powers under the Criminal Procedure Code. The Assistant Collectors of the Revenue sub-divisions of the district are invested with the powers under the Criminal Procedure Code. The Assistant Collectors of the Revenue sub-divisions of the district are invested with the powers of Sub-Divisional Magistrates, who are subordinate to the District Magistrate. The Taluka Mamlatdars are designated as Taluka Magistrates and are subordinate to the Sub-Divisional Magistrates. The Taluka Magistrates are the executive Magistrates. They try chapter cases under 107 of the Criminal Procedure Code. The Sub-Divisional Magistrates try chapter cases under sections 108, 109 and 110 of the Criminal Procedure Code and Sections 56, 57 of the Bombay Police Act. The general duty of the District Magistrate is to maintain law and order in the district.

Before the separation of the Judiciary from the executive the Mamlatdars were First Class Judicial Magistrates. The Senior Aval Karkuns were Second Class Magistrates. The judicial set-up of the district consists of one District and Sessions Judge, one Assistant Judge and Additional Sessions Judge, two Civil Judges (Senior and Judicial Magistrates, First Class) and 11 Civil Judges (Junior Division and Judicial Magistrates, First Class). For details, see Chapter XII—Law and Order and Justice.

THE DISTRICT DEVELOPMENT OFFICER

In the Panchayati Raj, the District Development Officer is appointed from the cadre of the Indian Administrative Service. The executive powers

of the District Panchayat for carrying out the provisions of the Act vest in him. Subject to the orders of the President of the District Panchayat, he exercises all the powers as the Chief Executive Officer in regard to the administration and execution of development programmes, the details of which will be found in Chapter XIV—Local Self-Government.

DISTRICT LEVEL OFFICERS

The general pattern of administration has been changed after integration of the State. Besides revenue, judiciary and police which were the principal departments in the past, the departments of Agriculture, Animal Husbandry, Co-operation, Rural Development, Panchayats, Public Works, Social Welfare and Education are now functioning with enlarged powers and resources having their functionaries at various levels of administration.

The following is the list of the district officers functioning at the district level :

1. The Collector, Kheda,
2. The District and Sessions Judge, Nadiad,
3. Civil Surgeon, Kheda,
4. Executive Engineer, Roads and Buildings, Public Works Department, Kheda,
5. Executive Engineer, Mahi Canals, Anand,
6. Executive Engineer, Mahi Canals, Nadiad,
7. Executive Engineer, Mahi Canals, Thasra,
8. District Education Officer, Nadiad,
9. District Treasury Officer, Kheda,
10. District Superintendent of Police, Kheda,
11. District Employment Officer, Nadiad,
12. District Superintendent of Prohibition and Excise, Nadiad,
13. Assistant Regional Transport Officer, Nadiad,
14. Divisional Forest Officer (Kotar + reclamation), Nadiad,
15. District Information Officer, Nadiad,
16. Sales Tax Officer, Nadiad,
17. District Inspector of Land Records, Kheda,
18. The Superintendent of P. N. Technical High School, Kapadvanj,
19. Supervisor Rural Board, Nadiad,
20. District Industries Officer, Nadiad,
21. Consolidation Officer, Nadiad,

22. Labour Officer, Nadiad.
23. Factory Inspector, Nadiad.
24. Sales Tax Officer, Anand.
25. Chief Officer, B. P. O. Let Mission Road, Nadiad, and
26. Sales Tax Officer, Petlad.

OFFICERS UNDER THE DISTRICT PANCHAYAT

After the enforcement of the Gujarat Panchayats Act, 1961 and with the transfer of many departmental schemes, a number of district level functionaries have been transferred to the District Panchayat. These Officers are under the administrative control of the District Development Officer, and for technical supervision they are under the control of their own heads of departments at the State level.

The following is the list of officers working under District Panchayat.

1. District Development Officer, Nadiad.
2. District Agriculture Officer, Nadiad.
3. Administrative Officer, Education, Nadiad.
4. District Health Officer, Nadiad.
5. District Animal Husbandry Officer, Nadiad.
6. District Social Welfare Officer, Nadiad.
7. District Statistical Officer, Nadiad.
8. Executive Engineer, Panchayat, Nadiad.
9. District Registrar Co-operative Societies, Nadiad.

THE CENTRAL GOVERNMENT OFFICER

In addition to the State Officers, there are several Officers of the Central Government in the district. These are listed below :

1. Income Tax Officers, Nadiad, Anand and Petlad.
2. Superintendent of Post Office (R. D.), Nadiad.
3. Superintendent of Post Office, Anand.
4. Assistant Collector, Central Excise, Kheda.
5. Sub-divisional Telephone Officer, Nadiad.

CHAPTER XI

REVENUE ADMINISTRATION

THE REVENUE ADMINISTRATION DURING EARLY DAYS

Introductory

From ancient time onwards land revenue has been the sheet anchor of Government and the key stone of the provincial revenues in India. The welfare and prosperity of agricultural classes are moreover closely connected with the settlement of land revenue. Even after diversification of taxes, land revenue provides substantial amount of the revenue to the State. Upon the incidence of the land revenue or rentals depends the prosperity or otherwise of the cultivators.

Along with the land revenue, land policy also plays an important part in revenue administration. Land policy is obviously influenced by the natural conditions of the region.

The revenue administrative history of the district may be divided into two distinct sections : (1) its condition at the time of transfer to the East India Company and (2) its progress under the British management.

The latter part may be sub-divided into two periods : (1) from 1803 to 1814 when the revenues of village groups and single village were farmed out to men of capital and village headmen and (2) from 1815 to 1862 A. D. when details of village management were collected and by degrees landholder's liabilities made simpler, fairer and more certain.

LAND ADMINISTRATION IN 1805

The Kheda district was the most fertile and densely populated part of the Bombay Province. With the exception of a few villages towards the Sabarmati held by some of the Kasbatis of Dholka, there was no class of villages exactly corresponding with those in the Talukdari estates in Ahmadabad. The old Gazetteer states that the lands of the central belt, the present district of Kheda were distributed over the sub-divisions of Nadiad, Matar and Mahudha, the estate of Kheda, and the Napad and Khari village groups, *tappas*. The villages belonged to three classes, the quiet *rasti*, the refractory *meharas* or *giras* and intermediate class *rasti-Mehvas*. The central lands of Nadiad and Napad, and to a less degree those of Matar and Mahudha, were

almost free from the turbulent classes. But in the outlying tracts, both to the north and the south-east, was a large unruly population and many unsettled villages both of the Rajput or *giras*, and of the Koli or *mehvas* types. Of the claims put forward by the two classes of holders of unruly villages, those of the Rajputs, as the rulers of the land at the time of the Muslim conquest, and as at once the more warlike and more civilized race, were more respected than those of the Kolis. Though they probably at one time held the whole country, the Kolis would seem to have been considered rebellious, or at least refractory villagers, who had from weakness resisted or eluded the just claims of the former Government. Both paid a tribute. But it was not usual to interfere with the inner management of their villages or to examine their revenues. Compared with the lands to the north of the Sabarmati, the Kheda district had few unruly villages of the Rajput class. Its Koli or *mehvas* villages, chiefly to the east and south, under chiefs, and Thakors were most of them groups of thatched beehive-like huts. Some of them included several distinct hamlets, *vas*, each with boundaries, husbandmen, and a chief of its own, responsible for a certain share of the whole Government demand on the village. Compared with the peaceful villages, the revenue they yielded was small, the amount fixed more by the Chief's power of resisting than by his ability to pay. Rebellious and insubordinate, many of the refractory villages especially those near the Mahi, except under pressure of force, refused to pay their tribute. In quiet or *rasti* villages, the lands were divided into two classes, those made over to private persons either free of rent, *nakru*, or on a quit rent, *Salami*, and Government or *Sarkari* land let out for village. The private or alienated lands claimed to be grants made either by Government or by village managers. Government grants were either religious, *vazifa*, political, *vanta* and *Malek*, or to foster irrigation, *kuvetar*. Village grants were to please dangerous neighbours, *giras*, *pagia*, *baria*, *koliapa* and *dabanja*; to reward village services, *pasaita haria*, *ranvatia*, and *palia*; to reduce the pressure of Government demand, *vachania* and *girania*. Of Government religious grants, *vazifa*, property a Muslim religious grant was used to include all personal grants by Muslim rulers, whether as charity, favour, or in return for service. The area of land held under this tenure was small. Of Government political grant the *vanta* or *share* lands were originally allotted by Sultan Ahmad Shah I. (1411-1443 A. D.) to the former Rajput proprietors, and either left in their hands or restored to them by the Emperor Akbar (1583). Under the Marathas, by sale, mortgage, and encroachment, the share had in most cases ceased to form anything like the one-fourth part of the whole village area. Still, in Colonel Walker's (1804) opinion, the right to the share maintained by arms and by an unconquerable sentiment was secured to the holders by universal consent, and was when he wrote, 'unimpaired in its privileges'. The boundaries of the share were marked off, and there was generally a distinct quarter of the village where the holder of *vanta* lands and his dependants lived. Lands of this class were, in some cases, held by the whole family as joint property, in other, kept in separate shares, or managed for the owner by the village headman. Under the head of

vanta came *sirjainin*, land granted by a holder of *vanta* for the maintenance of his wife. Even if the rest of the share escheated to Government, this part remained in the hands of the woman's heirs.¹ In the south-eastern corner on the bank of the Mahi, there were many villages held by petty Koli chiefs which always paid the same rentals since the introduction of the British rule and preserved their independence even more than Mehvasi holders in the north-east of Ahmadabad. Besides these, there were two separate classes of villages peculiar to the district, viz., Maleki villages and Narwadari villages. The Maleki villages were in all 27. The old Gazetteer states that the other chief political Government grant was to the class of Muslims called Maleks. These Maleks were descendants of soliders who, for their special valour at the siege of Pavagadh (1483), were by Mahmud Begada (1459-1513) presented with about ninety square miles of lands on the banks of the Mahi to the north and north-east of Thasra. At the time of the grant these lands were divided among twelve villages; in 1817, when with the rest of Thasra they came under British rule, they numbered seventeen; and in 1864 had increased to twenty seven. For more than two hundred years, taking half of the produce from the cultivators, the Maleks continued to hold these villages rentfree. About the beginning of the eighteenth century the Peshwa's Government imposed a lump tribute, *udhad jamabandi* on the maleki villages, the amount varying according to the success of the Maleks in resisting to the Maratha demands. To meet this tribute, the Maleks put a property cess, *karam vero*, on their tenants and reduced their own share of the produce, *vaje*, from a half to a third. Fifty years later (1769) the Marathas put forward another claim in the shape of support, *ghasdana*, for the Gaekwad's revenue collecting force. Some of the villages also became liable to a payment to the Babi of Vadasinor. These exactions were met out of the property cess, *karam vero* but in some years the Maleks were so hard pressed, that to meet the demand they had to part with a considerable quantity of land. In 1817, when Thasra came under British management accountants were placed in the Maleki villages. The filed register of all the lands was prepared. An acreage rate was imposed on Governments lands not tilled by the Maleks, and a quit rent on the alienated land. As the Maleks still levied special cesses to meet their tribute to the Gaekwad and the Babi of Vadasinor, the new assessment pressed the cultivators so hard, that they began to desert their villages. To prevent this a new settlement was made in 1819. The cesses on the cultivators of Government land, not in the Maleks' hands, were consolidated into one acreage rate varying considerably according to the cultivator's caste. The Maleks were to continue to hold the lands they tilled rent free, and from other unalienated land, instead of the produce share, were to recover a fixed money payment. As to the Gaekwad's tribute, Government in some cases agreed to pay the whole, and in others only the half. Two years later, failure of crops forced a reduction of assessment.

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panchmahals*, (1879), p. p. 81-82.

the loss of revenue being borne in somewhat larger proportion by Government than by the Maleks. In 1824 Government accountants were withdrawn from the Maleks' villages, and the privilege of self-management, granted to the Koli and Rajput chiefs in 1821, was extended to the Maleks. Soon after, the villages were, on paying Government a lump sum, leased to the Maleks, and were left free to alter the rates of assessment as they chose. They leases lasted till 1837 when the arrangement sanctioned in 1819 and 1823 was again introduced. In 1843 and again in 1850 district officers complained that the Maleks' had so adjusted the assessment, that while the Government share had been reduced by one-half, the Malek's share was about one-fourth larger than in 1819 and the following years. But Government were unwilling to interfere till in 1860, on the introduction of the revenue survey, the Maleks were asked if they would continue to manage their villages, paying Government a fixed rental. To this they would not agree, stating that the number of sharers was too great to give them any chance of managing their villages successfully. After a detailed inquiry into the state of the different villages, Government finally decided to adopt the proposal of Mr. Pedder, the settlement officer, that the villages should be managed by Government officers under the ordinary survey rules, and that the Maleks should be allowed to hold the lands cultivated by themselves in 1819 rent free, and for the rest receive a share varying from seven to nine sixteenths of the revenue. Village accountants chosen by the Maleks were appointed and paid by Government.¹

The constitution of the Narwadari villages was co-parcenary and very similar to that of the Bhagdari villages in Bharuch. This tenure was purely a method of collecting land revenue and did not involve any concession of land revenue.

The land tax was either paid in kind by a division of the produce called 'Bhagbatai' or by an acreage rate called bighoti. When the payment was taken in kind, the agricultural produce was divided by the Government agent and the village headmen. As regards the bighoti, there were remnants of the old measurements of Raja Todar Mal, the Revenue Minister of Akbar (1583-1590). A record of the area was kept and though disregarded by the Marathas, these rates were still cherished by the people. Under the Marathas, the rate depended upon factors like character of the soil, kind of crops grown, the distance of the field from the village site and the distance of the village from the market. In addition to the land tax, there were many cesses (Veras) on ploughs, cart, cattle and horses, falling on land holders and those on shops, trade-houses, etc.; on the non-land-holding classes.

The village Government was of four forms varying with the different character of the villages. (1) simple or *seja* form (2) Narwa or share system,

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panchmahals*, (1879), pp. 82-84.

(3) *ijara* form, and (4) the Katcha management. The revenue was collected by the Government manager, Kamavisdar. The village, which delayed payment, was fined by the Government or a messenger was billeted. The billet or Mohsal, represented a daily fine varying from Re. 1 to Rs. 100 at the discretion of the revenue farmer. Under, the Kamavisdar, were Desais (accountants), Majmundars ('Assessment Superintendents'), Amins, Patels and accountants and their sureties among Patels. There were matadars or signers, who alone had the right to sign the village agreements. Their position was hereditary and they were well off. It is significant to note that the realization of revenue was protected by an elaborate system of sureties. Sureties were of two classes, the Bhat and the money-lender, *manotidar*. The position of the Bhats was very important from the view point of administration. They could force execution of agreements by their threat to sit starving before them or to wound themselves. Certain class of usurers became sureties to villagers for payment of their rent for a premium (*manoti*) of 25 per cent.

In the opinion of Col. Walker's, the Maratha system was simple and well calculated to ensure the recovery of the revenue, but the demand was uncertain and the system liable to abuse and burdensome to the cultivators who were forced to support sureties. The Old Gazetteer states, "Cultivators of Government, *talpad* lands in peaceful, *rasti* villages, generally held them under one of the three tenures. The commonest was for the cultivator to have a certain area of land allotted to him, some of it good, some of it middling, and some of it poor. He paid only on the land under actual cultivation; and so long as he paid, it was understood that he could not be turned out. The second was known as *khatabandi* or the holding system. Under it the cultivator held a perpetual lease of some very good soil and with it a share of inferior but very lightly taxed land. A certain sum was fixed on the entire holding, and this had to be paid whether or not it was all tilled. As superior form of the *khata* tenure was when the allotment of land was called *vehta*. On the allotted land a very high assessment, in some cases six times as much as it would naturally pay, was charged. The amount of land allotted to each cultivator varying from half an acre to two acres, depended chiefly on the alienated land in his hands, which he continued to hold either rent free or subject to a quit-rent. If his state improved, he was forced to add to his share of *vehta*, and if unlucky, he was allowed to give some up. The holder of *vehta* land was part owner of the village. He could mortgage the land, and unless the Government raised the village payment, his rent could not be increased. In villages where the area of Government land was too small to supply a share for each cultivator, the quantity required was taken from the alienated land, and in return a quit-rent was paid to the owner. In villages where, after the lots were distributed, some Government land remained over, a rate of payment was fixed, and the land, called *khotia*, was distributed among the *vehta* holders. In villages inhabited only by shareholders the balance of the alienated land was assessed and distributed in the same way as *khotia* land. The principle of

vehta and *khata* lands, the allotment of a certain area of greatly over assessed land, was the same. Both were remnants of the perfect sharehold or *narva* village described below. Both in sharehold and in *vehta* village the body of owners were liable for the whole Government demand. They differ in this, that in a perfect sharehold or *narva* village each member paid according to his hereditary share; in a *vehta* village the share varied according to the member's capacity to pay. In a *khatabandi* village the management was in the hand of a contractor or Government officer and the joint responsibility had ceased. The third practice was for the cultivator to take out a written lease, *ganvat*, engaging to till the land for one year. This land, lying in most cases beyond the enclosed parts of the village, was too poor to have fixed holders. It was generally tilled by *uparvadas* or workmen from a neighbouring village. If a cultivator kept on tilling the same field for several years, he would have to take out a running lease or *chaluganvat*. Under this arrangement there was not regular cess, *bighoti*, for the different qualities of land; the rate varied with the crop, or each field had its own rate. Unless he gave notice, a cultivator had to pay the cess on all the lands he held."

"Except Government grants and hereditary shares, the lands were not the property of the holders; they were let out to the cultivators by the village headmen. If the cultivator failed to pay his share, his crops, and except his tools, his property were attached, Government recovering one-eighth in addition to their regular share of the produce. Still the cultivator had prescriptive rights and was seldom turned out of land which he or his family had long held. When too hard pressed on his usual resource, both in Government and in alienated villages, was to move into another district, and either settle there or wait till his grievance was redressed. Revenue farmers sometimes agreed to prevent these movements, refusing to give immigrants work; but as a rule they were not slow to make use of the services of any workman who wanted employment."

"The villagers' payments were of two kinds: a rental or *jama*, and cesses *vera* or *habat*. The land tax was paid either in kind by a division of the produce called *bhagbatai*, or by an acreage rate *bighoti*. When payment was taken in kind, the produce was divided by the Government agent and the village headman. The division was made either in the field, the *kaltar* system, or in the village farm yard, the *khaltad* system. Though in different places it varied to some extent, except in the case of Kolis, Musalmans, and other unskilled cultivators who paid specially easy rates, the Government share was held to be one-half of the rain-crop and from one third to one-fifth of the dry weather crop if raised by irrigation. From their share of the produce the cultivators had generally to pay the village officers an allowance in grain, and in some cases a charge of moving the grain to headquarters. As regards the

acreage rate, *bighoti*; there were remains of the old measurements of Raja Todar Mal, the Emperor Akbar's surveyor (1583-1590). A record of the areas was kept, and though disregarded by the Marathas, his rates were still cherished by the people. Under the Marathas the rent depended on several considerations. First, the character of the soil, the lands being divided into three classes and paying rent according to their fertility. Second, the kind of crop grown, millet paying from 10s. to 12s. an acre, and sugar cane from 15s. to 30s. A third point was the distance of the field from the village site; and a fourth the distance of the village from a market. For the benefit of the less skilled class of cultivators, Kolis, Musalmans, and others, two special forms of payment were in use, one a uniform acre cess called *ghattachas*, the other a lump sum or *udhadsalami* on the entire holding."

"Besides the land tax many cesses, *veras*, were enforced, those on ploughs, carts, cattle, and horses, falling on landholders; and those on shops, trades, houses, and hearths, on the non-landholding classes. The object of the cesses on tillage was to draw a revenue from rent free land. To prevent the payment of cesses bearing too hard on the tenant of revenue paying land, a reduction of the land tax equal to the amount of the cess was often made. Besides the indirect cesses, rent free lands were made to contribute in two ways, by an acreage quit rent or *salami*, and by a varying cess or *svad* on Government cultivators who tilled rent free lands."

Period of Revenue-farming (1803-1814)

In this period, the revenue of village groups and single villages were farmed out to men of capital and village headmen.

For the first five years, the revenue of the district was farmed out to the Desais and Amins.¹ This system was succeeded for some time by leases of their own village being given to the Patels. However, where the true resources of the district could be ascertained a scheme of setting up competitors to them was resorted to and the villages were leased out to the highest bidders. In the meanwhile, village accountants were gradually introduced and more detailed information about the conditions and prospects of the district was collected. It enabled the Collector to protect people from over exactions of the farmers and to dispense with the system of sureties. It further paved the way for adoption of the ryotwari system. In 1820, 370 out of 560 villages were so managed. Mr. Elphinstone in his Minute of 1821 on the Ahmadabad and Kheda Collectorates expressed his strong disapproval of the plan of giving farms to strangers; but the farming

1. A. ROGERS, *The Land Revenue of Bombay*, Vol. I, p. 78.

to the village Patels was considered less objectionable. The farming to Patels was not unpopular among the people themselves. But it had the disadvantage in that the Patels had not sufficient capital. Still, However, the farming system was not to the advantage of the people and the State from the point of revenue. The Narwa system, where Patidars (sharers) were numerous, had many of the advantages of the ryotwari system without risk or loss to Government, as the farmers were guarded against over-exaction by being able to move away to other villages. The Narwa system provided safeguards against over assessment under a rapacious Government, but was also a bar to the just claims of the State.¹

Col. Walker (1805)² laid down that the tribute of the Rajput and Koli chiefs should not be increased. Moreover, he said that they should be called upon to furnish securities for good behaviour. Furthermore much of the illegally alienated Government land should be recovered by payment of two-thirds or three-fourth of what the holders paid. Finally the Kamavisdar should cease to farm the revenue and become entirely a Government agent. The Maratha system of revenue management was to be continued until the real condition of the country was known. Sir John Malcolm wrote in his Minute of 1830 that the claims of Girasias were settled according to the principles laid down by Col. Walker. In 1808, Mr. Diggle described their method of levy as barbarous; "referring right to the spear rather than to any deed." Their demands were heavy amounting to a blackmail. Instead of allowing the Girasias to collect their dues direct from the villagers. Mr. Diggle suggested that, they should be paid from the Government treasuries. Then they were to be Government pensioners, losing much of their importance. Between 1811 to 1816, the settlement was made by Mr. Rowles with the Girasias of Kapadvanj. Capt. Robertson similarly made settlement with Girasias of Matar, Mahudha, Nadiad and Napad (Borsad). They were warned that any breach of peace would entail forfeiture of their allowances.

"Between 1805 and 1815, chiefly from the spread of tillage, the the land revenue rose from, £ 1,30,015 to £ 1,82,187 (Rs. 13,00,150 to Rs. 18,21,870), the advance on the original rentals amounting in Gaikwad lands to twenty seven and in Peshwa lands, were former supervision had been laxer, to ninety per cent. From 1812 to 1815 was a time of great prosperity. The Kathiawar and north Gujarat famine of 1813 and 1814 raises produce prices nearly threefold, and as there was no failure of crops in Kaira, much wealth poured into the district."³

1. A. ROGERS, *The Land Revenue of Bombay*, Vol. I, p. 79.

2. *Bombay Gazetteer*, Gujarat, Vol. III, *Kaira and Panchmahals*, p. 92.

3. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panchmahals*, (1879), p. 93.

Period of Depression (1815-1863)

This period of depression may be divided in to two sections from 1815 to 1830 and 1831 to 1863. These were the years of great agricultural depression.

The main changes of the period were first the entertainment of a regular system of paid village Talatis in 1814 and the detailed survey of the district between 1820 and 1826. The introduction of the village accountants resulted in great opposition from the hereditary officers and village headmen; because it led to undermine their influence and position in the villages. Mr. Rogers explained that in 1814-15, the Bhats of Matar who used to provide security for the payment of village revenues, murdered two of their women to intimidate the Government officers from appointing village accountants. Some Patels of Nadiad had to be punished as criminals for conspiracy. Gradually the crop-rates, plough-rates and other money cesses were replaced by fixed rates upon the bighas assessed by the Panchayats throughout the district. This change was introduced in accordance with the orders of the Court of Directors issued in 1818.

This result of the wise policy and the punishment of the Patels of Nadiad had a very salutary effect on the Government revenue and tillage. It brought to light many abuses which were stopped. Still however, "the management of the first six years (1814-1819) would seem to have erred in unduly raising the Government revenue.¹ The increase was on the basis of unusually high prices than ruling. But with the return of ordinary prices subsequently, the complaints of over-assessment became general.

(a) *Elphinstone's Minute of 1821*—In 1821, Mr. Elphinstone visited Kheda and recorded his opinion and impressions about the State, the district and the general results of British management in his famous Minute.² The striking note of the Minute was the maintenance of the *Status quo* and refraining from introducing any innovation in the existing system. Elphinstone, however, stressed the need for appointing village accountants.

(b) *Survey (1820-23)*—Next to the introduction of the Talatis, the second measure adopted to gain great knowledge of the district was survey by the surveyor. Capt. Cruikshank. 'Its objects were to establish for the village an authentic and permanent record of lands, dividing them into classes according to their nature and fertility'.

As regards alienated lands, the practices of indirectly assessing such lands to the state revenue, even in Narwadari villages was from the beginning

1. *Bombay Gazetteer*, Gujarat, Vol. III, *Kaira and Panchmahals*, pp. 97-98.

2. *Ibid.*, pp. 97-98.

carried to a very great extent than elsewhere. Mr. Elphinstone referred to this practice called 'Veta'.

In 1818-19, the revision of assessment by Panchayats had been found mischievous in the absence of efficient supervision of their proceeding. Government therefore issued orders not to carry out revisions without the direct supervision of the Collectors.

In 1824, the Kamavisdars and other Revenue officers were free from the obligation to provide the security of bankers for their good conduct and were allowed to give security of other respectable gentlemen. In 1826, the rules¹ were issued for the revision of assessment in the whole district.

In 1826, a fall in produce prices set in. Kapadvanj was described to be in a wretched state. "the people badly housed, badly clothed and badly fed". Mahudha, one of the richest part of the district showed signs of distress. To meet these difficulties, the rates were considerably lowered and by postponing the dates of revenue instalments, further necessary relief was given. The complaints about over-assessment ceased after a further reduction of rents. Much was done to improve the condition of cultivators by granting holdings at fixed rates and leases. During 1830, Sir John Malcolm, the Governor of Bombay, who visited Gujarat, noted² that the revenue system showed the good points of a direct settlement with few of its defects. He found that the rates were generally fixed on the *bigha*; that the villages were held on seven year leases, and that the village settlements were made by the Collector or his assistant personally. He was of opinion that the things should be kept as they were. Despite this, much mischief was caused by assessing alienated lands. Owing to a fall in the produce prices, rents were hard to collect. He felt that the rates were high and ought in some cases to be lowered. With the fall in prices, the condition of agriculturists worsened and the rate of assessment had to be reduced during the years from 1827 to 1832. Crisis was averted in 1832 by reductions in assessment and large remissions of revenue. Subsequently with the rise in prices, the district recovered from the bad effects of the slump. General revision was carried out by the Collector in 1843. It resulted in an all round increase of revenue. Prior to the introduction of survey settlement in 1863, the district showed signs of distress and over assessment as a result of low prices of foodgrains and lack of demand for tobacco, the chief rent-paying crop. In short, the prices of agricultural produce in general and tobacco in particular dictated the pitch of assessment of the district. Abolition of the system of revenue farming and sureties (Bhats as well as Manotidars) together with the introduction of village accountants gradually undermined the influence

1. A. ROGERS, *The Land Revenue of Bombay*, Vol. I, p. 84.

2. *Bombay Gazetteer, Gujarat*, Vol. III, *Kaira and Panchmahals*, pp. 102, 108.

and position of the district hereditary officers like Desais, Amins and Barots. This paved the way for the general introduction of the ryotwari system throughout the district.¹

SURVEY AND SETTLEMENT

The district comprises of 10 talukas of which 7 talukas are of the Union Areas² of the Province of Bombay. The areas of the former States of Cambay, Balasinor, Baroda, Khadal, Punadra and Ghodasar and non-Jurisdictional estates of Zar and Nirmali were included in this district on the merger of former States. On 1st August, 1949 Petlad, Cambay and Balasinor talukas were comprised chiefly of the former Baroda, Cambay and Balasinor States respectively.

In the Union Area, there is no change since 1947 in the position that obtained before Independence in respect of survey and settlement except that the *inam* and *ex-inam* villages which were unsurveyed were got surveyed and their soils classified from 1949 to 1951 under Post War Reconstruction Schemes Nos. 75 and 77-A respectively. The lands of each individual holding in this area were surveyed and designated as survey number and sub-divisions as pot hissas, pot numbers or hissa numbers. Their areas were worked out separately and recorded. The soils of these survey numbers and sub-divisions were classified for the purposes of land revenue according to the Gujarat Classification System and land revenue settlement was introduced under the Bombay Land Revenue Code. The original settlements in this district were introduced in 1862-63 and 1863-64 and these settlements were revised between 1893-94 to 1895-96. Re-revision settlements were introduced in Matar and Mahemadabad talukas in the year 1918-19 and second revision settlements in these two talukas were introduced in the year 1931-32. In the pre merger villages of the remaining talukas of Nadiad, Anand, Thasra, Baroda and Kapadvanj, second revision settlements were introduced in the year 1947-48 and though the guarantee period of ten years had already expired, the same have not yet been re-revised, nor have the settlements of Matar and Mahemadabad talukas been revised.

The details about (a) chronology of settlements (b) chronology of revisions and (c) chronology of re-revisions are now described below :

1. The account is based on following sources, viz. :

- (a) CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panchmahals*, (1879).
- (b) PATEL G. D. (DR.), *The Land Revenue Settlements and the British Rule in India*, (1969).
2. Union Areas—Areas forming part of the pre-Independence districts of the Bombay Province.

SETTLEMENT OPERATIONS

(a) *Chronology of Settlements*

The settlements were made in different talukas of the district by the different officers at different times, as will be seen from below :

District 1	Taluka 2	Year 3	Name of the Settlement Officer 4
Kheda	1 Matar	(1858-59) (1862-63)	Capt. Prescott
	2 Mahemadabad	(1858-59) (1862-63)	(did not exist as a separate Taluka)
	3 Nadiad (Mahudha)	(1862-63) (1868-69)	Capt. Prescott
	4 Anand	(1862-63) (1866-67)	(did not exist as a separate Taluka)
	5 Borsad	(1866-67) (1876-77)	Major Prescott
	6 Thasara	(1862-63) (1864-65)	" "
	7 Kapadvanj	(1862-63) (1863-64)	Mr. Harrington Bulkley

REVISION SETTLEMENTS

Chronology of Revisions

The Revision Settlements were made from 1889 to 1910 in the following chronological order by the Settlement Officers named against them :

District 1	Taluka 2	Year of Settlement 3	Name of the Settlement Officer 4
Kheda	1 Matar	(1894-95)	Mr. T. R. Fernandez
	2 Mahemadabad (Created in 1867)	(1894-95)	"
	3 Nadiad	(1895-96)	"
	4 Anand	(1895-96)	"
	5 Borsad	(1895-96)	Mr. E. Maconochie
	6 Kapadvanj	(1895-96)	Mr. T. R. Fernandez
	7 Thasara	(1895-96)	Mr. E. Maconochie

RE-REVISION SETTLEMENTS

The Chronology of the Re-revisions

In Re-revision, the procedure of beginning the settlement operations from Dholka in the Ahmadabad district was broken and the operations were commenced in Matar and Mahemadabad in the Kheda district and ended by a re-inquiry in these talukas. The information about these operations is tabulated talukawise for facility of reference.

District 1	Taluka 2	Year of re- revision 3	Name of the Settlement Officer 4
Kheda	1 Matar	(1818-19)	Mr. L. V. M. Robertson
	2 Mahemadabad Re-inquiry in	" 1931	Do. Mr. M. D. Bhatt
	3 Nadiad	1924	Mr. Master and
	4 Anand	"	Re-inquiry by Mr. R. G. Gordon.
	5 Thasara	"	"
	6 Borsad	"	"
	7 Kapadvanj	"	"

MERGED AREAS

*Historical Background**Survey and Settlement (Cambay State)¹*

It was a significant feature of the State that its villages were farmed out till the year 1879. The revenue farmers collected the land revenue on behalf of the State. The system of revenue farming was abolished after introduction of the survey and settlement of the villages by Mr. T. R. Fernandez, Deputy Superintendent in 1889-1892. The Original Settlement was sanctioned under Government Resolution, Political Department, No. 1075, dated 14th February, 1893.

The average incidence of the assessment was Rs. 4-9-6 per acre. The original settlement made by Mr. Fernandez was guaranteed for a period of 30 years. It appears from the Administration Reports of the State that revision settlement did not seem to have been done in the State. The period of original settlement was extended from time to time. The last extension expired in 1949. Out of 89 villages, 83 Khalsa villages were surveyed and

1. PATEL G D (DB), Cambay State, *Report of the Alienation Enquiry Officer*, 1951

settled. The five Inam villages were surveyed but not settled. The Record of Rights were maintained in the State on the basis of the system obtaining in the Khalsa villages. The State recognised the right of occupancy. The rights and responsibilities of the occupants were governed by the Cambay Land Revenue Code, 1942.

Balasinor State

Before merger Balasinor was the only Muslim State in the old Rewa Kantha Agency. It was a Jurisdictional State. A field survey of the State was begun by J. C. Hall in 1867 and completed in 1871. 31 per cent of the total area was alienated and the remainder 69 belonged to the State. Although the original survey was made in 1871, no settlement of land revenue was made till 1897. The Vighoti was then introduced in the State. A Revenue settlement on the basis of the system prevailing in the adjacent Khalsa villages was introduced in the State between 1915 to 1917. Out of 104 villages, 7 *ankda* villages were surveyed but not settled. The Records of rights on the British model introduced in 1943-44, were issued in respect of these lands.

The former Cambay and Baroda State areas were surveyed and classified during the former State regime on the lines similar to those in the pre-merger talukas of the district. The land revenue settlements were also introduced by these States on similar lines and so the settlement of these areas were considered to be scientific. As regards other former State villages included in this district, partial or wholesale survey and classification were found necessary and were carried out under the Merged State Area Survey and Classification Scheme. In one of these areas, there was nothing like scientific settlement in the past. No area in the district now remains unsurveyed and unclassified.

In the Merged State areas where the land revenue settlement was considered scientific, in order to bring the land revenue assessments on par with those obtaining in the pre-merger talukas of the district, Government framed Land Revenue Rule 19-N. For fixing the land revenue assessment in areas which were not settled or not scientifically settled on lines similar to the Bombay Land Revenue Code, Land Revenue Rule 19-O was also framed. Both the above rules were framed under the Bombay Land Revenue Code, Section 52. According to Land Revenue Rule 19-N, the villages in the various settlement groups were generally compared with those in the pre-merger talukas in respect of permanent and semi-permanent factors of physical configuration, climate and rainfall, markets, communications and standard in husbandry and Comparable Union areas were fixed for them. The standard rates of the scientifically settled areas were then compared with the standard rates of Comparable Union areas and remission was granted to the extent of the excess of the former over the latter.

1. PATEL G. D. (DE), Cambay State, *Report of the Alienation Enquiry Officer*, 1951.

Under the Land Revenue Rule 19-O, groups of villages of the merged areas were formed on consideration of their homogeneity in respect of permanent and semi-permanent factors mentioned above, and the Comparable Union areas of these villages fixed as under Land Revenue Rule 19-N and land revenue assessment in such areas were worked out by application of (1) the recoverable rate under Land Revenue Rule No. 19-N or (2) the existing rates prevailing in the merged areas or (3) the rates worked out on the basis of the average cash value of 35 per cent or 1/6th of gross produce, whichever was the lowest, to the soil classification value through the medium of the distance from village site scale and the actual areas of the survey number or its sub-division. In these areas, there were several villages held on Jagiri tenure. The Jagiri tenure was abolished under the Bombay Merged Territories and Areas (Jagir Abolition) Act, 1953, and the assessment of each individual survey number of sub-division was fixed under section 7 of the said Act by applying the rate of the adjoining homogeneous Khalsa villages.

Under the Gujarat Classification System which is also adopted in the former Baroda and Cambay State areas, land irrigated from wells are treated as dry crop lands with an additional classification factor of sub-soil so as to levy higher land revenue assessment on consideration of the capacity of wells and soil classification value.

Lands irrigated from second class and first class irrigation works which are in charge of the Public Works Department are subjected to irrigation cess and irrigation rates under the Bombay Irrigation Act, but for lands irrigated from smaller works like tanks, which are not governed by the Bombay Irrigation Act, the lands are subjected to Himayat assessment which is clubbed with the land revenue. Occasional use of water for agricultural purposes with permission from Government resource where Government have not spent anything is allowed free; and where Government have spent something, water assessment is levied under section 55 of the Bombay Land Revenue Code.

REVENUE ADMINISTRATION

The Revenue Department is the oldest and the best known department to the general public. The Collector of the district is the head of the department. Besides revenue administration, the department administers other branches of Government for which a separate department is not considered necessary. For example, the department administers the Court of Wards Act, the Stamp Act, the National Savings Schemes, etc. Till recently it administered the Money-lenders Act. Although there is Registration Department under the Director of Land Records, the Collector functions as the District Registrar. Although there is a separate Land Records Department, the work of the city survey is looked after by the Collector and the Mamlatdar works as City Survey Officer. Although

the jails are under the control of the Inspector General of Prisons, the work of sub-jails is supervised by the District Magistrate. Thus, the department carries out different works for other departments for which they do not have the necessary staff. Further, whenever any new scheme or legislation is to be enforced, Government entrusts the work to this department on account of its well trained and extensive staff. The services of the department are also requisitioned for all types of elections, population and civil supply. In short the services of the department are required whenever the people in bulk have to be dealt with or information is to be collected for which no separate machinery exists.

However, the main functions of the department are maintenance of law and order, development and co-ordination of the activities of other departments. These cover settlement and administration of land revenue, maintenance of revenue records, enforcement of land reforms, acquisition and requisition of property, excise duty, territorial changes, *wakfs*, administration of certain taxes, entertainment taxes, education cess, and collection of arrears of revenue of other departments in the district.

After introduction of the Panchayati Raj in April, 1963, many of the revenue duties, particularly functions regarding developmental programmes and collection of land revenue have been transferred to the Panchayati Raj institutions. Still the revenue duties of maintaining law and order, maintenance of land records, settlement of land revenue, civil supply and co-ordination of the activities of other departments in the district continue with the Revenue Department.

The hierarchy of the revenue officials under the Collector consists of the Prant Officer or Deputy Collector in charge of a sub-division, Mamlatdar in charge of a taluka assisted by Avalkarkuns, Circle Inspectors and Talatis functioning at lower level. The collection of land revenue has been entrusted to the gram/nagar panchayats. The Taluka Development Officer is vested with all the powers of a Mamlatdar in the matter of revenue collection. The Circle Inspectors are placed under his direct control and also responsible for the work of the Talati-cum-Mantri who looks after collection of revenue and maintenance of village records.

There are Circle Inspectors in the district who work under the Collector and under the District Development Officer. In matters relating to maintenance and repairs of boundary marks and crop inspection, their work is also supervised by the District Inspector of Land Records.

FUNCTIONS OF THE LAND RECORDS DEPARTMENT

In 1884, when the original survey and settlement operations in the Bombay State were completed, the old Survey and Settlement Department

was closed and the Land Records Department was created as an adjunct to the Revenue Department. The Land Records Department is now a separate department of Gujarat State and is an adjunct to the Revenue Department. At the State level, the department is headed by the Settlement Commissioner and Director of Land Records. For administrative purposes, the State is divided into circles each in charge of a Superintendent of Land Records, who has under him Inspectors of Land Records functioning at the district level.

The functions of the Department of Survey and Settlement are (1) to maintain old survey, classification and settlement records up to date by keeping careful notes of all changes, and for this purpose to carry out field operations preliminary to incorporation of the changes in the survey records, (2) to collect and provide statistics necessary for the sound administration of all matters connected with land, (3) to help reduce, simplify and cheapen litigation in revenue and civil courts by providing reliable survey and other records, (4) to supervise the preparation and maintenance of Record of Rights and, of the periodical inspection of boundary marks, (5) to conduct periodical revision and settlement operations, (6) to organise and carry out village site and city survey on an extensive scale and arrange for their proper maintenance, (7) to undertake special surveys for private individuals and public bodies, surveys in connection with railways, municipal and local projects, town planning schemes, and survey for the Defence and other Government departments, (8) to maintain up to date village, taluka and district maps, reprint them and arrange for their distribution to various Government departments for administrative purpose and sale to the public, and (9) to train revenue officers in survey and settlement matters.

The District Inspector of Land Records, is the principal officer in charge of the Land Records Department in the district. He is a gazetted officer (of a Mamlatdar's rank) appointed by the Settlement Commissioner and Director of Land Records, Ahmadabad and is directly subordinate to the Superintendent of Land Records, Vadodara Circle, Vadodara in all technical matters. He is also subordinate to the Collector of Kheda and has to carry out all administrative orders of the Collector in the matters of survey and land records.

Records of Rights—The Record of Rights has been introduced in all the villages of the district. After survey, the Land Records Department supplies the *Mapni* or survey register and map to the revenue officials for compilation of Record of Rights, Section 135 B(1) of the Land Revenue Code provides that the Record of Rights should contain the following particulars :

(a) names of all persons who are holders, occupants, owners, or mortgagees of the land or assignees of land, assignees of the rent of revenue thereof; (b) the nature and extent of the respective interests of

such persons and conditions or liabilities attached thereto; (c) rent or revenue, if any, payable by or to any such persons, and (d) such other particulars as the State Government may prescribe under the Land Revenue Rules.

The State Government has now applied these provisions to all tenancies by Notification under section 135 E (2) of the Code, whereunder any acquisition of right in land is to be reported to the village officer within 3 months by the person acquiring it, unless the right is acquired under a registered document.

INCOME FROM LAND REVENUE AND SPECIAL CESSES CONNECTED WITH IT

Land revenue is an important source of income in the district. The Statement XI.1 shows the demand, collection, remission and suspension in respect of the land revenue for the years 1969-70, 1970-71 and 1971-72 for the Kheda district.

STATEMENT XI-1

Sl. No.		1969-70 Rs.	1970-71 Rs.	1971-72 Rs.
1	Demand	8,295,105	9,188,910	9,361,520
2	Collection	7,701,156	8,656,270	8,871,897
3	Remission	93,259	118,593	106,975
4	Suspension	196,515	60,374	74
5	Percentage of collection	96.20%	93.98%	95.98%

Source : The District Development Officer, Kheda District Panchayat, Nadiad.

The statement shows an increase in original demand during the years 1969-70, 1970-71, and 1971-72. The reason for increase was mainly due to increase in fluctuating revenue. The decrease is also observed in respect of percentage of collection in the year 1970-71. The decrease is mainly attributed to the scarcity conditions prevailing during this year. It may be pointed out that in comparison to past the incidence of land revenue is less. J. C. Kumarppa carried out 'An Economic Survey of Matar Taluka' and stated 'Apart from the high ratio that the land revenue bears to the capital value of land, the yield per acre is in many cases, hardly sufficient to meet the revenue.'

Local Fund Cess

The local fund cess was imposed during the time of British Government with a view to construct roads for military purpose. Later on the proceeds were utilised for other public works.

The cess is levied under section 93 of the Bombay District Local Boards Act, 1923. It was formerly collected by the Revenue Department along with land revenue. But after the implementation of the Gujarat Panchayats Act, 1961, it is collected by the village panchayats, as the functions of collecting land revenue and local fund cess have been transferred to the panchayats. The cess which was first levied at the rate of 20 paise in every rupee of land revenue is now levied at the enhanced rate of 50 paise from 1st July, 1966.

In the Gujarat Panchayats Act, 1961, a provision has been made for levy of an additional cess. At the request of the gram and nagar panchayats, the State Government may levy an additional cess upto 25 paise on every rupee of land revenue payable to Government in the area within the jurisdiction of such panchayats. If such panchayats undertake for benefit of the community any special work or project which is to be completed within a specified period and for which additional funds are needed, it may pass a resolution at its meeting and after obtaining previous permission of the district panchayat, apply to the State Government to increase the rate upto 100 per cent in the land revenue payable to the State Government as ordinary land revenue.

Irrigation Cess

The irrigation cess is an annual charge payable by every landowner of cultivable area under command of a canal system. This cess is a fixed charge per acre and is not liable to variation from year to year. It was made leviable on old irrigation works with effect from 13th February, 1954, while in case of new irrigation works, it was decided to make the cess payable after three years from the commencement of the irrigation. It was found that farmers did not utilise the full irrigation potential. In order to pressurise recalcitrant cultivators to use irrigation facilities compulsory irrigation cess at the rate of Rs. 2-50 per acre per annum is being levied with effect from 13th February, 1963 on all lands within the command of irrigation works, irrespective of the fact whether irrigation water is used or not. This compulsory levy is primarily meant to cover the working expenses of the canal system. The levy of irrigation cess has not been continued in the State after 15th February, 1970.

Education Cess

After formation of the separate State of Gujarat, for promotion of education, a surcharge on agricultural and non-agricultural lands was levied by enacting the Gujarat Education Cess Act, 1962. The Act came into force from 1st August, 1962. An Education Cess Fund has been created out of the receipts from (1) the surcharge on all lands, agricultural and non-agricultural, assessed to land revenue, and (2) tax on lands and buildings in urban areas. A surcharge of 20 per cent is levied with effect from 1st August, 1962 on agricultural lands which are assessed or held for the purpose of agriculture and not used for any purpose unconnected with agriculture. A surcharge varying from 12½ per cent to 75 per cent of non-agricultural assessment is levied on all unalienated lands subject to non-agricultural assessment and on all alienated lands (excluding village sites) used for purposes other than agriculture. These rates have been brought into force from 1st August, 1962.

In the urban areas, the lands and buildings are liable to rates of tax which vary from 2½ per cent to 4½ per cent of the annual letting-value of the property. These rates have come into force from 1st October, 1965.

The surcharge levied on agricultural as well as on non-agricultural lands is transferred at the end of the year to the State Education Cess Fund and utilised on schemes for promotion of education in the State. During 1963-64, Government had directed that one-third of the tax collected on lands and buildings with the municipal areas should be given to the municipalities as grant with effect from 1st August, 1962, the date from which the tax was levied. Against a total demand of Rs. 852,269-22, a sum of Rs. 845,756-17 was collected as the education cess during the year 1971-72 in the district.

LAND REFORMS

The twin objectives of land reforms have been the stepping up of the agricultural production and the establishment of a socialistic order of society for the greatest good of the greatest number. Before Independence in these areas, there were various land tenures upon which land was held by agriculturists and others. These tenures were a product of long evolution determined by the geographical, economical, social, and political conditions prevailing at different times of history. They originated in the exigencies of administration and the overriding considerations of political expediency.

It was not out of any generosity that the previous rulers whether the Hindus, the Muslims, the Marathas or British alienated villages, lands and

cash allowances but all grants were dictated by the political necessity, the necessity of support to the existing rule and permanent stable revenues to the State. In order to achieve these objectives the leading men such as Paragana Watandars, Inamdars, Jagirdars, etc., were selected and given *inams* in the form of entire villages, lands, revenues and cash allowances.

Such types of grants were necessary in those uncertain political conditions when the means of transport and communications and the art of administration had not developed on the present scientific basis. With the unification of India under the British regime and with the advent of Independence, the political need for continuing those Inamdars and Jagirdars, who were intermediaries between Government and actual tillers of the soil, did not survive. Such intermediaries outlived their utility in the new democratic set-up as embodied in the Constitution of India. As a result, Government of India laid down a policy for removal of all such intermediaries from the land administration by enacting special legislation. In furtherance of this policy, the former Government of Bombay and present Gujarat Government enacted special legislation abolishing the *inams* and *watans* and the non-ryotwari tenures.

The following Land Reform Laws are applicable to the Kheda District.

1. The Bombay Bhagdari and Narwadari Tenures Abolition Act, 1949.
2. The Bombay Maleki Tenure Abolition Act, 1949.
3. The Bombay Talukdari Tenure Abolition Act, 1949.
4. The Bombay Paragana and Kulkarni Vatan Abolition Act, 1950.
5. The Bombay Personal Inams Abolition Act, 1952.
6. The Bombay Merged Territories and Areas (Jagirs Abolition) Act, 1953.
7. The Bombay Merged Territories (Ankadia Tenure Abolition) Act, 1953.
8. The Bombay Saranjams, Jagirs and other Inams of Political Nature Resumption Rules, 1952.
9. The Bombay Service Inams useful to Community (Gujarat and Kokan) Resumption Rules, 1954.
10. The Bombay Merged Territories (Miscellaneous Alienations Abolition) Act, 1955.

11. The Bombay Inferior Village Watans Abolition Act, 1958.
12. The Gujarat Patel Watans Abolition Act, 1961.
13. The Gujarat Devasthan Inams Abolition Act, 1969.
14. The Gujarat Agricultural Lands Ceiling Act, 1960.
15. The Bombay Prevention of Fragmentation and Consolidation of Holdings Act, 1947.
16. The Bombay Tenancy and Agricultural Lands Act, 1948.
17. The Bombay Paragana and Kulkarni Watans Abolition Act, 1950.
18. The Bombay Merged Territories (Matadari Tenure) Abolition Act, 1953.

The tenures alongwith the relevant Acts are now described in detail.

The Bombay Prevention of Fragmentation and Consolidation of Holdings Act, 1947.

Consolidation of Holdings¹

Consolidation of small and scattered holdings is accepted as a preliminary step to the formation of co-operative farming. The consolidation programme should, therefore, not be thought of in isolation but in context of the entire land policy of the State. In Gujarat, comprehensive legislation has been enacted to prevent fragmentation. The Bombay Prevention of Fragmentation and Consolidation of Holdings Act was enacted in 1947 and was made applicable to this district. It provides for prevention of fragmentation in agricultural holdings and also provides for consolidation of the scattered parcels of lands into compact holdings. For the purpose of the implementation of the Act, standard areas have been fixed for all talukas and mahals in this district and any area below the standard area is deemed fragment and noted as such in the land records.

The programme of consolidation of holdnigs had been undertaken in only six talukas of Kheda district, viz., Thasra, Vadasinor, Nadiad, Mahemadabad, Petlad and Borsad.

1. *Report on Consolidation of Holdings, Gujarat State, Vols. I and II* by H.K.L. Kapoor Committee.

The programme was successful due to successful propaganda of the scheme. The cultivators had recieved the scheme of consolidation cordially.

The Bombay Bhagdari and Narwadari Tenures Abolition Act, 1949

The Bhagdari and Narwadari¹ tenures were found in the Kheda district. In the parts of Kheda district comprising British areas there were 90 Narwadari villages in Anand, Borsad and Nadiad talukas. There were some villages in Petlad and Bhadran talukas of old Baroda State. These tenures were the remnants of the revenue farming system of the past Mughal and Maratha administrations. They were only a method of collection of land revenue from the villages in that generally the lands were liable to payment of full assessment. The responsibility for payment of revenue was joint for Mox Bhagdars and Peta Bhagdars. Thus, the tenures normally did not involve any alienation of land revenue or land. For safeguarding the prompt collection of land revenue, the Bhagdari and Narwadari Act, 1862, was passed. It imposed restrictions on the dismemberment of any Mox or Peta-Bhags. But as these lands were allowed to be inherited equally amongst the sons of the Bhagdars and Narwadars, the Bhags and Peta-Bhags were parcelled out in to incredible sub-divisions. The result was that the liability for payment of land revenue, though joint in principle, resulted in practice in individual responsibility with consequent difficulty in collection thereof. Despite restrictions on the alienation if the Bhag or Narwa property to non-Bhagdars, the alienations of such lands to non-Bhagdars were not uncommon owing to debt or other causes. Such a custom gave rise to the *gharenia* and *vechania* tenures in the Narwa villages which were exemted from payment of revenue. This was the revenue situation which the Bombay Bhagdari and Narwadari Tenures Abolition Act, 1949, was enacted to remedy. It came in to force on 5th August, 1949. It abolished all the incidents of the tenures and established direct responsibility of the individual occupants to payment of land revenue to Government. It also recognised all alienations, assignments, mortgages, etc., in respect of any unrecognised portions of Bhags or Narwas made in contravention of section 3 of the Act of 1862. The alienations such as *garenia*, *vechania*, *devasthanans*, etc., were resumed and the lands made liable to payment of full assessment. No compensation was required to be paid on account of abolition of these tenures. It was a notorious fact that the revenue accounts of the Bhagdari and Narwadari villages were in a great mess owing to unauthorised alienations and the consequent difficulty in collecting land revenue from the Mox and Peta-Bhagdars was equally great. These snags were removed and the path was made clear for smooth revenue administration at the village level. The Act also paved the way for smooth

1. The Narwa was nothing more than the mode of distributing equally the total land revenue of the village among the co-sharers (*bhagdars*). The only distinction between the two tenures was that while in the Bhagdari villages the assessment was fixed on each field, in the Narwadari there was never a separate field assessment but the revenue was fixed in lump.

consolidation of too many disparate and dwarfed fragments under the Bombay Prevention of Fragmentation and Consolidation of Holdings Act, 1947.

From the point of economic development, it has immensely done good to the cultivators. Removal of legal restraints on alienations of the Bhag properties to non-Bhagdars resulted in appreciation of values of lands in these villages and consequently enhanced the creditworthiness of the holders of the Bhag-lands. These lands could now be hypothecated in security of any loan from private persons or Government. Thus, it has helped the institutional credit more than anything else in these villages.

The Bombay Maleki Tenure Abolition Act, 1949

The Maleki Tenure was confined to 27 villages in the Thasra taluka of the Kheda district. These villages were originally granted by Mahmud Begada rent free to certain Muslim soldiers of the Malek Tribe for special valour at the siege of Pavagadh in 1483. For more than 200 years, the Maleks continued to hold these villages rent free. They only took half the produce from their cultivators; some of the Maleki villages used to pay Jamabhandhi to Nawab of Balasinor. During the British period the Government allowed Maleks to retain the lands which they ploughed and took the remaining lands in its possession in lieu of the payment ranging from 7 annas to 9 annas per rupee. Thus, the Maleks were the original grantees of the villages and their status approximated to that of the Inamdars enjoying the villages rent free. This status continued till the beginning of the 18th century when their fortunes began to fluctuate with the changes in the political power in Gujarat. During the Maratha rule oppressive cesses weighed down the population. When the Thasra taluka came under the British rule in 1817, the British attempted to introduce systematic revenue administration by appointing Talatis therein. Robertson made settlement with the Maleks in 1819 and 1823 by which the Maleks lost their proprietary rights in the villages and became 7 or 9 anna sharers of village revenues. This settlement imposed assessment based on the caste rates.

At long last, the Maleks' rights were settled by Pedder in 1865. The settlement was based on the rights of the Maleks in different categories of lands, viz., (1) Wajeli lands, (2) Santheli lands, (3) Nakru lands, and (4) the remaining lands. From the Wajeli lands, the Maleks used to get *vaje*, i. e., a share from land revenue which was collected by Government and paid to the Maleks. The second category was of the payments under Santheli lands, which were subject to *santh* payments under the Robertson settlement. The *sanths* were commuted into cash called 'Kothli Santh' cash allowances. The third category was of the Nakru lands, which were the *gharkhed* lands

of the Maleks at the time of the Robertson settlement. The fourth category comprised the public assignments such as grazing etc. In short, the rights given under the Pedder settlement were as follows. In these villages the Maleks were entitled to :

- (i) receive 7 or 9 anna share of the revenues from the *wajeli* land ;
- (ii) receive 7 or 9 anna share of the miscellaneous revenues consisting of sale proceeds of grass, grazing, produce of fruit trees, wood from waste *wajeli* lands ;
- (iii) claim a preferential right for the purchase of the occupancy of any waste *wajeli* land and
- (iv) claim a right to nominate talatis.

The tenure was abolished under the Bombay Maleki Tenure Abolition Act, 1949, with effect from the 1st March, 1950. The Act abolished all the revenue rights of the Maleks.

The tenure abolition would bring about a great change in the agricultural economy of the villages. The Maleks have ceased to receive *vaje*, and have been forced to look beyond their villages for employment. Some of them have found employment in the Associated Cement Co. Ltd., at Sewalia. Some of them have joined the district police force and the education and revenue departments and some have taken to cultivation of the *gharkhed* lands (former Nakru lands) in those villages. This is a very welcome change in that the erstwhile indolent class is forced to direct its energies into gainful employment. The Maleks are levelled down to the level of other land holders in the village economy.

The Bombay Talukdari Tenure Abolition Act, 1949

The Talukdari tenure was the most important tenure amongst the proprietary tenures of Gujarat and was prevalent in the Kheda district. There were 30 talukdari villages and 2 *wantas* in the district. The Talukdari estates either consisted of entire villages or portions of villages called *Wantas*. When the talukdars were despoiled of their estates by the Muslim conquerors they were allowed to hold one-fourth of their original possession as *wanta*. The Talukdars of Gujarat were identical with the ruling families of Saurashtra and other areas of Agencies. Their loss of political power was on account of the geographical accident of their estates being situated in the *rasti* (settled) portion of the Bombay State brought under the direct control of the British, whereas their kinsmen in the *mulkgiri* (unsettled) portion continued to be treated as tributaries. Thus, those who were fortunate to

1. PATEL G. D. (DR.), *The Land Revenue Settlements and British Rule in India*, p 39.

be in Saurashtra under the British Settlement retained political power and those whose lot was cast within the Bombay State became non-jurisdictional Thakors. The Talukdars of the estates belonged to different castes, viz., Muslims, Kathis, Charans, Vaghelas, Chudasamas, Kolis, Thakardas, etc. These Talukdars comprised men of varying positions ranging from jurisdictional Chiefs to holders of a few parcels of lands in a coparcenary estate.

The fundamental characteristic of the talukdari tenure was that the Talukdari estates were neither alienated nor unalienated. The Talukdars were not the grantees of the British but enjoyed proprietary rights in their estates antedating the advent of the British rule including ownership of mines, minerals, trees and forests. The historical evidence is that the Talukdars were settled by the Mughals as actual proprietors of their estates with the simple liability of paying tribute to Government. After the Muslim rule, the Maratha domination made no change in tenurial status of the Talukdars. The British on accession continued to levy the amount of tribute as hitherto but the amount was increased by 50 per cent in 1821. The status and the tributary obligations of the Talukdars remained in a nebulous state till their rights and responsibilities were settled by the Gujarat Talukdars' Act, 1888. It provided *inter alia* for the revenue administration of the estates.

Under the Act, the Talukdari estates were held subject to the payment of jama to Government which was either Udhad (fixed in perpetuity) or fluctuating. Some estates in Kheda district were held on Udhad jama or quit rent fixed under the Summary Settlement Act.

Under the provisions of the Act the Settlement Registers were prepared for each village, which served later the purpose of the Record of Rights in estates.

In these estates, large areas of lands were alienated to cadets, widows of the family and relatives for maintenance, and to village servants, either as reward for past services or as remuneration for services to be performed. The holders of these lands paid no revenue either to the Talukdar or to Government generally. The service inam (*chakariat*) lands were resumable at will, but in the case of other alienations, the Talukdars had a reversionary right in the event of the failure of male heirs. These alienations fell into three categories :

- (1) the alienations made prior to the British rule, i. e., before 1818 ;
- (2) the alienations made between 1818 and 1888, i. e., after the introduction of the British rule and before the passing of the Gujarat Talukdars Act, 1888 ; and
- (3) the post-Act alienations.

The Talukdars were exempted from the payment of jama as regards certain lands alienated by them before 1888 and as regards other classes of such lands, they were required to pay as jama 50 per cent of the proceeds derived by them therefrom.

Amongst the alienations, the problem of wanta lands in the Talukdari estates was very important. The wantas were a trace of the Mughal Settlement. It was a sort of the Talukdari tenure within a talukdari estate and, therefore, Peile called the wanta holders as "ex-Talukdars". Those wanta lands were entered as Lal-liti lands in the Settlement Registers. The wantas were of two kinds, viz., (1) the Summary Settlement wantas treated as personal inams in tail male ; and (2) the talukdari wantas subject to jama and classed as "Land specially reduced". The wanta holders had generally no documentary evidence to prove their title during the period prior to the enactment of Act VII of 1863 ; because such lands were not assigned but were the lands retained after surrendering $\frac{3}{4}$ ths of the area of the village of the Muslim rulers. Some wantas were settled under the Summary Settlement Act VII of 1863 and subjected to payment of quit-rent under the terms of the Sanads issued to them. Other wantas which were not so settled continued to pay Udhad Jama. The wantas held by the Talukdars differed in no way from the whole villages owned by that class.

The tenants in the Talukdari villages were invariably tenants-at-will ; but the evictions being rare, they continued cultivation of the same lands for generations. After the application of the Bombay Tenancy and Agricultural Lands Act, 1948, such tenants became protected or periodical for 10 years. The permanent tenants, however, were very few.

In order to remove these intermediaries from the Talukdari estates, the Bombay Talukdari Tenure Abolition Act, 1949, was enacted. It abolished the Talukdari tenure with all its incidents with effect from 15th August, 1950. The Talukdars holding the talukdari lands and cadets holding any talukdari land hereditarily for the purpose of maintenance (*jiwai*) have been recognised as occupants thereof liable to payment of full assessment. Since 1st March, 1955, the permanent tenants and inferior holders paying assessment to the Talukdars are made eligible to the rights of occupancy on payment of 3 or 6 times the assessment respectively. The multiples cover the occupancy price and the compensation for the right of reversion abolished.

It is true that with effect from 15th August, 1950, all lands in the Talukdari villages became liable to payment of full assessment. But there were two exceptions, viz., (1) the talukdari wantas which were paying *udhad jama* and (2) the lands in respect of which the settlement guarantee had not expired.

The Bombay Talukdari Tenure Abolition Act, 1949 made all the talukdari lands liable to payment of full assessment except certain categories of lands called the Udhad jama and jama-paying lands covered by the settlement guarantee.

The Bombay Paragana and Kulkarni Watans Abolition Act, 1950

The Kulkarni watans were found all over Maharashtra. But in Gujarat, there was only one Kulkarni watan in Kapadvanj in Kheda district. The paragna watans were, however, found in all the districts of Gujarat. The paragana watandars called Amins, Desais and Majmudars were the chief instruments in collection of the revenues of the State from the time of the Muslim rulers. This revenue arrangement was acquiesced in by the Marathas and the British. In the beginning of its rule, the British found them possessed of too much knowledge and power with the result that they could not be easily removed from the village administration. But in order to clip their wings, the British appointed Mamlatdars and the village accountants for collection of village revenues and maintenance of village accounts. With the collection of much statistical information about the villages and their revenues during the first half of the nineteenth century, these watandars lost much of their *raison d'être*. Government, therefore, seriously considered the question of dispensing with their services. With this objective, the British Government appointed in 1863 two Commissions presided over by Messrs. Gordon and Pedder. Mr. Gordon settled such watans in the Deccan, Konkan and Southern Maratha country; whereas Mr. Pedder effected such settlements in the five districts of Gujarat, viz., Ahmadabad, Kheda, Panch Mahals, Bharuch and Surat.

The Gujarat watans differed from the Deccan watans in point of origin, history, and perquisites. The commutation of service was effected subject to payment judi varying from 3 to 8 annas in a rupee of assessment and the sanads were given accordingly. The watans in Kheda were decided to be the private property of the watandars. As a result those watans were alienable. Throughout Gujarat, there was only one Kulkarni watan having cash emoluments in Kapadvanj (Kheda district). The Kulkarni deputed his man to officiate as Kulkarni. The Paragna and Kulkarni watans were abolished from the whole Bombay State with effect from 1st May, 1951 under the Bombay Paragana and Kulkarni Watans Abolition Act, 1950. The Act abolished the watans with all their incidents. After resumption of the watans lands, the ex-watandars were not dispossessed of those lands but were made eligible for re-grant of the resumed lands on new tenure on payment of occupancy price equal to six times the assessment fixed on the land within a period of 5 years from 1st May, 1951. If such lands were to be made transferable or partible, a Nazarana equal to 20 times the assessment was to be paid to Government in six instalments within one year.

The properties mentioned in section 37 of the Land Revenue Code, 1879, and other properties used by the public have been vested in Government. It should be noted that the vesting in this Act differs from similar provisions in other Acts, as the waste and uncultivated lands had been vested in Government but they were regranted to the former watandars on payment of the stipulated occupancy price to Government.

The Bombay Personal Inams Abolition Act, 1952

The personal inams were grants, made or recognised by the British Government in appreciation of services rendered by persons to Government in diverse circumstances of trying character. In the beginning of the 19th century, the British Government wanted a loyal class who would support their rule and administration at all levels. Such a class was found in such grantees by the British.

This class of the inams was most widespread all over Gujarat and consisted of entire villages, lands, *amals* (shares from village revenue) and cash allowances. It covered personal inams adjudicated by the Inam Commission and under the Summary Settlement Acts of 1863. Besides, there were other grants such as the 'Maleki Nakru' lands in Thasra taluka, the Talukdari watans, Toda Giras allowances, etc., which were outside the scope of these Acts and still treated as personal inams. The Summary Settlement Acts II and VII of 1863 were applicable to Gujarat. The Acts converted into transferable freehold all such inams whether they were adjudicated by the Inam Commission or not, subject to payment of quitrent of respectively 4 or 2 annas in a rupee with or without Nazarana. Besides, there were certain "terminable Inams" which had been adjudicated to be continuable not hereditarily but only for one life or a few lives. They were also enfranchised by Government in 1864 subject to payment of Judi equal to 2/3rd 1/2 and 1/3rd assessment, according as the inam was continuable for one, two or three lives, respectively. Thus, the inams were private enfranchised property of the holders subject to payment of Judi to Government. The rights to trees, forests, mines and minerals, where not specially reserved by Government, were conceded to the holders.

The personal inams consisted of the following categories:

- (1) grants consisting of exemption from payment of land revenue only;
- (2) grants consisting of soil with or without exemption from payment of land revenue;
- (3) grants consisting of assignment of land revenue called *amals*; and
- (4) dash allowances.

It is very interesting to know the various purposes or services for which inams were originally granted by Government in Gujarat. In Gujarat, the grants were multi-purpose in their character.

In the Kheda district the personal inams were the Maleki Nakru lands in the Thasra taluka and maintenance grant of the Silod village of Kheda district to the Rode family of the Minister of Gaekwad. After the dawn of Independence, this class of vested interests became outdated and outlived its utility. Its inams were, therefore, abolished with effect from 1st August, 1953 under the Bombay Personal Inams Abolition Act, 1952. The Act abolished all the incidents of the inams and resumed cash allowances and *amals*. All lands, which were partially or wholly exempt from payment of assessment, were made liable to payment of full assessment. In the case of the smaller inams, the levy of full assessment was graduated.

If the inams consisted of grants of exemption from payment of assessment below Rs. 5,000, full assessment became leviable from 1st August, 1955 and if the exemption was upto or exceeded that limit, the liability to pay full land revenue commenced on 1st August, 1953. The grants which consisted of soil accompanied with or without exemption from payment of land revenue became so liable from 1st August, 1953. Broadly speaking, all inams adjudicated by the Inam Commission generally were treated as grants of soil with or without exemption and those settled under the Summary Settlement Acts of 1863 were treated as consisting of grants of exemption from payment of land revenue only. If the grants consisted of the *amals* and cash allowances, they came to be resumed with effect from 1st August, 1953.

The fundamental fact about the Act was that the holders of inams were not dispossessed of their lands but were subjected to payment of full assessment only. They were made occupants of their lands without charging any occupancy price. Besides, occupancy rights were recognised in respect of the lands held by inferior holders paying assessment to the Inamdars.

Certain lands and properties of a public character and waste and uncultivated lands were vested in Government and were subsequently assigned for public purposes such as grazing, cattle-stand, play-grounds, etc.

As regards extinguishment of rights in lands, the pattern of compensation provisions were quite analogous to that of the Bombay Talukdari Tenure Abolition Act, 1949. And for resumption of *amals* and cash allowances, a quantum of seven times and the amount of the allowance was provided. For imposition of full assessment on the wholly or partially exempt lands, no compensation was payable under section 17 (5).

Thus, a large body of reactionary intermediaries was removed from the administration by this legislation.

The Bombay Saranjams, Jagirs and other Inams of Political Nature, Resumption Rules, 1952

The political inams were found mainly in the Deccan. In Gujarat, they were few and far between. They were Jagirs given and recognised by the British Government. It was the practice of former Governments, both Muslims and Marathas to maintain a species of feudal aristocracy for the State purposes by temporary assignments of revenue either for the support of the troops or personal service, or the maintenance of official dignity or for other specific purposes. The holders of such grants were empowered to collect and appropriate the revenue and manage villages and lands. Under the Muslim rule, such grants were called Jahagirs and under the Maratha rule, they were called Saranjams. But such a distinction became blurred during the British period and these terms became convertible.

The political inams were governed by the Saranjam Rules of 1899. Accordingly, the Saranjams were ordinarily continuable during the pleasure of the Government. They were life estates which on the death of the holder were formally resumed and a fresh grant was made to the next holder. Thus they were technically re-grants. They could not be sub-divided. The regrants were subject to provisions for the maintenance of the widow or widows of deceased holder. These general rules which were applicable to Saranjams, held good in the case of the political inams of other nature. Such inams granted on political considerations were continued in terms of the Sanad or order creating the grant. If the inam was alienated outside the family, it was liable to be resumed unless such transfers were expressly provided. These rules were rules of convenience only. They did not exhaust the general powers of Government or prevent Government from making any decision referable to a particular Saranjam or political inam. There was 1 entire village (*viz.* Alwa) in the Kheda district. The scattered inam lands were also found in the district. Besides the village and scattered lands, cash allowances were also held by certain persons. The cash allowances were chargeable to the provincial revenues generally.

These grants were recognised or made by the British as a matter of political expediency and the ancient historical families, which generally held them, were hereby preserved without performance of service. Thus, the historical families which were deprived of power and position in the administration were placated by continuance of grant of political inams. By and large, the inams were continuable during the pleasure of Government. These inams were resumed with effect from 1st November, 1952 under the Bombay Saranjams, Jagirs and other Inams of Political Nature, Resumption Rules, 1952.

The resumption Rules distinguished grants which were purely grants of soil and which were grants consisting of exemption from payment of land revenue (*i. e.*, grants of revenue only). In the case of the soil grants, the resumption was outright and if any encumbrances were created by inamdars, they were extinguished. Only the inferior holders paying assessment anterior to the grants were recognised as occupants. In the case of land revenue grants, the resumption was by levy of full assessment, the lands having been the private property of the holder. The Rules abolished the cash allowances chargeable to the State revenues but did not affect those chargeable to the central revenues. In the Kheda district Alwa village was covered by these Rules.

The Bombay Merged Territories and Areas (Jagirs Abolition) Act, 1953

Like the Saranjams and political inams in the British districts of Gujarat, there were Jagirs covering several categories in the territories and areas which merged after Independence. They could be broadly divided into two categories, *viz.*, (1) those granted for maintenance to the members of the royal family, and (2) those granted in services to the State or valour in war. These two categories of Jagirs were found in all the former States and Estates of Gujarat. The maintenance grants were called Jiwarak, Jiwai or Ayada and were held generally by the younger brothers of the Ruler and cadets. The expression 'Jagirs' covered a medley of grants for maintenance, appreciation of services or remuneration for services rendered or to be rendered. Most of these Jagiri villages in States were surveyed and settled during the States' regimes. But the Jagirs covered with hills, forests and saline sandy soils were not surveyed and settled. In these Jagirs the system of land revenue was *bhagbatai* or Vaje and the State's share was fixed on an *ad hoc* basis. Cost of cultivation often determined the amount of land revenue payable by the cultivator.

In furtherance of the Government policy of abolishing intermediaries in the agrarian sector all these Jagirs were abolished under the Bombay Merged Territories and Areas (Jagirs Abolition) Act, 1953, with effect from 1st August, 1954. The Act applies to grants consisting of entire alienated villages and portions of villages and not to the scattered lands and cash allowances. It classifies the Jagirs into proprietary and non-proprietary. Besides, it recognises another category of Jagirs called the lifetime Jiwai Jagirs.

Occupancy rights are recognised in respect of Gharkhed lands held by Jagirdars or cadets and the lands held by permanent holders. Tenants in proprietary and non-proprietary villages are made eligible to the rights of occupancy on payment of the occupancy price equal to six multiples of assessment to the Jagirdars and the State respectively. As usual, the *devasthan* and *dharmada* inams held for the institutions and inams held for service useful to Government were saved.

The vesting of public properties and lands is on the analogy of other Abolition Acts. There is also the saving of the Jagirdars' rights to mines and minerals and forests.

As regards compensation provision, the pattern of the Bombay Talukdari Tenure Abolition Act, 1949, is followed for the proprietary Jagirs and that of the Ankadia Tenure Act, 1953 for the non-proprietary Jagirs. In the case of the lifetime Jiwai Jagirs, however, the compensation is provided at ten times the average amount of land revenue recovered by or due to the Jagirdar.

As the abolition of the personal inams created uproar amongst the Inamdars in the former Bombay State area, the abolition of the Jagirs created much consternation and uproar among the Jagirdars in the merged territories and areas. Next to the personal inams, this measure has affected all sorts of holders of Jagirs in one respect or the other.

The Bombay Merged Territories (Ankadia Tenure Abolition) Act, 1953

The Ankadia system originated in the difficulties inherent in administering the far flung and hilly regions of the borderland owing to uncertain political administrations of the 18th century in Gujarat. The then Government badly needed a person, who could control the village, collect revenue and pay a fixed sum called 'Ankada' to Government. In the villages, other than those of Baroda, the amount of Ankada was fixed under a lease for a number of years; whereas in Baroda the amount of the Ankada was either fixed for thirty years or ten years according as the village was *ek-Ankadia* or *farta Ankadia*.

They were regulated by leases or *pattas* which were renewed at the discretion of the ruler. *Pattas* generally stipulated performance of police duties as well.

There were 12 Ankadia villages in the former State of Balasinor merged in Kheda district. These villages were neither alienated nor Jagiri villages; but were akin to leasehold villages. They were held by persons of different castes such as Rajputs, Kolis, Thakardas, Kathis, Muslims, Barots, Brahmins, Charans in the ex-Baroda State and by Thakarda Kolis in other States.

In furtherance of the Government policy of abolishing intermediaries from the agricultural sector, Government of Bombay undertook a special legislation. The Bombay Merged Territories (Ankadia Tenure Abolition) Act, 1953, was enacted and brought into force from 15th August, 1953. The law abolished the Ankadia tenure with all its incidents. All the leases or agreements relating to the Ankadia villages were cancelled. All the Ankadia villages were resumed and all lands in those villages were made

liable to the payment of land revenue under the provisions of the Bombay Land Revenue Code, 1897. As in other Abolition Acts the inams held by religious and charitable institutions and inams held for services useful to Government were saved. Certain categories of landholders or cultivators were recognised as occupants in respect of lands held by them. The Ankadedar was recognised as an occupant in respect of his Gharkhed lands. A person whose name was entered in the record as an occupant (Kabjedar) of such land and was liable to pay to the Ankadedar land revenue was also recognised as an occupant. The Ankadedars in respect of the Gharkhed lands, and cultivators paying land revenue have been recognised as occupants. Except these persons, other cultivators continued as tenants under the provisions of the Bombay Tenancy and Agricultural Lands Act, 1948. Thus, the Act has made the Gharkhed and Jiwai lands which were wholly exempt from payment of land revenue liable to full assessment under the Code.

For extinguishment or abridgement of any rights of the Ankadedar, compensation is provided at three times the average of the amount to have been realised annually by the Ankadedar as revenue during the three years immediately before the coming into force of the Act. On this basis in several cases no compensation was payable to the former Ankadedars.

Bombay Merged Territories (Matadari Tenure) Abolition Act, 1953

In the Matadari estates of the Bawishi, Vatrak Kantha and Gadhwada Thanas merged in the districts of Ahmadabad, Kheda and Sabar Kantha, one of the forms of revenue-farming methods of revenue administration was Matadari. The estates were called 'Matadari' and their holders Matadars, because the holders thereof had to sign a bond for payment of the village revenues to the ruling authority.

Geographically, the estate villages were situated on the border land of the Baroda territory in many parts inaccessible because they were cut by rivers and ravines. In those unsettled days, Government wanted an intermediary who could collect revenue for Government without much cost of collection. Such an agency was found in the backward but militant Thakardas of the estates.

The villages were under the direct control of the Gaekwad before the British took over the administration of those estates in the beginning of the 19th century. Then, the Matadars were directly and personally responsible for payment of the tribute to Baroda. The amount of the tribute depended more on the means at the disposal of the Gaekwad to enforce its payment than on the capacity of the village to pay. It was recovered by the Mulkigiri army. At the time of the Mahikantha Settlement in 1812, the amount of the tribute was fixed on the basis of the demands of the previous years. In 1820, the British Government gave guarantee to recover the tribute from the Bawishi

Thana villages and to pay it to the Gaekwad. The result was that the Mulkigiri army of the Gaekwad stopped collecting tributes from the villages. Thus much harassment and suffering were stopped by the British.

As regards the exact status of the Matadars, the British Government decided in 1885 that they were no Chiefs or Talukdars in the Bavishi Thana and that they could not be admitted to the status of the Talukdars. Further Mr. Shattock's findings in 1941 showed that the status and rights of Matadari estateholders whether in Rajawat or non-Rajawat villages were inferior to those of non-jurisdictional Talukdars and Bhagdars of other Thana areas. Consequently, those estates were merged with Baroda in 1943, Baroda thereafter appointed a Committee to decide the rights and responsibilities of the Matadars. The committee decided these estates as Ek Ankadia villages, and fixed a lump sum called 'Ankada' for payment to the Baroda State. But after the issue of the orders, the Government of India detached these estates from Baroda in October, 1948 with the result that the estates reverted to their status prior to 1943. At the time of the abolition of the estates, the position remained nebulous; the Matadars collected land revenue, paid the Ankada to the Baroda State and enjoyed the surplus. Thus, the Matadars were reduced to the position of revenue farmers without any proprietary interest in their villages. Of course, they held considerable lands as Gharkhed.

The village lands were broadly divided into Sarkari and Barkhli. The alienations consisted of Salamia, Ghasdana, Ranvatia, Jarat, Wanta, Vechania, Gharenia, Devasthan, etc.

The Matadari estates were resumed with effect from the 1st January, 1954 under the Bombay Merged Territories (Matadari Tenure) Abolition Act, 1953. The estate villages were resumed and made liable to payment of full assessment under the provisions of the Land Revenue Code. The Devasthan and Dharmada grants held for religious or charitable institutions were not affected. Occupancy rights are conferred on the Matadars in respect of his Gharkhed lands, the Bhayats in respect of Bhayati lands and the registered occupants in respect of the Sarkari lands.

For abolition of the Matadars' right to enjoy the surplus revenue, compensation is payable at three times the average of the amount of such portion proved to have been received by him during the five years immediately before the enforcement of the Act.

The Bombay Service Inams Useful to Community (Gujarat and Konkan) Resumption Rules, 1954

In the village economy of Gujarat, the villages were economically self-sufficient and administratively autonomous. The autonomy of the village

units was not affected by the changes in political power. The continuity and stability of the village service was maintained by the village servants useful to community from generation to generation. In order to meet the needs of the agriculturists and village industries, a group of village servants such as Suthars, Luhars, Kumbhars, Barbers, etc., grew up. They were called Vasvayas (meaning persons who were settled in the villages for service). By way of inducement, such persons were given scattered lands and cash allowances as emoluments for rendering service to the village community.

Such inams of Gujarat were regulated by the Resumption Rules of 1908. The Bombay Hereditary Offices Act, 1874, was not applicable to those inams, but the Pensions Act, 1871, and the Invalidation of Hindu Ceremonial Emoluments Act, 1926, were applicable to these inams.

With the mechanisation of transport facilities the age-old self-sufficiency of the village economy broke down and the village servants began to look more and more to the towns and cities for gainful employment. Consequently, many village servants left their villages for nearby towns and the stipulated customary service came to be performed perfunctorily. Further this, the structure of village service useful to community was shattered by the impact of the mechanised means of transport and machine-made cheap goods of daily necessities. Thus, in most cases, these service inams became non-service, to all intents and purposes. Consequently Government framed the Bombay Service Inams Useful to Community (Gujarat and Konkan) Resumption Rules, 1954, and resumed all such inams with effect from 1st December, 1954. The rules were applied to Gujarat and Konkan only.

The Resumption Rules have abolished inams consisting of (a) grants of soil with or without exemption, and (b) grants of revenue only. In the case of the former, the resumption is outright : only an inferior holder paying assessment to the Inamdar has been recognised as occupant. In Gujarat, practically all those inams were grants consisting exemption from payment of land revenue only with the result that the resumption is by levy of full assessment only. For the resumption of cash emoluments, compensation is payable at seven times the amount of the emoluments. The above Resumption Rules of 1954 apply to the service inams in Gujarat including the district.

The Bombay Merged Territories (Miscellaneous Alienations Abolition) Act, 1955

After the abolition of Baroda watans and non-Ryotwari tenures such as Ankadia, Jagirs, etc. from the merged territories and areas of the district, several miscellaneous alienations consisting of scattered lands and cash allowances survived. The alienations were mainly made for maintenance to the Maharaj Kumars and other members of the royal family and to other

persons as a reward or remuneration of services connected with the administration of the State. The alienations were called by different names such as Jiwarak, Nakri, Adania, Girwi hak, inam, Barkhali, Gharenia, etc. These alienations were found in Kheda district too. In order to abolish them the Miscellaneous alienation Abolition Act, 1955 was enacted and enforced with effect from 1st August, 1955. It applies to the merged territories only with the result that alienations in the merged areas were affected. The definition of the expression 'Alienations' given in the Act covers a wide category of alienations such as entire village, portions of villages consisting of grants of soil with or without exemption from payment of land revenue, or of assignment of land revenue, cash allowances or allowance in kind of any type by the ruling authority before the merger or by the State Government after the merger including watans and giras lands. Although the definition 'alienation' covers entire villages, Government has decided that the entire alienated villages should be deemed to have been abolished under the Bombay Merged Territories and Areas (Jagirs Abolition) Act, 1953 and not under this Act. The net result of these orders is that the Act, would cover alienations consisting of scattered lands, assignment of land revenue and cash allowances only.

The Act does not apply to certain types of alienations such as :

- (1) Devasthan inams or inams held by religious or charitable institutions,
- (2) alienations held for service useful to Government other than watan,
- (3) any pension granted to an ex-servant of a former Indian State in consideration of the service to a State,
- (4) revenue-free sites granted for dispensaries, schools, etc.

Broadly, the Act divides the alienations into the following six categories, viz.,

- (1) the community service inam lands (section 6),
- (2) the Paragana and Kulkarni watan lands (section 7),
- (3) the Baroda watan or Giras lands (section 8),
- (4) the residual alienations not covered by categories (1) to (3) above (section 9),
- (5) cash allowances in cash and kind (section 15), and
- (6) assignment of land revenue (section 14).

As regards the compensation provisions, the pattern of compensation for the lands vested in Government under section 11 is analogous to that in the Bombay Talukdari Tenure Abolition Act of the alienation consisting of assignment of whole or part of land revenue of a village. It varies according as the assignment was hereditarily subject to service of succession cuts or for the lifetime of the holder. If the assignment was hereditary without any cuts, the compensation at seven times the amount of land revenue is awardable. If it was hereditary but subject to the cuts, then five times the amount of such allowance. If it was for the lifetime, only three times the amount of land revenue is awardable.

The Bombay Inferior Village Watans Abolition Act, 1958

In pursuance of the Government agrarian policy, the Bombay Inferior Village Watans Abolition Act, 1958 abolished all the inferior village watans with their incidents. The watandars were not dispossessed of the land but were made eligible to the regrant of the resumed land, on payment of the occupancy price equal to three times the amount of the full assessment of the land. Thus, the watandars were made occupants within the meaning of the Bombay Land Revenue Code, 1879. Occupancy of the land re-granted is not transferable or partible by metes and bounds without the previous sanction of the Collector and except on payment of such amount as the Government may determine by general or special orders. It may be pointed out that resumed land held previously by the authorised holder was also to be re-granted to him on payment by him to the State Government of the occupancy price equal to three times the amount of full assessment of the such lands. The Act makes provision for application of tenancy law to any watan land lawfully leased.

For abolition of the watan rights, the Act provides for compensation as follows :

(a) Where the full or a portion of the assessment of the watan land was assigned towards the emoluments of the watandars, seven times the amount equal to the difference between the amount of such assessment or portion and the amount of quit-rent (Judi), if any, payable to the State Government by the watandar.

(b) Seven times the amount equal to annual cash allowance or other annual payment of money (not being the rent of land resumed under class (b) of section 12 of the Bombay Hereditary Offices Act, 1874, or a like provision under any existing watan law), made by the State Government to the watandar under the existing watan law.

(c) Three times the cash value of the average of the customary fees or perquisites, in money or in kind levied or leviable by the watandar

under the existing watan law during the three years immediately preceeding the appointed date.

The Gujarat Agricultural Lands Ceiling Act, 1960.

Ceiling on Land Holdings—The Gujarat Agricultural Lands Ceiling Act, 1960 was enacted and enforced with effect from 1st September, 1961. It provides for ceiling on existing holdings as well as on future acquisition. The ceiling is on a person which includes a joint family. No allowance is made for the size of a family. The ceiling area varies according to the class of land. In the case of dry crop land, the ceiling varies from 56 acres to 132 acres, in the case of rice land from 38 acres to 88 acres, in the case of seasonally irrigated land from 38 acres to 88 acres, and in the case of perennially irrigated land from 19 acres to 44 acres. Thus, the ceiling varies from 19 acres to 132 acres according to local areas and classes of land. The level of ceiling on future acquisition is the same as that on existing holdings.

About transfer, very stringent provisions have been made. No transfer or partition can be made by a person holding land in excess of the ceiling area after the commencement of the Act. Any transfer or partition made between 15th January, 1959 (the date of the Nagpur Resolution) and 1st September, 1961, shall be deemed to have been made with a view to defeating the object of the Act and shall be ignored in computing the surplus land held by the person. The surplus so determined shall be taken in the first instance from the transferor to the extent of land available with him and the balance, if any, shall be taken in the first instance, from the transferee to whom the transfer was made after 1st September, 1961 and thereafter from the transferee to whom the transfer was made after 15th January, 1959 and before 1st September, 1961.

Under the law, the landowners are enjoined to declare the surplus area within the time prescribed. Elaborate provisions are made for computing the surplus lands.

Exemptions—The following categories of lands are, however, exempted from the ceiling limits :

(i) lands held in compact blocks of efficiently managed farms on which heavy investments or permanent structural improvements have been made and breaking of which will lead to a fall in production ;

(ii) lands leased to or held by bodies or persons for growing fruit trees and used for that purpose for not less than the last 3 years ;

(iii) lands held or leased by approved Land Development Banks ;

(iv) land held or leased by approved co-operative societies for improvement of economic and social conditions of peasants or for ensuring the full and efficient use of land ;

(v) lands leased or held by approved industrial undertaking which *bona fide* carries on any industrial operations ;

(vi) lands being the property of a public trust for an educational purpose, hospital, Panjrapole, Gausala or an institution for public religious worship the entire income from which is for the purpose of the trust.

The lands in the categories mentioned above will not be taken into account in computing the ceiling area of a person, but if the extent of the land held under such categories exceeds the ceiling area, the person will not be permitted to retain other lands.

The ceiling areas prescribed for different classes of land area as under :

Ceiling Area

Class of Local Area	1	Ceiling area in acres			
		Dry crop land	Rice land	Seasonally irrigated land	Perennially irrigated land
	2	3	4	5	
Class A	..	56	38	38	19
Class B	..	60	40	40	20
Class C	..	72	48	48	24
Class D	..	80	54	54	27
Class E	..	84	56	56	28
Class F	..	96	64	64	32
Class G	..	108	72	72	36
Class H	..	120	80	80	40
Class I	..	132	88	88	44

In the Kheda district all the villages of the Petlad taluka (other than those included in local area C) have been placed under the areas falling in class A. Similarly all the villages of the Borsad taluka (other than those included in local area C) and 54 villages of Nadiad taluka have been placed in local area falling in class A.

In the local areas falling in class C following villages have been included :

(i) 13 villages of Petlad taluka.

(ii) 45 villages of Borsad taluka.

(iii) All the villages of the Mahemadabad taluka (other than those included in local area D).

(iv) 69 villages of Kapadvanj taluka.

(v) 11 villages of Anand taluka.

(vi) All villages of Nadiad taluka (other than those included in local area A).

(vii) 53 villages of Khambhat taluka.

(viii) 18 villages of Matar taluka.

(ix) All villages of Thasra taluka (other than those included in local area E).

In the Local Areas falling in Class D, following villages have been included :

(i) All the villages of Matar taluka (other than those included in local areas C and H).

(ii) 47 villages of Mahemadabad taluka.

In the Local Areas falling in Class E, following villages have been included :

(i) 43 villages of Thasra taluka.

(ii) All villages of Kapadvanj taluka (other than those included in local area C).

(iii) 39 villages of Vadasinor taluka.

In the Local Areas falling in Class F, following villages have been included :

(i) All villages of Vadasinor taluka (other than those included in local area E.).

In the Local Area falling in Class H following villages have been included :

(i) All villages of Khambhat taluka (other than those included in local area C.).

(ii) 24 villages of Matar taluka.

The Gujarat Patel Watans Abolition Act, 1961

In order to remove Patel watans, the Gujarat Patel Watans Abolition Act, 1961 was enacted. It came into force on 1st April, 1963. It abolished the Patel watans with all their incidents (including the right to hold office and watan property, and the right to levy customary fees or perquisites in money or kind and the liability to render services). All the watan lands were resumed and subjected to payment of land revenue under the Bombay Land Revenue Code, 1879. It declared that in future, no office of a Patel shall be hereditary.

After resumption of the watan lands, which was a grant of land revenue only, the holder was deemed to be the occupant of the land subject to payment of land revenue to Government. In the case of authorised holders of watan lands, the resumed watan lands were re-granted to the authorised holders on payment of occupancy price equal to six times the full assessment of such lands subjects to payment of land revenue to Government (section 7). Where any watan land was in possession of an unauthorised holder, he was liable to summary eviction, but such land may be re-granted to him if such eviction would cause hardship to him on account of the investment made for development of the lands or the non-agricultural use of the lands. Such re-grant shall be on the terms and conditions determined by the State Government (section 10). Lastly in the residual cases left out after re-grant under sections 5, 7 and 10 the lands were re-granted to the holder on payment of occupancy price equal to six times the full assessment of land.

For the abolition of all rights in watans, compensation is provided in the Act. A watandar is entitled to compensation equal to the aggregate amounts calculated in the manner provided in the following clauses (a), (b), (c) and (d), namely :

(a) seven times the amount of the assessment or portion thereof, where the assessment or a portion of the assessment of the watan land was assigned under the existing watan law towards the emoluments of the watandar.

(b) seven times the amount of the annual cash allowance or other annual payment of money (not being the rent of land under any existing

watan law) made by the State Government to the watandar under the existing watan law.

(c) seven times the amount of the land revenue paid or payable to the watandar in the year immediately preceding the appointed day ; where the watan property consists of a grant of the whole or part of land revenue of any land, and

(d) three times the cash value determined in the prescribed manner of the average of the customary fees or perquisites in money or in kind levied or leviable by the watandar under the existing watan law during the three years immediately preceding the appointed day.

The law provides for the payment of compensation. (1) Compensation payable is in cash if the amount does not exceed Rs. 1,000 and (2) if such amount exceeds Rs. 1,000 a sum of Rs. 1,000 shall be payable in cash and the remaining amount shall be payable in transferable bonds which shall carry interest at the rate of three per cent from the date of issue and be repayable in 20 years from the said date by equated annual instalments of principal and interest. The bonds shall be of such denomination and in such form as may be prescribed.

The Gujarat Surviving Alienations Abolition Act, 1963

The Gujarat Surviving Alienations Abolitions Act, 1963 has been brought in to force with effect from 1st October, 1963. The Act has been brought in to force with a view to doing away with the surviving inams which were not abolished by any of the tenure abolition laws of the former Saurashtra and Bombay States. The Act extends to the whole of Gujarat State. It abolishes alienations altogether with incidents thereof and alienated lands have been made liable to the payment of land revenue.

The Gujarat Devasthan Inams Abolition Act, 1969

In order to abolish the inams held by religious or charitable institutions in the former Bombay area of the State of Gujarat, the Gujarat Devasthan Inams Abolition Act, 1969 was enacted and brought into force with effect from 15th November, 1969. The Act has a limited application. Firstly, it extends to only the former Bombay area of the State of Gujarat and excludes the Saurashtra districts and Kutch from its purview. Secondly, it applies to the Devasthan Inams consisting of lands only and not to cash allowances or allowances in kind.

It abolished Devasthan inams consisting of lands only together with all their incidents, which have been made liable to payment of land revenue. Occupancy rights are granted to (1) the inamdar, where such land was in

his possession and had been cultivated on behalf of the inamdar, (2) authorised holder or inferior holder, where such land was in possession of an authorised holder or inferior holder, and (3) the inamdar, where such land was in possession of a person other than the inamdar, authorised holder, unauthorised holder or inferior holder.

Where any Devasthan land is in possession of an unauthorised holder, it shall be resumed and unauthorised holder shall be summarily evicted. If in the opinion of the State Government, the eviction of such holder would entail hardship on him in view of the investment made by him in the development of the land or in the non-agricultural use, the State Government may direct to the Collector to re-grant the land to such holder on payment of such amount and subject to such terms and conditions as the State Government may determine. If such land is not so re-granted, it shall be liable to be disposed of under the provisions of the Bombay Land Revenue Code, 1879. The lands, which are not so re-granted, shall be disposed of under the provisions of Land Revenue Code.

All public roads, lanes and paths, the bridges, ditches, dikes and fences, rivers, streams, lakes, wells, tanks, canals and water courses, etc., and all lands excluding land used for buildings and other non-agricultural purposes in respect of which no person is deemed to be an occupant and all mines whether being worked or not and minerals whether discovered or not and all quarries situated within the Devasthan lands have been vested in the Government. All rights held by an Inamdar in such property shall be deemed to have been extinguished and such land shall be available for disposal by the Collector.

For abolition of the inam rights in Devasthan lands, provision is made for payment of compensation to the Inamdars in the form of perpetual annuity. If the grant consisted of soil with or without exemption from payment of land revenue, the amount of compensation payable would be an average of the full assessment leviable during a period of three years before the commencement of the Act. If the grant consisted of assignment of land revenue or share in such land revenue, the gratuity shall be an amount equal to an average of the amount of land revenue or the share therein received by the Inamdar during a period of three years before the commencement of the Act. Compensation shall be payable to the Inamdars on application to the Collector. The Collector shall decide the compensation application. An appeal against Collector's decision shall lie to the Gujarat Revenue Tribunal.

The Act provides for abolition of (1) the exemption enjoyed by institutions for public religious worship under section 88-B of the Bombay Tenancy and Agricultural Lands Act, 1948, (2) the exemption which was available to the Devasthan Inams in regard to the provisions available

the landlord in regard to the termination of tenancy and (3) the exemption which was provided for the Devasthan Inam Land in the Ceiling Act.

TENANCY LEGISLATION

The tenancy rights in the district are regulated at present under the Bombay Tenancy and Agricultural Lands Act, 1948. In the former Bombay State there was no special law regulating the relations between landlords and tenants. The relations between the two were mostly governed by mutual contracts or local usage and customs. The provisions of section 83 of the Bombay Land Revenue Code, 1879 constituted the tenancy law of the State. With a view to safeguarding the rights of tenants in the Bombay State the first tenancy legislation called the Bombay Tenancy Act, 1939 was enacted. This Act introduced a new concept of protected tenant covering those tenants who held land continuously for a period of not less than six years. It gave to the tenants for the first time, fixity of tenure, a ceiling on rentals, right in house-sites and trees and protection from eviction under certain circumstances. After Independence, this Act, of 1939 was replaced by a comprehensive legislation in 1948. This Act was amended extensively in 1956. It provided that on the 1st April, 1957 described as the 'Tiller's Day', every tenant whether permanent, protected or ordinary, was deemed to have purchased from the landlord the land leased to him subject to the condition that the tenant cultivated the land personally and his total holding did not exceed the ceiling areas and the purchase price did not exceed 200 times the assessment. This Act was also amended from time to time by the Bombay Acts XV and XXXVIII of 1957, LXIII of 1958, Gujarat Act XVI of 1960 and XXVII of 1961.

The original Tenancy Act of 1948 as amended in 1956 made comprehensive provisions for regulation of rent, security of tenure, transfer of ownership to tenants, imposition of ceilings on existing holdings as well as future acquisition, restrictions on transfers of agricultural land, management of uncultivated lands, etc. Under the law, the maximum rent is not to exceed five times the assessment or Rs. 20 per acre and shall not be less than twice such assessment and where the amount equals to twice, the assessment exceeds, the sum of twenty rupees per acre, the rent shall be twice the assessment.

As regards security of tenure, permanent tenants have been given complete security of tenure. Other tenants are given security subject to landlords' rights to resume lands not exceeding 3 economic holdings (12 to 48 acres) on condition that every tenant retains half the area leased. A small holder is defined as a person who has leased land not exceeding one economic holding and whose total annual income does not exceed Rs. 1,500. He can resume half the area leased from a tenant in all cases. These were constraints on resumption. The main constraints are that the income by the cultivation of land of which a person is entitled to take

possession is the principal source of income for his maintenance and that the land leased stood in his name or any of his ancestors on January 1, 1952. If a landlord after terminating the tenancy does not cultivate the land personally within one year of resumption or after having commenced such cultivation, discontinues the same within 10 years, the tenant will be entitled to restoration.

Transfer of ownership to permanent tenants was provided with effect from Tiller's Day, *i. e.*, 1st April, 1957. Other tenants except those of small holders were also deemed to have acquired ownership from that day. As regards tenants of small holders, the law was subsequently amended to provide transfer of ownership to tenants in respect of non-resumable lands with effect from 1st April, 1962. During the course of implementation, it came to the notice of Government that in many cases there were possibilities of the purchases by the tenants becoming ineffective due to the tenants' absence before the tenancy courts and due to their repeated unwillingness to purchase these lands. In many cases their purchases were likely to become ineffective due to non-payment of due instalments of purchase price to the landlord. The State Government has, by two important amendments, tried to prevent such ineffective purchases. Under one amendment, the tenants who remained absent before the tenancy courts and who expressed unwillingness to purchase the land have been given an opportunity to apply for purchase of the lands, if they have not still been disposed of by submitting an application within one year from 29th December, 1965. By another amendment, the State Government had extended the period of paying arrears of instalments by three years more. The Government has, at the same time framed Rules under the Agriculturists Loans Act for advancing tagavi to assist them in paying the arrear amount of the instalment within the extended period of three years.

THE BHOODAN MOVEMENT

In order to reduce inequalities in the distribution of land, legislative measures for abolition of intermediaries, tenancy reforms and land ceilings have been adopted by the State Government. These measures have not helped to solve the problem of landless labourers. In this context, the contribution of the Bhoodan Movement as one of the schemes of land distribution to the landless has got a special value. Secondly, this movement is reminder that the land problem cannot be solved by legislation alone. The Bhoodan Movement also attempts at the abolition of the concept of private ownership. The fundamental principle of the movement is that all land belongs to God (*Sab Bhumi Gopalki*) and a man is only a trustee of the land which should be treated as a social agent of production for the entire community.

This movement, which started in 1951 in Telengana region of the former Hyderabad State (now in Andhra Pradesh) spread during the walking tours undertaken by Shri Vinobaii.

Distribution of Donated Lands

Since the distribution of the donated lands is vital to the success of the movement, it is necessary to know the main rules for the land distribution, which are stated below :

(1) The date on which the land is to be distributed is announced by beat of drum or leaflets in the village.

(2) The Revenue Officers from Talati to Collector upwards and the village panchayat members attend the function.

(3) As far as possible, one third of the lands is given to the Harijans.

(4) As far as practicable, the land is given to the landless of that very village. After distribution to the landless, the excess land, if any, may be distributed amongst the landless of the adjacent villages. Such lands are to be given to persons who are capable and willing to cultivate land personally.

(5) For a family of 5 persons, 1 acre of irrigated land or 2½ acres of dry land should be granted. Under special circumstances, land exceeding 5 acres may also be given.

(6) Attempt should be made to consolidate the scattered lands into the compact block. If small parcels of land cannot be given for cultivation, they may be assigned for manure pits, public latrines, etc.

(7) The lands which are cultivable, should be liable to payment of land revenue to Government from the day of grant.

(8) If such lands remain uncultivated for a period of 2 years, it will be open to Government to grant them to other landless persons.

(9) Three year limit is fixed for making cultivable virgin lands, waste lands or Khar lands, so donated.

These are the main principles of distribution of lands received in the Bhoodan.

The movement, which raised high hopes and aspirations among the landless labourers in the beginning, has not made much headway particularly in this district. This is evident from the fact that till September 1973, only 1,153 acres and 12 gunthas of lands were donated by 485 persons. Out of the total lands donated only 468 acres and 17 gunthas were distributed to 273 landless persons. Shri Ravishanker Maharaj has contributed substantially towards the progress of the movement.

RURAL WAGES

The rural wage structure in the district is complex. The rates and levels of wages vary according to different agricultural operations. The wages are different for men and women. Children are also employed in agriculture and they are paid low wages. Moreover, wages vary according to the season is busy or slack. In the district, large number of persons possess no lands of their own but are dependent upon the agriculture for their livelihood. They are labourers who are employed to work on the field either casually during the harvest season or throughout the year as *ek-sali* servant. In 1971 there were 9,946 agricultural labourers in the district.

The farm labourers are recruited both for permanent and casual employment. The important systems of permanent labour are the *chakar* (servant), the *bhagia*, and *sathi*. The *chakar* system prevails in parts of the Kheda district. The period of employment varies from six months to one year. A lump sum payment in cash for the period of employment or on monthly basis is ordinarily the practice. This amount varies from Rs. 250 to Rs. 1,200 per year. In addition to the cash wage the *chakar* is given food twice or thrice a day, tea, tobacco, a head dress and a set of clothes and shoes. This might be to serve as an additional inducement. There are innumerable variants. This is only a broad description. Depending upon the needs of the farmer employer and the efficiency or recalcitrance of the permanent labourer the pattern of employer-employee relationship moves through innumerable hues and shades. It is difficult to commute all perquisites in cash to determine the wage or cost of labour to the employer. Probably it might work out excessive. The payment and facilities, however, to the *chakar* are relatively satisfactory.

The system of *Sathis* is also prevalent in the district. A *Sathi* binds himself to do all types of work. A lump-sum payment in cash for a period is ordinarily given. The amount varies from Rs. 500 to Rs. 2,000 per year.

Under the *bhagia* system of labour a share in the farm produce is given to the permanent incumbent. Sometimes the quantum is fixed. The system is in vogue in the Matar taluka of Kheda. The share of the *bhagia* in the produce ranges from a fourth to a fifth. The fixed quantity may be 15 to 20 *deshi maunds* for a period of five months of work. A *bhagia* is free to leave the farmer at the end of the season. Ordinarily, the period of employment is one year. The cost of supplemental casual labour employment on the farm at peak season is on the total produce or proportionately on both the farmer and the *bhagia*. The members of the family of the *bhagia* who work on the farm sometimes get a distinct wage. In others, the contract of *bhagia* employment covers the work contribution of the family members

Casual Labour

The casual employment is common in the district. The period of employment lasts from June to October and also from November to February. Most of the landholders employ casual field labourers only when there is a rush of work on the farm and pay them on daily wages. Agricultural operations such as ploughing which entail more strenuous labour command a higher wage rate. While much of the heavy work is done by men, women and children are employed in such work as weeding, winnowing, watering, etc. They are usually paid in cash and rarely in kind. The daily wage rates have increased considerably in recent years compared to pre-war and post-war years, due to high agricultural prices and the increased cost of living.

Casual labourers work from sunrise to sunset with a break of about two hours, for lunch at noon. Sometimes during harvesting period, they work even more and are also paid more. The main source of labour is the village itself though at times during the harvesting season help of labourers from surrounding villages is also called for to meet the local shortage. Field labour being seasonal, they have to seek alternate employment during the off season. Such work includes collecting and selling of firewood or hay, making tiles, spinning, weaving, etc.

The current rates in the district vary according to the demand and supply of labour and proximity of place from towns. The table given below shows comparative rates prevalent in 1960-61, 1965-66 and 1972-73.

Rates of Wages According to Nature of Operations

Nature of operations 1	Payment of daily wages in cash or kind during		
	1960-61 2	1965-66 3	1972-73 4
	Rs.	Rs.	Rs.
A. Payment for operating implements (Ploughing, Harrowing, Sowing Carting, etc.) ..	3.00	3.00	3.00
B. Wages for threshing out grain ...	2.00	2.00	3.00
C. Wages for harvesting cereal crops..	2.00	2.50	3.00
D. Payment of wages to contract labour or special operation of sugarcane ..	N.A.	N.A.	3.50

N. A = Not available.

REGISTRATION

Registration of Documents

Registration of certain documents is made compulsory under section 17 and optional in the case of some documents under section 18. As a rule, fees are levied for the registration of all documents, but the State Government has exempted co-operative societies registered under the Gujarat Co-operative Societies Act, 1961 from payment of such fees. Certain types of societies enjoy restricted exemption in respect of certain documents involving consideration up to a prescribed limit and fees are charged for the registration of documents for consideration in excess of the prescribed limit.

Marriages under the Special Marriage Act, the Indian Christian Marriage Act and the Parsee Marriage Act are also registered.

The District Registrar

The Collector, Kheda is the *ex-officio* District Registrar, who exercises powers of supervision and inspection over the entire registration staff in the district. Though the Sub-Registrars are appointed by the Inspector General of Registration, the District Registrar has powers to fill in temporary vacancies. He hears appeals and applications preferred to him under sections 72 and 73 of the Indian Registration Act (XVI of 1908) against refusals to register documents by the Sub-Registrars under him. Under sections 25 and 34 of the same Act, he is empowered to condone delays in presentation of documents and appearance of executants, provided the delay does not exceed four months, and directs such documents to be registered on payment of fine not exceeding ten times the proper registration fees. He is also competent to order refund in the case of surcharges and to grant full or partial remission of safe custody fees in suitable cases. Under section 42 of the Act, a will or codicil may be deposited in a sealed cover and may be got registered at the cost of the party desiring it after the depositor's death. He is also authorised to record and register births and deaths under the Births, Deaths and Marriage Registration Act, (VI of 1886).

Registry Offices

Every taluka has a separate office of a Sub-Registrar in the district, besides Kheda. The Sub-Registrar, Kheda holds his office at Matar on every Monday and Tuesday.

The Sub-Registrar

The main functions of the Sub-Registrar are to register documents, keep a record of all documents registered, and send to officers concerned,

extracts from documents affecting immovable property in respect of which a record of rights is maintained. Every Sub-Registrar is an *ex-officio* Sub-Registrar for the registration of birth and deaths.

The Sub-Registrar working as Headquarters Sub-Registrar at Kheda is vested with the powers of solemnising marriages under the Special Marriage Act, 1954. He assists the Collector in adjudication of documents impounded under section 33 of the Bombay Stamp Act, 1958 (IX of 1958) and also in the adjudication of cases under section 31 of the Bombay Stamp Act, 1958.

In the year 1972, the annual income and expenditure of the Registration Department in Kheda district was respectively Rs. 4,06,420 and Rs. 97,894. Photo-Stat copies are taken at all places except at Mahemadabad and Vadasinor. In all 15,177 documents were registered in the district in the year 1972. Of these, 15,102 documents falling under compulsory registration and 75 under optional registration were of the aggregate value of Rs. 6,81.76, 871-00.

STAMPS

The Superintendent of Stamps is the authority controlling the supply and sale of non-postal stamps. In the Kheda district, the Collector is the administrative head of the district, is in charge of the entire work relating to the stamps. He has to regulate the sale of stamps and ensure collection of stamp duties. As there is no treasurer in the treasury, the work of sale of stamps to vendors and to the public is done by a Stamp Senior Clerk under the direct supervision of the Treasury Officer. He is in charge of the local depot at Kheda and is responsible for the maintenance of the stock of stamps, their distribution to the branch depots in the district and sale to the public. Refund of the value of unused, spoiled and obsolete stamps is not within the competence of the Treasury Officer, as these powers are not delegated to him, after the separation of the Treasury from the Revenue Department. These powers are exercised by the Collector and Assistant or Deputy Collector. A branch depot located at every taluka headquarters, is in charge of a Sub-Treasury Officer. As per Government Notification No. GHM/M/87/STP/1068/54035.H, dated 13th January, 1969 all the Sub-Treasury Officers have been appointed as "Proper Officer" for the purpose of the Act and under the Rule 9 of the Bombay Stamp Rules, 1939 they are empowered to affix the special adhesive stamps on the unexecuted documents presented for stamping by the public.

For the convenience of the public, stamps are sold not only at the district depot and branch depots but also at various other centres by licensed stamp vendors, who are appointed by the Deputy Collector. There are 32 Stamp Vendors in the district. The non-judicial stamps in case of

instruments requiring stamp duty of the value of above Rs. 5.00 and the courtfee stamps exceeding Rs. 125 are sold directly by the Treasuries and Sub-Treasuries to the public. Stamp below these denominations are sold by authorised vendors. The Sub-Treasury Officers act as *ex-officio* stamp vendors at taluka places by virtue of their posts.

The total income realised from the sale of stamps in the district in the year 1972-73 was Rs. 37,91,533 for non-judicial stamps and Rs. 8,89,893 for judicial stamps. The vendors were allowed as a small discount which in the year 1972-73 amounted to Rs. 52,380 for non-judicial stamps and Rs. 5,798 for judicial stamps.

OTHER SOURCES OF INCOME

In order to meet the growing expenditure on development activities, the State and Central Governments have to augment their financial resources by tapping additional sources of revenue. Other sources are Income-tax, Sales Tax, Taxes on Motor Vehicles, State Excise, Central Excise, etc. These are briefly examined below.

SALES TAX

As a source of revenue, sales tax occupies a distinct position in the tax-structure. It is not only productive from the point of view of revenue but has the additional merit of flexibility. By changing the coverage and rates of tax, the yield can be adjusted and increased to meet the revenue needs of the State.

The Bombay Sales Tax Act, 1946 was made applicable to the Kheda district from 1st October, 1946. The Act provided a levy of single-point tax at the last stage on sales of goods. The then Bombay Government introduced a multi-point sales tax from 1st November, 1952. The Bombay Sales Tax Act, 1952 became also operative in this district. This Act was further amended and was known as the Bombay Sales Tax (Amendment) Act, 1953. It was also known as two-point sales system continued in this with effect from 1st April, 1953. The two point system continued in this district till 31st December, 1959, till its replacement by a fresh legislation.

Since different systems of sales tax operated in the constituent units of the former Composite State of Bombay, the Bombay Government appointed a committee under the chairmanship of Shri Babubhai J. Patel to evolve a uniform system of sales tax for the entire State. On the basis of its recommendations, the Bombay Sales Tax Act, 1959 was enacted and enforced with effect from 1st January, 1960. After bifurcation of the

Bombay State, this Act of 1959 was adopted by the Gujarat State. In order to rationalise the tax-structure and further to simplify the procedure of assessment with a view to removing the hardships to dealers, the Government of Gujarat appointed in 1967 the Sales Tax Enquiry Committee with Shri M. M. Odedra as its Chairman. The terms of reference of the committee were to examine the existing system of sales tax, to review its working and to make recommendations for the sales tax, simplification of procedures, measures for removal of hardships to dealers and streamlining the administrative system. In making the recommendations, the committee was asked to take into account the revenue requirements, of the State and to suggest measures against avoidance and evasion of the tax. This committee submitted its report to Government on 28th June, 1968. Its main recommendation related to the provision of a single-point tax. On the basis of these recommendations, a Sales Tax Bill, was introduced and passed in the Assembly in 1969. The enactment is called the Gujarat Sales Tax Act, 1969 and is made applicable to the entire State with effect from 6th May, 1970. The salient features of the law are (1) that a single-point levy may be combined with a double-point levy; (2) that a levy of retail sales tax is abolished and (3) that exemption from the tax is granted to small manufacturers and traders of special category with an annual turnover of Rs. 30,000. It is hoped that these provisions will greatly benefit the traders. The total collection of sales tax in the Kheda district for the year 1971-72 amounted to Rs. 2,47,19,615.

TAX ON MOTOR VEHICLES

Tax on motor vehicles constitutes one of the important sources of State revenues. The Motor Vehicles Department is responsible for the proper administration of the Indian Motor Vehicles Act, 1939 and Rules made thereunder. It also collects taxes on motor vehicles, passengers and goods carried by road under (1) The Bombay Motor Vehicles Tax Act, 1958, (2) The Bombay Motor Vehicles (Taxation of Passengers) Act, 1958, and (3) The Gujarat Carriage of Goods Taxation Act, 1962. It also performs general duties and responsibilities enjoined on it under the provisions of these Acts and Rules made thereunder.

Administrative Set-up

The department is headed by the Director of Transport with headquarters at Ahmadabad. At present, the State has been divided into four regions, viz., Ahmadabad, Vadodara, Rajkot and Surat. Accordingly, there are four Regional Offices each of them being headed by a Regional Transport Officer. The Kheda district has been placed in the Vadodara region which covers the revenue districts of Vadodara, Panchmahals, Kheda and Bharuch. The Jurisdiction of the office of the Assistant Regional Transport Officer, Nadiad,

extends to Kheda district only. The net collections of the revenue realised from the Nadiad office for the year 1971-72 were as under:

Sl. No.	Name of the Act	Amount in Rs.
1	2	3
1	The Indian Motor Vehicles Act, 1939	2,90,471
2	The Bombay Motor Vehicles Act, 1958	53,04,185
3	The Bombay Motor Vehicles (Taxation of Passengers) Act, 1958	1,03,371
4	The Gujarat Carriage of Goods Taxation Act, 1962	11,93,265
Total		68,91,292

STATE EXCISE

In view of the total prohibition policy of the Government of Gujarat, excise revenue is not an important source of income. The Department is headed by the Director of Prohibition and Excise, Gujarat State, Ahmadabad. The Superintendent of Prohibition and Excise is the Officer-in-charge of the administration of the department in Kheda district. He is vested with various powers under the Bombay Prohibition Act, 1949; the Dangerous Drugs Act, 1930; the Bombay Opium Smoking Act, 1936; the Bombay Drugs (Control) Act, 1959; the Spirituous Preparations (Inter State Trade and Commerce) Control Act, 1955 and the Medicinal and Toilet Preparations (Excise Duties) Act, 1955. He has under him 4 Sub-Inspectors of Prohibition and Excise. The State Government levies duty on the following exciseable articles under section 105 of the Bombay Prohibition Act, 1949.

- (1) Any alcoholic preparation for human consumption.
- (2) Opium.
- (3) Any intoxicating drug and hemp.
- (4) Any other exciseable articles as defined in clause (13) of section 2 of the Bombay Prohibition Act, 1949.

In addition to the above articles, excise duty on medicinal and toilet preparations containing alcohol, opium, Indian Hemp or other narcotic drug or narcotics is levied under the Medicinal and Toilet Preparations (Excise Duties) Act, 1955 by the Central Government but collected by the Prohibition and Excise Department at the State and retained by the State

Government. The total revenue realised from excise duty in the Kheda district for last three years shown below :

Year	Total Excise Revenue in Rs.
1970-71	121,556
1971-72	116,475
1972-73	103,738

CENTRAL EXCISE

In the Kheda district, there are two Central Excise Divisions with their headquarters at Nadiad and Anand respectively. The Central Excise Department in the district deals with the excise duties mainly levied on tobacco, textiles, sugar, glass and glass ware, paints and varnishes, metal containers, electric motors and motor starters, readymade garments etc. Such duties yielded a total annual revenue of Rs. 115,907,135 in the year 1972-73.

INCOME-TAX

Interesting details about the imposition of Income-tax in the district in early days are available from the book entitled "*Charotar Sarvasagraha*".¹ The imposition of Income-tax in the *Samvat* year 1917 (1861 A. D.) created commotion and flutter among the population of the district. The imposition met with stiff resistance from the Bhats of Nadiad. They refused to pay the tax. Consequently, warrants were issued on them. The Government Officer, however, could not carry out his duties in connection with warrants for the fear of large scale disobedience. He, therefore, informed the Mamlatdar and the Police Superintendent about the matter. The Police Superintendent tried every possible means and ways and requested Bhats who had assembled in the corner in the locality of Modi Santh in Nadiad. However, during the course of negotiations, the police came to know about the possession of small knives kept concealed by Bhats with them. Accordingly they arrested them. Suddenly all the assembled Bhats formed a straight row and inflicted injuries on their bodies repeatedly by pronouncing the name of Goddess Amba. During this process one Bhat was killed and several were injured. Government filed cases against 49 Bhats. Out of them 27 were awarded 6 months rigorous imprisonment and fine of Rs. 200 for disobedience. Their terms of sentences were to be extended if they failed to pay the fine by additional 3 month's imprisonment.

1. SHAH P. C. AND SHAH C. F. (EDITORS), *Charotar Sarvasangraha*, Vol. I., Nadiad, (1954), p. 964.

Alike Bhats, Brahmins were also defiant in payment of Income-tax and requested Government to exempt some of their castes from the payment of Income-tax. The request was turned down. They eventually, therefore, decided that two old ladies should prepare themselves for stiff disobedience and voluntary sacrifice. They believed that as these old ladies had enjoyed the mundane existence they would readily offer themselves for sacrifice. They offered themselves in lieu of Rs. 40 to be given to their daughters. These two old ladies were taken into the centre of the bazaar and after muttering heavy curses they died. Thereafter it was not felt disgraceful to pay the tax by the Brahmins. According to Mr. Forbes, the Bhats considered those persons inferior in status who paid the tax without indulging in acts of disobedience. They also did not offer their daughters in marriage to such persons. After reviewing the imposition of tax historically, it would be pertinent to refer to the present day set-up and the total collection realised under the Act in the district.

Income-tax is one of the most important Central taxes. For the Gujarat State, there is a Commissioner of Income-tax headquartered at Ahmadabad. Under him, there are Inspecting Assistant Commissioners of Income-tax. The Kheda district is placed in charge of the Inspecting Assistant Commissioner of Income-tax stationed at Ahmadabad. Under him, there are nine Income-tax Officers and eight Income-tax Inspectors. Besides there is one Supervisor, four Head Clerks, thirty four Upper Division Clerks and fourteen Lower Division Clerks, etc.

The details of the realisation of Income-tax from Kheda district for the year 1972-73 are as under :

		Rs.
Gross collection of Income-tax	...	40,877,620-93
Less : Refunds	...	4,990,613-00
Net Collection of Income-tax	...	35,887,007-93

CHAPTER XII

LAW AND ORDER AND JUSTICE

Police

INCIDENCE OF CRIMES

The following statement shows the incidence of crimes committed in the district between the years 1970 and 1972. It will appear that the crime graph has risen from 23,881 in 1970 to 30,373 in 1972. Among the crimes, substantial rise is noticed under those committed under the special and other local laws as the figure of 16,339 has shot up to 22,564 during the period. Those relating to person and property have risen from 2,621 in 1970 to 2,725 in 1972. During the period under review it is, however, significant that not a single offence was reported (i) against the State, (ii) the army and the navy, and (iii) relating to the Government stamps.

Incidence of Crime

Sl. No 1	Description of offence 2	Number of offences	
		1970 3	1972 4
1	Against the State	..	..
2	Relating to the army and navy	..	..
3	Public tranquillity	122	135
4	Relating to public servants	43	10
5	Contempt of the lawful authority of public servant	84	80
6	False evidence	7	5
7	Relating to coins	1	13
8	Relating to Government stamps	..	..
9	Relating to weights and measures	..	68
10	Affecting the public health, safety, convenience and decency	797	590
11	Relating to religion	9	59

Incidence of Crime—contd.

Sl. No. 1	Description of offence 2	Number of offences	
		1970 3	1972 4
12	Affecting life	73	141
13	Causing of miscarriage, etc. .. .	5	7
14	Hurt	1,142	1,060
15	Wrongful restraint and confinement .. .	72	213
16	Criminal force	159	149
17	Kidnapping, etc.	8	41
18	Rape	1	4
19	Unnatural offence	1	68
20	Theft	683	451
21	Extortion	..	79
22	Robbery	14	13
23	Criminal misappropriation	16	36
24	Breach of trust	110	87
25	Stolen property	13	84
26	Cheating	324	245
27	Fraudulent deeds, etc.	..	47
28	Mischief	157	179
29	Criminal trespass	432	279
30	Offences relating to documents, trade or property marks .. .	5	58
31	Breach of contract	20	108
32	Offences relating to marriages	252	361
33	Defamation	24	48
34	Criminal intimidation, insult and annoyance .. .	2,968	3,091
35	Under special and other local laws	16,339	22,564
	Total	23,881	30,378

Source :
District and Sessions Judge, Nadiad.

Introduction

At the beginning of the 19th century when Kheda came under the British management, the chief criminal classes were the Rajput Girasias or land revenue claimants, who, to recover some alleged claim, or because of some other grievance would, by turning outlaws, tried to force the authorities to accede to their demands. The next class were the Kolis, inveterate robbers and highway-men. A third were the Bhats or Barots, who, when pressed to pay taxes, committed *traga*, that is, either mutilated themselves or killed one of their number. At the 1811-12 circuit sessions, the chief offences were gang robberies, house-breaking and theft, and the passing of base money. The gang robberies were seldom found out. In 1813 on account of the scarcity, crime was unusually general. At that time so disturbed was the country that in the western districts long before Sunset, ploughs were unyoked and wells deserted.

In 1812, the district was orderly. There was no open violence, murders were rare, and thefts much fewer than before. Except the Kolis, the people were not given to affrays, drinking or other forms of vices. In the year 1827, regular Police arrangements began to take shape during the British regime. In 1828 things were better, there were few cases of large plundering gangs. The population was generally quiet and crimes were few. Two years later (1830) the Kolis were again unsettled. Bands of disaffected vagrants wandered about, orderly cultivators were not protected, few travellers escaped without loss and in Sir John Malcom's camp though at a distance from the wilder tracts and guarded by village watchmen as well as by soldiers, many thefts were safely committed. Though they had, to a great extent, settled as regular cultivators, the Kolis were a troublesome class. Many were born and brought up as thieves, and the difficulty of tracing crime was abated and encouraged by the ready shelter given to criminals in the tract of rough country along the Mahi, and in almost all the States within the Kheda limits. Besides, small hamlets, sometimes as many as twenty, had sprung up, and in other parts the lower classes of villagers had begun to live in small huts in the fields. These changes added much to the difficulty of keeping a watch on the criminal classes. Agrarian crimes, thefts from fields during the harvest time, the burning of crops to pay off a private grudge, and the murder of oppressive money-lenders had been rather common. In 1872 several cases of poisoning occurred. Suspicions were aroused and on the trial of one of the cases it came out that the poisonings were the work of a gang of professional criminals. The leader was convicted and hanged, and one of his accomplices transported for life. Since then this form of crime mostly ceased.

In the year 1877, the total strength of the district or regular police force was 754. Of these, under the District Superintendent, one was a subordinate

officer, 142 inferior subordinate officers, thirty-five mounted police, and 575 constables.¹

However, districtwise police force was regularly set-up under the Bombay District Police Act, 1890.²

The Police arrangements in the former princely States of Khambhat and Vadasinor are described below.

KHAMBHAT STATE

As in other parts of Gujarat, the village headman was called chief, *mukhi*. The office was sometimes, though not always, held hereditary; and the holder was rewarded by the grant of rent-free land. He had no magisterial powers. The other village officers were the *ravana*, a Rajput, Koli, or Musalman, who helped in collecting the State demands, guarded collections on their way to the treasury, and did the ordinary work of a messenger; and the tracker, *pagi*, a Koli, paid in land and commonly held responsible for stolen property traced within the limits of his village, who went with the headman round the village at night, watched, and tracked thieves. In large villages there was Koli or Musalman messenger and *havaladar*. In some places the villagers kept private watchmen.³

The police force in the State was headed by a Police Superintendent and was assisted by Inspectors of Police, Sub-Inspectors of Police, Jamadars and Head Constables, Police Constables, Cavalry known as Hussain Yawar Body Guards and Sowars. The total strength in 1938-39 was 166. The total strength of Village Police excluding Mukhis and Deputy Mukhis was 345.⁴

VADASINOR STATE

The State Police force was headed by a Superintendent of Police and had under him one Headquarter Sub-Inspector, 20 Head Constables, 73 Constables and 4 sowars. They were armed with a total of 125 weapons comprising revolvers, brach loading gun, rifle, and muzzle loading guns.⁵

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panchmahals*, (1879), pp. 120-22.

2. *Charotar Sarvasangraha*, (1954), p. 469.

3. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. VI, *Rewakantha, Narukot, Cambay and Surat States*, (1880), pp. 236-37.

4. *Cambay State, Annual Administration Report*, 1938-39, pp. 14, 16 and 52.

5. *Relasinor State, Annual Administration Report*, 1942-43, p. 9.

Before Independence

Till 1937, the Kheda district was divided into northern and southern sub-divisions, comprising the following talukas :

1. Northern sub-division—Nadiad, Matar, Mahemadabad and Kapadvanj.
2. Southern sub-division—Borsad, Anand and Thasra.

The total strength of police force was 947 and was headed by the District Superintendent of Police.

After Independence, on account of territorial changes resulting out of merger of princely States and estates in the district, three more talukas of Petlad, Khmabhat and Vadasinor were formed.

Prior to 1948, the district was infested by the notorious tribes like Patanwadia and Dharalas who commonly indulged in arson and looting and made life and property insecure. The police had, therefore, to perform onerous duties for keeping law and order. The Gujarat social worker Ravishankar Maharaj did commendable work and persuaded these notorious men to give up their predatory habits. They were ultimately brought to book by his efforts.

The district produced famous dacoits like Babar Deva, Pirmohmed Chadia and Umraokhan, who had let loose a region of terror and their gangsterism was continued from the soil of the princely States which gave them protection. These States were situated on the border of this district. The failure of the police force in the States to subdue outlawry forced the Government of India to appoint a special police force at Vadasinor to arrest Pirmohmed Chadia. Further the deep ravines and water courses of the rivers Mahi and Vatrak and the hilly tracks of Vadasinor, Virpur, Sathamba and Moda provided easy escapes to these fugitives and proved to be a great impediment to the police officers in curbing the activities of the outlaws. Slowly and gradually the district was cleared of this menace by strong and stringent measures.

Functions of the Police

The primary functions of the police are prevention and detection of crime, prosecution of criminals maintenance of law and order, prevention of offenders, escorting and guarding of prisoners, protection of Government Treasuries, private or public property of which they may be placed

in the charge. In addition to this, they have to perform other duties such as traffic control, service of summons and warrants of criminal cases, destruction of stray dogs, inspection of shops dealing with explosive and poisonous drugs, etc. In case of fire the police force is engaged for rendering help to the firebrigade staff of the municipalities by maintaining law and order at the site of such incident. The police have to attend to the work of verification of character, inquiries about passport, police *bandobast* at fairs and festivals and surveillance of criminals. These functions are incorporated into the Bombay Police Act, 1951 as adopted and applied to the Gujarat State.

PRESENT SET-UP

Police Divisions

Prior to the formation of Gujarat State, Kheda district was placed in the Ahmadabad Range with headquarters at Ahmadabad. After the formation of Gujarat State, Kheda was placed under the Vadodara Range from 1960. On the formation of Gandhinagar Range, Kheda came under the Gandhinagar Range since November, 1973.

The District Magistrate has over all responsibility for the law and order of the district. The District Superintendent of Police is the executive head of the police force in the district. His primary duties are to maintain law and order, to ensure that the detection, investigation and prosecution of crimes in the district are properly and efficiently carried out by the police force, and is responsible for the overall administration of the police force in the district.

The district is divided into three subdivisions, viz., Nadiad, Anand and Petlad. The Nadiad sub-division comprises Nadiad, Matar, Mahemadabad and Kapadvanj talukas, the Anand sub-division comprises Anand, Thasra and Vadasinor talukas and the Petlad sub-division has Petlad, Borsad and Khambhat talukas under it. Each sub-division is under the charge of a Sub-divisional Police Officer styled the Assistant Superintendent of Police or the Deputy Superintendent of Police. The sub-division at Nadiad is headed by an Assistant Superintendent of Police whereas Anand and Petlad sub-divisions have each a Deputy Superintendent of Police. The officer concerned is responsible for the crime work in his sub-division, and is assisted for crime work by one Circle Inspector.

At the district headquarters the District Superintendent of Police is assisted by Home Police Inspector, who supervises the work of the office at the headquarter.

There is one Deputy Superintendent of Police (Admn.) at district headquarters, who attends to the work of Departmental Proceedings and other administrative work.

There is a separate Inspector for the local crime branch and the local intelligence branch in this district, and each have two Sub-Inspectors under them.

There are 32 police stations, each under a Sub-Inspector, except the Nadiad town police station which is under a Police Inspector. There are 36 outposts each under a Head Constable. Each police station is equipped with Head Constable and Constables for investigation, patrolling, serving of summons, guards, escort duties, etc. Further each police station is staffed by Head Constable and one writer Constable to attend to office work. The location of police stations and out-posts is shown in Statement XII-1 appended to the Chapter.

The sanctioned strength of police officers and men on 1st January, 1974 was 2,175. Its composition was as follows: The District Superintendent of Police 1, Deputy Superintendents of Police-cum-Sub-divisional Police Officers 4, Inspectors 7, Police Sub-Inspectors 75, Head Constables 450 and Constables 1,620.

In addition to this there were 12 Police Prosecutors, 1 Head Wireless Operator and 1 Wireless Operator.

The expenditure on the officers and police establishment in the district for the year 1972-73 came to Rs. 66.28 lakhs. As regards the ratio of the police to the area and population, there was one policeman for 3.47 sq. km., and population of 1,150 persons. Among the officers and men shown above, the percentage of literate officers is 100 per cent. The district has a fleet of 37 police vehicles, including 25 jeeps, 5 light vans and 2 motor cycles. Wireless arrangements are provided at the district headquarters, Kheda as well as at Petlad, Virpur and Nadiad.

The Railway, Police

The railway police unit in the Kheda district works under the Superintendent of Police, Western Railway with headquarters at Vadodara. The unit is headed by a Police Sub-Inspector, who is headquartered at Anand. He is assisted by 73 other staff comprising the unarmed Head Constables, unarmed Police Constables, armed Head Constables and armed Police Constables. Further, the railway police establishment is spread over Petlad and Nadiad.

Welfare Measures

Out of the total strength of policemen in the district 1,204 are provided with Government accommodation. Similarly 39 police officers are provided with Government quarters. A canteen is run at the district headquarters to cater to the food requirements of the policemen. A children's park, recreation room, library, Bal-Mandirs, Cinema Projector, grocery shop, poultry farm, stitching centre, etc., are provided at the police headquarters, Kheda.

Village Police

The District Police is assisted by village police at the village level. Each village generally has a police patel. The police patel appointed by the District Magistrate is not under the administrative control of the police. He is required to collect information regarding suspicious characters and supply to the police stations. He has to keep a strict watch over the movements of the notorious persons under the surveillance of the police and to give all information about the happenings in the village to the visiting police party.

Home Guards

The Home Guards organisation was started in the year 1947 at Nadiad. The activities are at present extended to ten taluka centres such as Nadiad, Matar, Kapadvanj, Mahemadabad, Anand, Thasra, Vadasinor, Borsad, Petlad and Khambhat. There are sixteen sub-centres in the district, viz., Chaklashi, Kathlal, Haldarvas, Mahij, Umreth, Kunjra, Virpur, Virsad, Ankla, Alarsa, Bodal, Kathana, Ras, Kasor, Kalamsar and Dhuvaran for conducting home guards activities. Its cadets are imparted training in squad drill, *lathi* drill, arms drill, firing, use of bayonet and physical exercises. When called on duty, they enjoy the same powers and protection as those of the members of the police force. Their functions consist mainly of guarding public buildings, patrolling, prevention of crime and assisting the police in their duties.

Besides, they are called on duty for *bandobast* during emergency and on other occasions, when their need arises and their services thought essential by the District Superintendent of Police for maintaining law and order.

The number of Home Guards cadets working in the Kheda district was 1,612 at the end of the year 1973. Of these, 1,548 were males and 64 were females. In the year 1972-73 the expenditure incurred for home guards amounted to Rs. 1.18 lakhs.

Gram Rakshak Dal

Besides the village police, another organisation established by the Government for the protection of the rural areas is the Gram Rakshak Dal which was started in the district from 1948. It is a body of men primarily organised for the defence of the village against dacoits, and anti-social elements, and for protection of person and property in villages. During the time of emergency, the Gram Rakshak Dal functions as an adjunct to and works in close co-operation with the police in maintaining internal security. Every person between the ages of 20 and 50 years residing in a village, possessing good health and character, good antecedents and civic sense, and educated upto third standard vernacular, is eligible for enrolment as a member of the Gram Rakshak Dal. The District Superintendent of Police is the appointing authority and the training is imparted by the Police Head Constables, appointed specially for the purpose. Every member of the Dal enjoys the powers, privileges and immunities of a police officer, when called for duty. They are trained in elementary squad drill, *lathi* drill, physical exercise, use of rifle, arms drill, organising *naka bandhi* in the village, combating of dacoits and robbers and giving first aid to the injured. They are also encouraged to do night patrolling in their respective villages, both on their own as well as with the police and are also mobilised when the village faces dangers like floods fire, other natural calamities or is attacked by dacoits, robbers, etc. In this district at the end of the year 1973, Gram Rakshak Dals were organised in 954 villages, and had a membership of 24,050 persons. There were 486 Naiks and 426 up-naiks.

Mahila Gram Rakshak Dal

Similar organisation for women was started in the wake of the Pakistani aggression in 1965. The main objective of organising a separate wing for women was to inculcate in them a spirit of defence and to induce them to take part in protecting life and property in the village. During natural calamities such as flood, fire, earthquakes, etc., they are required to give first-aid to the injured and prepare food for the affected. Help in saving women from harassment by the anti-social elements is one of the main functions of the Mahila Gram Rakshak Dal. Any woman between the ages of 18 and 50 years, possessing good health, character and educated upto fourth standard, is eligible for enrolment as a member of this organisation. The District Superintendent of Police is the appointing authority. In this work, he is assisted by the honorary women organisers of the district. Members are trained in elementary drill, use of rifle and cane, and imparted instruction in elementary knowledge of law, first-aid to the injured, collection of intelligence about anti-social elements and saving women from the clutches of such persons. In this district at

1. Placing of guards at the crossing of roads.

the end of the year 1973, the Mahila Gram Rakshak Dals were organised in 35 villages and had a membership of 846. A post of Mahila Honorary Gram Rakshak Dal Officer has also been sanctioned by the Government.

Jails

ORGANISATION

Prisons in the Gujarat State have been established under the provisions of the Prisons Act of 1894. The Inspector General of Prisons, Ahmadabad is the head of the Jail Department and exercises, subject to the orders of the State Government, general control and superintendence over all the prisons, jails and the headquarter sub-jails in the State. The Jail Department functions under the Home Department.

The sub-jail is located at Nadiad. All the under-trial prisoners from Nadiad taluka are confined here. The prisoners, who are committed to the sessions by the Magistrates are also transferred here from all the taluka headquarters in the district. Prisoners sentenced upto 6 months' imprisonment are detained in this jail. The long-term prisoners are transferred to the Central Prison at Vadodara. In the district, there are ten taluka sub-jails at Anand, Borsad, Petlad, Khambhat, Kapadvanj, Mahamadabad, Thasra, Vadasinor, Matar and Kheda under the Revenue Department. The Mamlatdar of the taluka is designated the Superintendent of the taluka sub-jail, and a clerk from his office work as the Jailor. The total number of convicts and under-trial prisoners in the sub-jail as on 31st December, 1972 was 126.

The sub-jail at Nadiad has a capacity to accommodate 88 male prisoners and 8 women prisoners. The women under-trial prisoners are also confined here, but a woman prisoner on conviction is transferred to the Central Prison at Vadodara. Seventeen offences were committed in the sub-jail during the year 1972.

PRISON DISCIPLINE

Prison life is well organised, and prisoners behave in a disciplined manner and any breach of prison discipline is dealt with under the Prisons Act, 1894. Those found guilty are awarded various types of punishments such as (i) cut in the remission period, (ii) separate confinement, (iii) stoppage of canteen facilities, (iv) standing with hand-cuffs, etc.

WELFARE OF PRISONERS

Though jails are considered penal institutions, the policy of Government towards prisoners is not retribution or revenge but that of reformation

and rehabilitation. Whatever may be a cause of a prisoner's entry into jail, the jail administration provides training so as to enable him after release to settle down as useful citizen of the community. With this end in view, various reforms have been introduced in the jails. These are : (i) remission of sentence for good behaviour, (ii) grant of furlough and parole, (iii) adult literacy classes, (iv) provision of newspapers, (v) canteen facilities, and (vi) cultural activities in the form of *bhajans*, songs, etc. There is a Visitors Board under the chairmanship of the District Magistrate, which meets every quarter and hears the prisoners' complaints. The Government have also appointed one moral lecturer to deliver lectures on moral topics to the prisoners.

Social Defence

Measures for the welfare of the juvenile delinquents and the beggars in this district have been undertaken under the provisions of the following three special Acts, viz., (1) the Bombay Children Act, 1948, (2) the Bombay Probation of Offenders Act, 1938, and (3) the Suppression of Immoral Traffic in Women and Girls' Act, 1956. These activities are carried on under the direct control and supervision of the State Directorate of Social Defence, with headquarters at Ahmadabad.

Remand Home, Nadiad

A Remand Home at Nadiad was started in the year 1951 to implement the provisions of the Bombay Children Act, 1948. A voluntary agency called the Kheda District Probation and After-care Association is in overall charge of the Remand Home.

The destitute children are kept in the Remand Home till their cases are finally disposed of by the Juvenile Court. Thus the Remand Home is a place of safety and provides stay for a short period to juvenile delinquents. During their stay in the Remand Home the children are provided training in literacy and craft under the care of the Probation Officer who submits the report to the Juvenile Court. If the child is found in need of institutional treatment, he is sent to a certified school in the State.

The Kheda District Probation and After-care Association has its own building, where nearly 50 inmates can be accommodated. The staff of the Remand Home is as under :

(1) Probation Officer-cum-Superintendent	...	...	1
(2) Junior Clerk	...	...	1
(3) Literacy Teacher	...	...	1
(4) Guards	...	...	4
(5) Cook	...	...	1
(6) Medical Officer (Part-time)	...	...	1

THE BOMBAY PROBATION OF OFFENDERS ACT, 1938

The Bombay Probation of Offenders Act, 1938, was applied to the district from March 1961 and the Chief Officer was appointed to carry out the work. Now one more post of the District Probation Officer has been created to cope up with the increasing work. The said Act aims at helping the young offenders to become good citizens.

Since 5th September, 1973, the Central Probation of Offenders Act, 1958 is applied to this district. This Act is one of the most progressive social legislations in the field of correctional services.

Hindu Anathashram, Nadiad—The Hindu Anathashram at Nadiad, established as early as 1908 is one of the oldest orphanages in the State. It is recognised as a fit person institution for both boys and girls. It is also recognised as a Remand Home for girls. It has a capacity to accommodate 200 inmates. It is housed in its own spacious building. The managing committee looks after the day-to-day management and welfare of the children with the help of the appointed staff. The Anathashram receives financial help from the Government and also accepts donations from the public.

The ashram has also facilities to receive abandoned children and they are treated with motherly care. The institution provides training in crafts such as tailoring, painting, etc. Most of the children are sent to local schools for further study.

Salvation Army Emery Hospital, Anand—This hospital is recognised as a fit person institution by the former Bombay State. It is meant for the medical treatment of the children who are suffering from T. B. It receives financial help from Government.

I. P. Mission School, Borsad—This institution is recognised as a fit person institution by the Government.

It is a home meant for deserted and illegitimate Christian children. It is better known as creche. The hostel for orphan girls is also located nearby. The creche has accommodation for 25 children and the hostel has similar facility for 50 girls. It provides food, clothing and shelter to the inmates. It also arranges for literary and professional education for girls. Children are admitted directly as well as through the juvenile court.

The Reception Centre, Khambhat

A Reception Centre at Khambhat was started in the year 1969, under the scheme of Moral and Social Hygiene and After-care Programme. It

provides shelter and care to the destitute widows and unmarried mothers. It also provides shelter and protection to the women who are rescued from the clutches of the anti-social elements and those who are in difficulties on account of marital and family troubles. They are kept in the institution for a period not exceeding 6 months. During this period the Superintendent tries to rehabilitate the inmates either by way of reconciliation with family, or employment or giving training in craft so as to make them self-reliant. The inmates, who are in need of shelter for more than 6 months are sent to State Home. The Reception Centre has been declared as a protective home under the Suppression of Immoral Traffic in Women and Girls' Act 1956, and it also works as Remand Home under the Bombay Children Act, 1948. It has a capacity to accommodate 25 inmates.

Judiciary

INTRODUCTION

The judicial system obtaining in the former Kheda district under the management of the British Government is described in the following paragraphs :

“The judicial administration of the lands acquired in 1802 remained in the hands of the Resident at Baroda, till in 1805 a Judge and Magistrate was appointed for Kaira. In 1818 the office and functions of the Magistrate were transferred from the Judge to the collector. In the same years, owing to the acquisition of territory under the Treaty of the 6th November, 1817, the jurisdiction of the Kaira Judge was limited to the lands of the eastern division, and a new Judge was appointed for the western division and stationed at Ahmedabad. In 1828 the office of District Judge of Kaira was abolished, and from that time till 1856 the judicial administration of the district remained in the hands of the Judge of Ahmedabad. In 1856 a senior assistant Judge was sanctioned for Kaira. This appointment was abolished in 1869, and since that time, except from 1872 to 1874 when a joint Judge was stationed at Kaira, the duties have been performed by the Judge and Assistant Judge of Ahmedabad.”

“Of the strength of the staff appointed to decide civil cases in the Kaira district, no details prior to 1830 are available. In 1830 there were eight judges. In 1850 there were in all seven courts, which disposed of 6,189 cases. In 1874 there were five courts. In 1878 the district was provided with five subordinate Judges' courts with an average jurisdiction over 320 square miles. Of these, one was

stationed at Kaira with jurisdiction over the Mehmabad and Matar sub-divisions; another at Nadiad with jurisdiction over the Nadiad and some villages of the Anand sub-divisions; a third at Kapadvanj with jurisdiction over the Kapadvanj sub-division, and over some villages of Thasra in Kaira and of Prantij in Ahmedabad; a fourth at Umreth with jurisdiction over some villages of the Thasra, Anand, and Nadiad sub-divisions; and a fifth at Borsad with jurisdiction over the Borsad sub-division and some villages of Anand. Besides these, there was a small cause court at Nadiad. The business of this court was conducted by the Judge of the small cause court at Ahmedabad who visited Nadiad on the first and third Mondays in each month."

Criminal Justice—"In 1878 eighteen officers shared the administration of criminal justice. Of these five, one of them a Mamlatdar, are magistrates of the first, and thirteen of the second and third classes. Of the former, two are covenanted European civilians and three are natives. With regard to the local jurisdiction and powers of these magistrates, one of them, the District Magistrate, was placed in a special position, invested with a general supervision over the whole district. Each of the four remaining first class magistrates had an average charge of 400 square miles. Of the five first class magistrates three had as Collector, Assistant Collector, and Deputy Collector, revenue charge of the parts of the district in which they exercised magisterial powers. There were fourteen subordinate magistrates, all of them were natives and were invested with powers to decide original criminal cases. Besides their magisterial duties, these officers exercise revenue powers as Mamlatdars or the head clerks to the Mamlatdars. Seventy of the six hundred village headmen, were entrusted with powers of fining and imprisoning, and the rest with the powers contemplated under the Bombay Village Police Act, 1867."¹

Khambhat

About the judicial administration in the former Khambhat State, following details are available.

"Except serious cases tried by the Nawab in person all ordinary criminal charges were heard by the city magistrate, *korwal*, and in the districts by the rural magistrates, *darogas*. Cases calling for severe punishment were referred to the Nawab, by them, who also heard criminal appeals.

There were three Civil Courts: the original Civil Courts, (*diwani adalat*), the first Appellate Court, (*tajvizi*), and the highest appellate court,

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panchmahals*, (1879), pp. 116-20.

(*diwan khana*) where the Nawab, assisted by an assessor, heard final appeals. In miscellaneous appeals and caste disputes, the head of the merchant's guild, (*nagar seth*), and one or two chief merchants acted as assessors. In cases of Hindu law a hereditary and paid *Shastri* was attached to the court. Most debt cases were decided by arbitration. When brought into court, the judge was guided by the rules framed for the purpose.

There was a Divorce Court presided over by a salaried and hereditary officer, styled Kazi, who acted as an assessor in all religious matters. As head of the registration department, the Kazi signed and sealed all bonds affecting immovable property. The proceeds of the registration fees were divided equally among the Nawab, the Munshi, and the Kazi. In divorce cases, the Kazi levied fees graduated according to the social standing of the person claiming relief.

Civil and Criminal codes were introduced, and the procedure was supposed to be regulated by their provisions. The practice was irregular and open to abuse. In the criminal courts neither summons nor warrants were issued, and persons apprehended on the merest suspicion, were often kept until bail was given, evidence found or release purchased. Civil justice was little less free from abuse. Complaints of bribery and extortion were general, and, so little were the court officers controlled, that decrees, passed by the Nawab himself, were sometimes set aside or left unexecuted. No appeal lay to the Political Agent. But a complaint, found by him reasonable, was referred to the Nawab, and in such cases justice was usually done."¹

Vadasinor State

There were four criminal courts in the State in the year 1902-03 as shown below.

1. Court of the Assistant Sessions Judge
2. Court of the District Magistrate and 1st Class Magistrate.
3. Court of the IInd Class Magistrate.
4. Court of the IIIrd Class Magistrate.

The Administrator exercised the powers of an Assistant Sessions Judge and of the District Magistrate and First Class Magistrate. The Nyayadhish exercised the powers of Second Class Magistrate with powers to commit for trial, while the Mahalkari of Virpur exercised the powers of a Magistrate of the Third Class.²

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. V, *Rewakantha, Narukot, Cambay and Surat States*, (1880), pp. 235-36.
2. Balasinor State, *Annual Administration Report*, (1902-03), p. 7.

In 1942-43 the judicial set up in the State was as under.

1. The High Court.
2. The District Small Causes and Sessions Judge's Court and the Court of the District Magistrate.
3. The Nyayadhish and first class Magistrate's Court.
4. The Additional Small Cause Court.
5. The Mahalkari and Second Class Magistrate's Court.

The High Court Judge was invested with full powers and supervised the working of the subordinate courts of the State. Sentences of death, however, required confirmation by the Resident for Vadodara and the Gujarat States. The Dewan exercised the powers of an Additional High Court Judge. The District and Sessions Judge acted as the Registrar of the High Court.

In civil matters the District Judge exercised original jurisdiction in all suits exceeding Rs. 2,000 in value and appellate jurisdiction over all other civil suits decided by the Nyayadhish and the Virpur Mahalkari. The District Judge also exercised the powers of a Judge of a Court of Small Causes and disposed of suits of a small cause nature upto Rs. 100 in value. In criminal matters as Sessions Judge and District Magistrate, he had both original and appellate jurisdiction, under the Criminal Procedure Code of 1898. The District and Sessions Judge was known as Sar Nyayadhish.

The Nyayadhish exercised both civil and criminal jurisdiction. In civil matters he exercised jurisdiction in all suits upto Rs. 2,000 in value. In criminal matters, he had same powers as a first class Magistrate in British India. The Nyayadhish heard suits also under the Mamlatdar's Court Act.¹

As stated earlier the judicial business of the Kheda district was executed by the Judge and Assistant Judge of Ahmadabad since 1869. District and Sessions Court for the district was, however, created in the year 1926, and building to house the District and Sessions Court and the Court of the Civil Judge (S. D.) and Civil Judge (J. D.) were constructed. Formerly the special jurisdictional suits of both Kheda and Panchmahals district were tried in the Court of the Civil Judge (S. D.) at Nadiad, which functioned as the Court of First Class Subordinate Judge.

¹ Balasinor State, *Annual Administration Report*, (1942-43) pp. 10-11.

Originally, upto year 1948, the Civil Judges, Junior Division had powers to try suits or proceedings where, the value of the subject matter did not exceed Rs. 5,000. But since 1949, the Civil Judges (J. D.) have been empowered to try suits and proceedings where the value of the subject matter does not exceed Rs. 10,000. The District and Sessions Judge exercised general control over all the Courts in the district, viz., Courts of the Civil Judge, Senior Division and Civil Judge, Junior Division and Judicial Magistrates, First Class.

In 1945, the Bombay Agricultural Debtors' Relief Act was applied to the Kapadvanj, Thasra, Matar and Mahemadabad talukas. Chairmen were appointed to try these cases. One Chairman each was appointed to try cases of Kapadvanj and Thasra talukas and the Matar and Mahemadabad talukas respectively. The Chairman for Thasra and Kapadvanj talukas held offices at Kapadvanj and Thasra for 15 days at each place. In the same way the Chairman for Matar and Mahemadabad talukas held his offices at Matar and Mahemadabad for 15 days in a month. In 1947 the said act was extended to all the talukas in this district and consequently the Boards were abolished. The powers of the said Boards were then vested in the Civil Judges of each Court.

Before Independence there were five Civil Courts in the Kheda district under the British. The location and jurisdiction of each court are shown below :

Sl. No. 1	Name of the Court 2	Jurisdiction 3
1	Civil Court, Nadiad	.. Whole of Nadiad taluka and some villages of the Anand taluka.
2	Civil Court, Kheda	.. Matar and Mahemadabad talukas.
3	Civil Court, Borsad	.. Borsad taluka and some villages of Anand taluka.
4	Civil Court, Umreth	.. Thasra taluka and some villages of Anand and Nadiad talukas.
5	Civil Court, Kapadvanj	.. Kapadvanj taluka and some villages of the Thasra taluka.

After the merger of the princely States of Khambhat, Vadasinor, Ghodasar, Punadra and Khadal and inclusion of the portion of the Petlad taluka of the former Baroda State after 1st May 1949, the former territorial limits of

Kheda district changed. To facilitate the general public the number of Civil Courts was increased. Their location and jurisdiction are stated below.

Sl. No. 1	Name of the Court 2	Jurisdiction 3
1	Civil Court, Anand (1949) ..	Anand taluka.
2	Civil Court, Dakor (created on 1st December, 1955).	Thasra taluka and at Court headquarters Dakor (linked Court).
3	Civil Court, Kheda ..	Nine Days beginning from First Monday at Mahemadabad, one week beginning from Third Monday at Matar and remaining days at Kheda.
4	Civil Court, Nadiad ..	For twenty days at Nadiad beginning from first Monday in each month and at Vadasinor for the remaining days.

As the major portion of the Kheda district was under the Bombay Province of the Government of India naturally system obtaining in the Kheda district was organized on the Bombay pattern.

In the year 1953, the Judiciary was separated from the Executive and all the Magistrates of the First Class who were formerly under the control of the District Magistrates were brought under the control of the Sessions Judge. Before separation there was a separate cadre of Resident Magistrates and there existed 9 Courts of the Magistrates of First Class at Nadiad (two Courts), Anand, Kheda, Borsad, Umreth, Petlad, Khambhat and Vadasinor. One Magistrate from the Nadiad Court held his Court at Kapadvanj also. Over and above these Magistrates, there were two Honorary First Class Magistrates, one at Nadiad and the other at Boriavi.

PRESENT SET-UP

(i) *Civil Courts-District Judge*—The District Judge, Nadiad is the highest judicial authority in the district and presides over the District Court. It is also a court of appeal from all decrees and orders passed in the suits valued upto Rs. 10,000 by the subordinate courts. The District Judge exercises general control over all the civil courts and their establishments and inspects the proceedings of courts subordinate to him. He also exercises jurisdiction under the following special Acts, viz., the Bombay Motor Vehicles Act, the Land Acquisition Act, the Bombay Public Trusts Act, the Bombay District Municipalities Act, the Bombay Municipal Boroughs, Act, the Bombay Rent Act, etc., as adopted and applied to Gujarat State as also the Indian Electricity Act, the Indian Telegraphs Act, the Indian Railways Act, and the Representation of People Act, 1951, etc.

Appointment to the post of Assistant Judge is made whenever necessary depending upon the volume of work in the District Court. The Assistant Judge exercises both original and appellate jurisdiction. He can try original cases. He is empowered to try appeals from the decrees and orders of the subordinate courts, filed in the District Court, which may be referred to him by the District Judge. At present there are two Assistant Judges.

Subordinate to the District Judge, are the courts of the Civil Judge Senior Division, and Judicial Magistrate, First Class, Nadiad and Civil Judges Junior Division, and Judicial Magistrate, First Class. The jurisdiction of the Civil Judge, Junior Division extends to all original suits and proceedings of a civil nature wherein the amount involved in the subject matter does not exceed Rs. 10,000 in value, while the jurisdiction of the Civil Judge, Senior Division extends to all original suits and proceedings of a civil nature, irrespective of the value of the subject matter of the suit.

At Nadiad, besides the District Court, there are two courts of Assistant Judges, three courts of Civil Judges, Senior Division and three courts of Civil Judges, Junior Division and Judicial Magistrate First Class. As Small Cause Judges, the Civil Judges, Senior Division and Civil Judges, Junior Division try cases upto the prescribed pecuniary limits as per powers vested in them by the High Court of Gujarat. In addition to these courts, there are courts of Civil Judges, Junior Division and Judicial Magistrates First Class, viz., (i) the Civil Judge, Anand, (ii) the Joint Civil Judge, Anand, (iii) the Civil Judge, Petlad, (iv) the Joint Civil Judge, Petlad, (v) the Civil Judge, Khambhat, (vi) the Civil Judge, Borsad, (vii) the Joint Civil Judge, Senior Division, Borsad, (viii) the Civil Judge, Umreth, (ix) the Civil Judge, Dakor, (x) the Civil Judge, Vadasinor, (xi) the Civil Judge, Kapadvanj and (xii) the Civil Judge, Kheda.

There are the following Linked Courts in the district.

Linked Courts

1. **Kheda-Matar and Mahemadabad** The Civil Judge (J. D.) and J. M. F. C. Kheda holds his Courts at Mahemadabad for 9 days beginning from 1st Monday of each month and at Matar for one week beginning from 3rd Monday of each month for criminal work and at Kheda for the rest of the days for civil and criminal work.
2. **Dakor-Thasra** Civil Judge (J. D.) and J. M. F. C. Dakor holds his Court at Thasra for

criminal work as well as civil work for 13 days beginning from Monday of the first week till Saturday of the 2nd week.

The Judicial Magistrate, First Class, Nadiad also holds his court in the Remand Home at Nadiad for juvenile offenders on 1st and 3rd Saturdays in a month. There is no court of Honorary Magistrate in this district.

(ii) *Criminal Courts*—The District Judge, Nadiad is also the Sessions Judge of the district. He tries criminal cases committed to his court by the Judicial Magistrates after preliminary inquiry and hears appeals against the decisions of the subordinate Magistrates. He also tries cases of Motor Accident claims as Member of the Motor Accident Claims Tribunal of the district. He also hears Town Planning Appeals of Anand Town as President of Board of Appeals.

The Assistant Judges exercise powers of Additional Sessions Judge on the criminal side for the trial of sessions cases, criminal appeals and miscellaneous criminal applications transferred to him for disposal by the Sessions Judge. If the Assistant Judge is not invested with the powers of the Sessions Judge, he works as an Assistant Sessions Judge only. The Sessions Judge and the Additional Sessions Judge may pass any sentence authorised by law, but any sentence of death passed by them is subject to confirmation by the High Court. The Assistant Sessions Judge can impose a sentence of imprisonment for 10 years, but has no power to hear appeals and criminal revision applications. At present, there are two Assistant Sessions Judges, and both are invested with the powers of the Additional Sessions Judge. Of these, one Assistant Judge and Additional Sessions Judge is invested with the powers of the Special Judge to hear cases under the Bombay Prevention of Corruption Act.

The Bombay Separation of Judicial and Executive Functions Act, 1953 and the Code of Criminal Procedure of 1958 classify the Magistrates into two categories, viz., (1) Judicial Magistrates and (2) Executive Magistrates. All the Judicial Magistrates in the district are Magistrates of the First Class. They are subordinate to the Sessions Judge, who may, from time to time, make rules or give special orders as to the distribution of business among them.

Executive Magistrates fall under the following classes—(1) District Magistrate, (2) Sub-divisional Magistrates and (3) Taluka Magistrates. All Sub-divisional Magistrates are subordinate to the District Magistrate and the Taluka Magistrates to the Sub-divisional Magistrates concerned, subject

to the general control of the District Magistrate. Their powers and functions are described in the paras III-A, IV and V of Schedule III of the Criminal Procedure Code. Appeals from orders of the Executive Magistrates requiring security for keeping peace lie to the Sessions Court.

One Magistrate in the district is specially empowered try cases under the Essential Commodities Regulation Act for the whole district.

Law Officers—The Law Officers of the Government functioning in the district are : (1) District Government Pleader and Public Prosecutor, (2) 1st Assistant Government Pleader and Public Prosecutor, (3) 2nd Assistant Government Pleader and Public Prosecutor, and (4) 3rd Assistant Government Pleader and Public Prosecutor.

Civil Cases—The following statement shows the number of civil cases classified according to (A) the nature of suits and (B) the amount involved in them during the year 1972.

Sl. No. 1	Particulars 2	No. of cases 3
<i>A—Civil Cases Classified According to Nature of Suits, 1972</i>		
1	No. of cases pending at the end of the year 1971	4,010
2	New cases instituted during the year 1972	3,231
Cases relating to—		
	(a) Money and movable property	1,852
	(b) Immovable property	828
	(c) Specific Relief	462
	(d) Mortgage	75
	(e) Others	14
3	Cases revived and received otherwise	108
4	Suits disposed of during the year	3,062
5	Cases pending at the end of the year 1972	4,287
<i>B—Civil Cases Classified According to Amount Involved, 1972</i>		
1	Not exceeding Rs. 10	80
2	Over Rs. 10 but not exceeding Rs. 50	63
3	Over Rs. 50 but not exceeding Rs. 100	156
4	Over Rs. 100 but not exceeding Rs. 500	754
5	Over Rs. 500 but not exceeding Rs. 1,000	679

Sl. No.	Particulars	No. of cases
6	Over Rs. 1,000 but not exceeding Rs. 5,000	958
7	Over Rs. 5,000 but not exceeding Rs. 10,000	249
8	Over Rs. 10,000	111
9	Cases of which the monetary value could not be estimated	181
Total		3,231

Out of a total of 3,231 cases registered in the year 1972, those relating to money and property numbered 1,852 or 57·31 per cent. Of these, cases, not exceeding Rs. 5,000 in value numbered 2,690, those above Rs. 5,000 but not exceeding Rs. 10,000 numbered 249, and those exceeding Rs. 10,000 numbered 111, whereas there were 181 cases, the monetary value of which could not be estimated. Out of 3,062 suits disposed of, 687 were disposed of without trial, 403 were *ex-parte*, 467 were decided by admission of claim, 848 by compromise and 615 after full trial. 11 suits were disposed of by reference to arbitration and 4 suits were transferred.

Criminal Cases—In the year 1972, 40,368 offences were reported in the Criminal Courts of the district. The number of persons under trial was 71,253. Cases of 60,306 persons were disposed of; 33,800 persons were discharged or acquitted; 26,265 persons were convicted; 241 persons were committed to sessions; and 14 persons died or escaped. Of those convicted, 3,233 were sentenced to various terms of imprisonment, 22,334 were asked to pay fine, 72 were released on admonition, 646 were released after giving security and 124 persons were dealt with under the Probation of Offenders' Act.

In the Sessions Court, 102 offences inclusive of those mentioned above were reported during the year 1972. Persons under trial were 269, of whom 162 were acquitted or discharged and 31 persons were convicted and cases of 76 persons were pending for trial at the end of the year. All those who were convicted were sentenced to various terms of imprisonment.

The Nyaya Panchayats—Over and above the judicial courts discussed above, the Panchayat Courts have been established under Gujarat Panchayats Act, 1961, in villages in this district, to try minor cases of a civil nature and petty criminal offences with a view to avoiding undue hardship and expenditure to the village people. An appeal against the decision of the Nyaya Panchayat lay before the District Judge within 30 days of the judgment of the Nyaya Panchayats. The Nyaya Panchayats could not inflict any punishment by way of imprisonment but could only impose a fine upto Rs. 250.

Bar Association—The Nadiad Bar Association was founded in the year 1927. It is not registered. The association is formed to promote co-operation amongst the members of the Bar.

STATEMENT XII-1

Police Stations and Out-posts

Sl. No.	Name of Taluka	Name of Police Station	Name of Out-post
1	Nadiad ..	1 Nadiad town 2 Nadiad rural 3 Chaklashi 4 Vaso 5 Mahudha	1 Vina 2 Sodpur 3 Uttarsanda 4 Alina
2	Mahamadabad ..	6 Mahamadabad 7 Kheda town	5 Iali 6 Sarsavani 7 Sinbuj 8 Ghodasar
3	Kapadvanj ..	8 Kathlal 9 Kapadvanj 10 Atarsumba	9 Chhipadi 10 Antisar 11 Nirmali 12 Lasundra 13 Antroli 14 Ravdavat
4	Matar ..	11 Matar 12 Limbasi	15 Radhu 16 Bhalada
5	Anand ..	13 Anand town 14 Anand rural 15 Khambholaj 16 Vidyanagar 17 Umreth	17 Vasad 18 Samarkha 19 Ode 20 Rasanol 21 Bhalej
6	Thasra ..	18 Dakor 19 Thasra	22 Bhadrara 23 Pali
7	Vadasinor ..	20 Vadasinor 21 Virpur	24 Pandva
8	Petlad ..	22 Petlad town 23 Petlad rural 24 Mahelav 25 Sojitra	25 Dharmaj 26 Nar 27 Kasor
9	Khambhat ..	26 Khambhat city 27 Khambhat rural 28 Tarapur	28 Kalamsar 29 Piploi 30 Dhuvaran 31 Panad 32 Varsada
10	Borsad ..	29 Virsod 30 Anklay 31 Borsad 32 Bhadrar	33 Kathana 34 Ras 35 Umata 36 Bamangam

Source : District Superintendent of Police, Kheda.

CHAPTER XIII

OTHER DEPARTMENTS

The role of public administration has been increasingly expanding in recent years to meet the exigencies of planning for a Welfare State. The activities now undertaken by Government are so diverse and manifold that a number of departments which did not exist or play any significant part in the past, have come up since Independence to give effect to and keep pace with the growing tempo of work generated by various developmental activities under the Five Year Plans. The Departments of Agriculture, Animal Husbandry, Forest, Public Works, Industries, Co-operation, etc., have now become important. The organisational set-up of (1) the Agriculture Department, (2) the Animal Husbandry Department, (3) the Forest Department, (4) the Public Works Department, (5) the Co-operation Department, (6) the Industries Department, (7) the Office of the District Information Officer and (8) the Office of the District Statistical Officer, are dealt with in this chapter.

THE AGRICULTURE DEPARTMENT

The District Agricultural Officer with headquarters at Nadiad is in charge of the agricultural activities in the district. Before the introduction of the Panchayati Raj, he was under the administrative control of the District Collector. Thereafter, he has been placed under the District Development Officer of the District Panchayat. However, he remains as before under the Department of Agriculture for technical supervision and control. In this respect, he is directly responsible to the Superintending Agricultural Officer, Vadodara. He is assisted by one Assistant District Agricultural Officer and one Soil and Water Use Management Specialist who gives guidance to the cultivators about efficient use of fertilisers, manures, irrigation and soil management. The District Agricultural Officer is also assisted by the Plant Protection Officer, who popularises plant protection measures and recommends insecticides for prevention of agricultural pests and diseases. The Seed Development-cum-Training Officer looks after purchase and distribution of seeds and imparts training to farmers on improved methods of cultivation. The Agricultural Officer, (Tobacco scheme) looks after the raising and distribution of tobacco seedlings which are free from any disease. The Agricultural Officer (Taluka Seed Farms) supervises technical work of Taluka Seed Multiplication Farms and prepares schemes of Seed Farms. There are 2 Extension Officers (Agriculture) in each taluka. They are working at taluka level under Taluka Development Officers and look after extension activities under the guidance of the District Agricultural Officer.

The District Agricultural Officer is responsible for carrying out agricultural extension activities through the field staff mentioned above. The main functions of the District Agricultural Officer are : (i) implementation of developmental schemes under the Five Year Plans, (ii) organisation of crop protection services and training methods, (iii) supervision of agricultural activities in blocks, crop cutting experiments and seed multiplication farms, conducting trials of improved seeds and fertilizers, (iv) organisation of farmers' unions, crop competitions and van mahotsav, (v) distribution and storage of improved seeds, (vi) preparation of rural and town compost, (vii) technical guidance to co-operative farming societies, (viii) organisation of Rabi and Kharif campaigns and imparting training to the technical staff and cultivators, (ix) technical inspection of the agricultural development activities of the blocks, (x) extension of agricultural development schemes like construction of wells, oil-engines and pumping sets subsidy scheme, plant protection scheme, etc.,

THE ANIMAL HUSBANDRY DEPARTMENT

The Officer at the district level in-charge of animal husbandry activities is the District Animal Husbandry Officer. He is responsible technically to the Director of Animal Husbandry, Gujarat State, Ahmadabad and administratively to the District Development Officer. The main functions of the District Animal Husbandry Officer are to carry out schemes relating to improvement of cattle breed, protection of cattle against contagious diseases, treatment of sick animals in veterinary dispensaries, castration of scrub animals and other developmental activities relating to animal husbandry.

He is assisted in his work by 10 Veterinary Officers, 46 Livestock Inspectors and other technical staff.

THE FOREST DEPARTMENT

The Chief Conservator of Forests with headquarters at Vadodara is the head of the Forest Department of Gujarat State. Under him there are four territorial circles, viz., (I) Vadodara Circle, Vadodara (II) Junagadh Circle, Junagadh, (III) Surat Circle, Surat and (IV) Gandhinagar Circle, Gandhinagar. There are two other circles for special works each under a Conservator of Forests. The special circles relate to (I) Research and Working Plan Circle located at Vadodara and (II) Wild Life Wing at Junagadh. The Conservators have under them, Deputy Conservators of Forests to look after the administration of the Division under their charge. They belong to Gujarat Forest Service Class-I. They are assisted by the Assistant Conservators of Forests who belong to Gujarat Forest Service Class-II. Godhra Forest Division is one of the Divisions functioning directly under the control of the Conservator of Forests, Vadodara Circle, Vadodara. The Godhra Forest Division has jurisdiction over two districts, viz., Panchmahals and Kheda.

The Division is sub-divided into smaller executive charges called 'Ranges', supervised by the Range Forest Officers who are non-Gazetted subordinate officers (class-III) usually trained at one of the Forest Colleges in India at Dehra Dun or at Coimbatore. Each Range is further sub-divided into 'Rounds', each under a Round Officer or a Forester, trained at forest classes held at Kakrapara in Surat Circle. Finally, each Round is sub-divided into 'Beats' and each Beat is managed by a Beat Guard also called a Forest Guard. A training class for Guards is also being conducted at Kakrapara in Surat Circle which trains the Guards from all the circles of the State.

To keep the forests preserved, protected and improved, there is one Range Forest Officer at Virpur (Birpur) to look after the forests of Vadasinor taluka. Under the Range Forest Officer, there are three Round Foresters who are in charge of Virpur and Gundela Rounds of Vadasinor taluka of Kheda district and Naroda Round of Lunawada taluka of the Panchmahals district.

The total forest area in Vadasinor taluka of the Kheda district as on 31st March, 1973 was 62.61 sq. km. These forests are of 'Dry Deciduous and Thorny' type and have been described in detail in chapter-1, 'General'.

THE PUBLIC WORKS DEPARTMENT

This department deals with (1) Roads and Buildings, (2) Irrigation, (3) Electricity and (4) Ports. The sphere of activities of each of these four branches is quite distinct from each other. The first two branches work under separate Superintending Engineers, while the work relating to electricity is placed under the charge of the Chief Engineer (Electrical), to the Government. The Ports organisation with headquarters at Ahmadabad, is headed by the Director of Ports under the administrative control of the Public Works Department at the State level.

Roads and Buildings

Activities in regard to roads and buildings cover construction, maintenance and repairs of the roads, bridges and Government Buildings, etc. For this purpose, the Kheda district is placed under the charge of a Superintending Engineer, Roads and Buildings, Ahmadabad Circle No. 1, who has under him, three Divisions in the Kheda district each under the charge of an Executive Engineer. The divisions are :

- (1) Kheda Division, Kheda, (2) Mahi-Kadana Road Division (No. 1), Nadiad, and (3) Mahi-Kadana Road Division (No. 2), Petlad.

There are four sub-divisions under Executive Engineer Kheda Division Kheda each at (1) Kheda, (2) Nadiad, (3) Khambhat and (4) Kheda (National Highway Works, Sub-division). These sub-divisions are placed under the charge of Deputy Engineers, who function under the control and guidance of the Executive Engineers, Roads and Buildings Division, Kheda. Each Sub-division is further divided into sections each in charge of a Overseer or Junior Engineer.

Other two divisions, *i. e.*, Mahi Kadana Road Division No. 1 with headquarters at Nadiad and Mahi-Kadana Road Division No. 2 with headquarters at Petlad are created specially for completion of the approach roads for the Mahi-Kadana Project area.

The Superintending Engineer and the Executive Engineers belong to the Gujarat Service of Engineers, Class-I, while the Deputy Engineers belong to the Gujarat Service of Engineers, Class-II. With the introduction of the Panchayati Raj from April 1963, the roads below the category of National and State highways, *i. e.*, Major District Roads, Other District Roads and Village Roads have been transferred to the District Panchayats. These roads and minor irrigation schemes in the district are under the charge of Executive Engineer, Kheda District Panchayat, Nadiad. There are nine Sub-divisions under the District Panchayat, *viz.*, (1) Nadiad, (2) Dakor, (3) Anand, (4) Kharland, Panchayat Sub-division, Khambhat, (5) Minor Irrigation Panchayat Sub-division, Nadiad, (6) Minor Irrigation, Panchayat Sub-division, Dakor, (7) Minor Irrigation Panchayat Sub-division, Vadasinor, (8) Tubewell, Panchayat Sub-division, Nadiad and (9) Road Project, Panchayat Sub-division, Nadiad. These sub-divisions are under the charge of Deputy Engineers who work under the control and guidance of the Executive Engineer, Kheda District Panchayat, Nadiad.

Irrigation

The Irrigation wing of the Public Work Department is a separate branch and is quite distinct from other branches. For efficient execution and administrative convenience, irrigation works in the Kheda district are divided between two irrigation Circles *viz.*, (1) the Ahmadabad Irrigation Project Circle, Ahmadabad, in charge of irrigation works in the Matar and Mahemadabad taluka and (2) the Vadodara Irrigation Project Circle, Vadodara, in charge of such works in other talukas.

The Ahmadabad Irrigation Division, Ahmadabad looks after the execution and maintenance of the Khari-cut canal system, (2) Fatewadi Canals, (3) Meshwo Canal, (4) Chorvadodara Drain and Ghoda Feeder Drain Scheme of Khari-Cut canal situated in both districts of Ahmadabad and Kheda. The Meshwo Canal system is entirely in Kheda district.

The Ahmadabad Irrigation Division, Ahmadabad is headed by an Executive Engineer of Gujarat Service of Engineers, Class-I. He is assisted by a Deputy Engineer and five Junior Engineers.

The irrigation activities transferred to the Panchayats relate to the maintenance and execution of minor irrigation schemes, check dams, tubewells, etc., and are looked after by the Kheda Panchayat Division, Nadiad. It works under the control of Ahmadabad Panchayat Circle, Ahmadabad.

The Water Resources Investigation Circle with its headquarters at Ahmadabad and with jurisdiction over the whole State was created in February, 1970 with a view to carrying out investigation of water resources and prepare plans and estimates of the major and medium irrigation schemes for augmenting the farm output.

The Water Resources Investigation Division, Ahmadabad has five sub-divisions which look after the investigation of major and medium schemes besides carrying out hydrological data collection in Gujarat region. The Water Resources Investigation Sub-division (No. 1) at Ahmadabad headed by a Deputy Engineer, class-II, looks after the investigation works in the Kheda district as well as in those of Ahmadabad, Sabar Kantha, Panch Mahals, Vadodara and Mahesana.

The Flood Control Organization was created in the year 1969 after the heavy flood of the year 1968 in the State. The Superintending Engineer is the administrative head of the Flood Control Circle, Ahmadabad.

Three sub-divisions for flood control working at Nadiad, Ahmadabad and Thasra, each headed by a Deputy Engineer, look after the flood protective works in this district. These Deputy Engineers are responsible to the Executive Engineer, Flood Control Division, Ahmadabad, who, in turn, functions under the control of Superintending Engineer, Flood Control Circle, Ahmadabad.

Electrical Organisation

For carrying out advisory, administrative and executive duties pertaining to the use of electricity in the State there is an Electrical wing headed by the Chief Engineer (Electrical) to the Government, Public Works Department. There are four electrical divisions each at Ahmadabad, Vadodara, Rajkot and Gandhinagar. Kheda district is placed under the Executive Engineer, Electrical Division, Public Works Department, Vadodara. He carries out the work of preparing of plans and estimated for electrical installations, air conditioning, lifts in Government buildings, etc., through

the Deputy Engineer, Electrical Sub-division, Anand, who is in charge of Kheda and Panch Mahals districts.

Ports

The only port of Khambhat in this district has been declared as closed by Government. There are thus no ports in the district.

THE CO-OPERATION DEPARTMENT

The Co-operation Department is headed by the Registrar of Co-operative Societies with headquarters at Ahmadabad. This department works under the Agriculture, Forests and Co-operation Department at the State-level. He also performs the triple functions of the Registrar General of Money-lenders, the Director of Cottage Industries and the Director of Agricultural Marketing. He is assisted by the Deputy and Assistant Registrars working at the headquarters. As the Registrar General of Money-lenders, he looks after the enforcement of the Bombay Money-lenders Act, 1946. In his capacity as the Director of Agricultural Marketing, he attends to implementation of the Gujarat Agricultural Produce Markets Act, 1963 and performs the functions of organising and constituting the regulated markets. As the Director of Cottage Industries, he looks after the development of cottage and small-scale industries and sanctions loans and other assistance to the village artisans. In this work he is assisted at the headquarters by : (1) a Deputy Registrar, (2) a Deputy Development Officer for Handicrafts, (3) an Engineer for Cottage Industries, (4) a Textile Expert, (5) an Assistant Director for Khadi and Village Industries, and (6) a Textile Officer.

Before the reorganisation of the Co-operative Department in 1968, there were three Divisional Deputy Registrars with headquarters at Ahmadabad, Vadodara and Rajkot and District Registrars in each district in the State. The Kheda district was placed under the Deputy Registrar, Ahmadabad Division, who had jurisdiction over the districts of Ahmadabad, Banas Kantha, Sabar Kantha, Mahesana and Kheda. At the district level, the District Registrars carried out all the activities of (i) co-operation, (ii) industrial co-operatives, (iii) agricultural marketing, and (iv) money-lending.

With the introduction of the Panchayati Raj from April 1963, some of the powers and functions of the co-operative sector were transferred to the panchayats and the services of the District Registrars were placed at the disposal of the District Panchayats, though the District Registrars continued to hold the charge of the subjects dealt with at the State level. With effect from September, 1964, however the District Registrars were

withdrawn from the panchayats, but the services of the Assistant District Registrars were placed at the disposal of the panchayats for the subjects transferred to them (the panchayats). Thus, one Assistant District Registrar, Panchayats, deals with the following subjects : (i) registration of societies, (ii) maintenance of prescribed registers, (iii) powers relating to the formation, registration or continuation of the societies and their membership, (iv) amendment of bye-laws, (v) change of name of the society, (vi) disposal of the surplus assets of societies in the event of their dissolution, and (vii) holding annual general and special meetings of the co-operative societies. He exercises these powers in relation to the agricultural credit societies inclusive of service co-operatives, consumer's stores, labour contract industrial co-operatives, etc.

With a view to achieving economy in expenditure, the department was reorganised in June, 1968. Its salient features are as follows :

(1) The officers of the Divisional Deputy Registrars at Ahmadabad, Vadodara and Rajkot were abolished, and the powers exercised and duties performed by them have been adjusted between the Offices of the Registrar of Co-operative Societies at the State level and the District Registrars at the district level.

(2) The activities of the department are divided into four sections such as (i) Co-operation and marketing, (ii) Industrial co-operatives and cottage industries, (iii) Money-lending, and (v) Audit.

(3) The administration of the department at the district level has been decentralised. Instead of placing all the sections under a single District Registrar, as was done prior to June, 1968, the first three sections are placed under the charge of different District Registrars, who are functioning quite independently of one another and are in charge of one or more districts. The work relating to the Audit is carried out with the help of departmental and certified auditors.

(4) The set-up of the department at the State level has remained unchanged. The Registrar of Co-operative Societies continues to be the administrative and executive head of the department.

(5) Even after the reorganisation of the department, the previous arrangement for deputing one Assistant District Registrar to each District Panchayat continues.

In the Kheda district, the administrative set-up of the department is as under :

(1) *Co-operation and Marketing*

According to the revised set-up, the District Registrar, Class-I with headquarters at Nadiad, deals with these sections and exercises jurisdiction over the districts of Kheda and Panch Mahals. At the headquarters, he is assisted by an Office Superintendent, a Head Clerk, Accountant, a Co-operative Officer, an Assistant Co-operative Officer and other staff. He also functions as the Deputy Director of Agricultural Marketing and Rural Finance and entertains proposals for the establishment of regulated markets and the declaration of market yards.

(2) *Industrial Co-operatives and Cottage Industries*

The District Registrar (Industries), Class-I, with headquarters at Ahmadabad, looks after the administration and development of industrial co-operatives and cottage industries including forest labour and labour contract societies in the Kheda district. He also exercises jurisdiction over the districts of Ahmadabad, Gandhinagar, Sabar Kantha, Banas Kantha, Mahesana and Panch Mahals.

He is assisted at the district headquarters by Office Superintendent, Head Clerk, Co-operative Officer, Class-III (Industries) and other staff.

(3) *Money-lending*

The District Registrars who are entrusted with the enforcement of the Bombay Money-lenders Act, 1946, are designated the Registrars of Money-lenders, Class-I. One such Registrar with headquarters at Ahmadabad supervises the work relating to the money-lending legislation in the districts of Kheda, Mahesana, Ahmadabad, Gandhinagar, Sabar Kantha, Banas Kantha, and Panch Mahals.

An Assistant Registrar (Money-lending), with headquarters at Nadiad, has jurisdiction over the districts of Ahmadabad, Gandhinagar, Kheda and Panch Mahals. He works under the guidance and supervision of the Registrar (Money-lending), Ahmadabad, and is assisted by a Co-operative Officer who works as the Inspector of Money-lenders.

The Registrar of Money-lenders is empowered to grant or refuse licences to money-lenders on merits. In case of any breach, he is empowered to compound the offence under section 35 (c) of the Act. He has to take final decisions in cases of illicit money-lending detected by the subordinate officers working under him. The Assistant District Registrar conducts inquiries into applications for licences and forwards them with his

report to the Registrar, who may either grant or refuse them on merits. The Co-operative Officers attached to him detects the cases of illicit money-lending, which the Assistant District Registrar forwards to the Registrar for final disposal.

Audit

Section 84 of the Gujarat Co-operative Societies Act, 1961, provides for the statutory audit of every society at least once a year, by the Registrar of Co-operative Societies or by any person authorised by him. In the Kheda district there is a Special Auditor for Co-operative Societies, attached to the District Central Co-operative Bank Limited, Nadiad. Another Special Auditor, Co-operative Societies, Nadiad and the Special Auditor, Co-operative Milk Societies at Anand carry out the work of audit with the help of Sub-auditors.

THE INDUSTRIES DEPARTMENT

The purposeful industrial policy has generated a new climate and opened up a new horizon for the rapid and diversified growth in the industrial structure. The positive assistance in securing industrial inputs and generation of conducive atmosphere for industrial entrepreneurship are the principal features of the policy. The administrative machinery of the Industries Department has been so devised as to carry out numerous complex functions assigned to it.

The main functions of the Department of Industries are the development of large scale and medium scale industries, assistance to small scale and cottage industries, purchase of stores for Government departments, enforcement of the Weights and Measures Act, issue of essentiality certificates export promotion and financial assistance. According to the established policy of Government, the department assists industrialist in securing land, water, raw materials, power and other requirements. It gives them technical advice and also furnishes information in respect of raw materials, processes of manufacture and industrial potentialities. It also conducts research and investigation in technical problems relating to industries.

The Department of Industries is headed by the Industries Commissioner, who has his headquarters at Ahmadabad. He works in several capacities such as the Controller of Weights and Measures, Controller of Coal and Coke and Controller of Molasses, etc. Besides, he is instrumental in implementing the industrial policy of the State Government. Under him there is one Deputy Director of Industries (Metric) at Ahmadabad, who is in charge of the Weights and Measures branch. He is responsible for enforcement of the metric system of Weights and Measures Act, in the whole State.

At the regional level there are five more Deputy Directors of Industries one each for Ahmadabad, Vadodara, Rajkot, Mahesana and Surat. There is also one Assistant Director of Industries for Kutch District and one Assistant Director of Industries in charge of Industrial Research Laboratory at Vadodara. One Liaison Officer (Industries) is posted at Bombay.

Besides looking after industrial development, the Deputy Director of Assistant Director of the region acts as the Deputy Controllers or Assistant Controllers of Weights and Measures respectively in their respective regions.

The Kheda District falls under the jurisdiction of the Deputy Director of Industries, Vadodara. He is in charge of industrial development activities of the region. Vadodara region consists of 4 districts, viz., Vadodara, Bharuch, Panch Mahals and Kheda.

Among the important activities carried out by the Regional Deputy Director of Industries, Vadodara are the issue of essentiality certificates for the import of raw materials as well as capital goods. The issue of allotment certificates to steel processing industries and foundries for their requirement of steel is also attended to by him. As stated above, the Deputy Director is in charge of the growth and the development of organised small scale industries in his region. He also entertains applications of small scale units for registration with the Director General of Supplies and Disposals, New Delhi and forwards them with necessary recommendations to the authority concerned. He is the controlling officer for administration of the Bombay Weights and Measures (Enforcement) Act, 1958 and the Rules, made thereunder. Under the Act and Rules the Industries Inspectors collect fees for verification and re-verification of weights and measures articles, inspect instruments of weights and measures and stamp them if found correct. He prosecutes for the breaches of the provisions of the Act.

At the District level the Industries Officer is posted at Nadiad. He is in charge of industrial development of the district. He is assisted by the Industries Inspectors posted at Nadiad, Anand, Petlad, Kapadvanj, Khambhat and Thasra.

The Industries Officer is charged with a number of functions which are more or less analogous to those assigned to the Deputy Director at the regional level. The most important function assigned to the Industries Officer is to look after the promotional aspect of industrial development in the district. To this end he has to render all possible help to the parties approaching him for advice regarding the industrial potentialities such as infrastructure facilities like water power, land, communications, etc. He has to assist them in getting required raw materials, loans and machinery on hire purchase system. Other functions besides these relate to the proper

enforcement of the Bombay Weights and Measures (Enforcement) Act, 1958 and the Rules made thereunder. In this work, he is assisted by the Industries Inspectors who are required to visit centres allotted to them. In addition to this work, these Inspectors assist the Industries Officer in investigation of applications for the import of scarce and controlled raw materials, power subsidy, hire-purchase of machinery applications, registration of small scale industries, telephone priority, collection of industrial statistics and information relating to industrial activities in the district, investigation of applications of sales tax exemptions, small loan applications of the Gujarat State Financial Corporation, loan applications of Professionals and artisans, electric duty rebate applications, etc. After completing investigation the Inspectors submit their reports to the Industries Officer, who after ascertaining their genuineness takes necessary decisions on applications, within his powers.

The Industries Officer, under rehabilitation scheme, grants loans to the Indian repatriates from Burma, Portugal and Ceylon. Till 1972 loans amounting to Rs. 17,000 were granted to nine Burmese repatriates and loans of Rs. 5,000 were granted to a Portuguese repatriate.

Under the Gujarat State Aid to Professional and Artisans Rules loans may be granted to trained or experienced artisans or technicians for (1) Purchase of tools and equipments and (2) working capital. Loan amount not exceeding Rs. 3,000 and in exceptional cases upto Rs. 5,000 in each case will be sanctioned on the recommendations of District Advisory Committee of the Collector. The Industries Officer disburses loans.

The work of loan upto Rs. 10,000 of the Gujarat State Financial Corporation is done by the Industries Officer. The applications of such loans are received by the Industries Officer who investigates them and prepares reports. These applications are examined by a committee. The committee communicates the decision of acceptance or rejection to Gujarat State Financial Corporation which makes the payment.

With a view to encouraging cottage and small scale industries and to increasing their production through the use of electric power, a subsidy scheme for electricity consumed by cottage and small scale industries is implemented by the Commissioner of Industries. Under this scheme all small scale industries except flour mills, (Excluding roller flour mills) and rice and pulse mills, photographic units, ice factories, ice cream, ice candy and ice fruits industry (excluding storage as covered under Cold Storage Order of 1964 of Government of India), laundry, re-packing of medical and toilet goods, oil expeller, tailoring units and power looms (situated in the area with population over 20,000) Mills for spices including Dhana Dal (*coriander dal*) having a connected load not exceeding 30 Horse Power are

eligible for subsidy. The quantum of subsidy admissible under the scheme is the difference between the actual rate paid per unit consumed and (i) 3 Paise per unit subject to maximum of 12 Paise per unit, and shall be payable for a period of 120 months from and including the month of its Registration under the Rules, if the industry is situated in an area with a population upto 20,000 (ii) 6 Paise per unit subject to a maximum of 9 Paise per unit and shall be payable for period of 84 months from and including the month of its registration, under the Rules, if the industry is situated in an area with population between 20,000 and 1,00,000 and (iii) 9 Paise per unit subject to a maximum of 6 Paise per unit and shall be Payable for a period of 60 months from and including the month of its registration under the Rules if the industry is situated in an area with a population of one lakh and above. However, subsidy is not payable on the consumption of electric power exceeding 2,000 kwh., in any month in respect of small scale industrial units and 2,500 kwh., in any month in respect of industrial co-operative.

The total amount disbursed as power subsidy in the district amounted to Rs. 97,091-25 in the year 1970-71 and Rs. 88,835-74 in the year 1971-72 in the Kheda district. The total number of units registered for getting the subsidy on power on 31st March, 1973 were 186.

Since October 1967, the District Collector is appointed as an *ex-officio* Deputy Commissioner of Industries for his district. The functions and powers assigned to him include : allotment of factory sheds and plots in the Government Industrial Estates, holding of seminars connected with industries, formulation of District Master Plans and correspondence with all authorities in or outside the State directly with regard to the difficulties of industries in the district. The meeting of the district level committee is called under the chairmanship of the district Collector to solve the general problems with regard to infra-structure facilities such as land, water, power, etc.

OFFICE OF THE DISTRICT INFORMATION OFFICER, KHEDA DISTRICT, NADIAD

The important function of Government in a democracy is to keep the people informed of the work of their Government in various spheres of development and administration and enable them to take advantage of the welfare schemes sponsored by the State. It is also necessary, that Government should be kept informed of the public opinion and the needs and grievances of the people. The District Information Officer of the Directorate of Information, Gujarat State is stationed at Nadiad. He is in charge of all works pertaining to information, publicity, mass communication and public relations in the district. He acts as a link between the Government offices and the press and keeps himself in touch with officers of various

departments in the district. He issues to the press the news items which supply factual information on schemes and activities of the Government in the district. He also organises visits of pressmen to various development works in the district as and when considered necessary and organises press conferences to provide an opportunity to the press to get first-hand knowledge of the subject to be covered. He acts as a correspondent of the Directorate of information, Gujarat State and covers on its behalf working of activities and the schemes of Government. press conferences, etc. He discharges two-way functions of keeping the people informed of the work of the Government and of keeping the Government informed of the public opinion and needs and grievances of the people. Besides, he helps tourists and others visiting the district and provides them with necessary information. He issues regular press-notes and hand-outs giving factual information about important schemes and activities of Government and corrects, in consultation with the department concerned, incorrect newspaper reports.

As in every other districts of the State, a mobile publicity van is put in-charge of the District Information Officer, Nadiad. The van is equipped with 16 mm., film projector. It is taken round the district and film shows and talks which are both instructive and entertaining are arranged on various nation building activities such as agriculture, cattle improvement, health, prohibition, untouchability, small savings, education, Five Year Plans, family planning, etc. He keeps the rural folk informed of the concessions and facilities offered to them by the State and Central Governments and also distributes leaflets, pamphlets, posters, etc., on items of public interest.

An Information Centre exists at Nadiad, where books, periodicals, etc., bearing on the Five Year Plans, and its progress are displayed. It serves as a useful centre of information for the town of Nadiad in particular and the district of Kheda in general. The centre is also equipped with daily news papers and periodicals. It is open to public as reading room and reference library.

There is a General Assistant looking after the centre. He sells priced publications, enrolls subscribers and distributes free literature.

BROADCASTING

All India Radio, Ahmadabad, Vadodara, Rajkot and Bhuj Broadcasts daily in the evening a programme in Gujarati specially for the rural listeners. Till December, 1972 the Government of Gujarat had installed in all 268 community receiving sets in villages of this district. These sets are maintained and repaired by the Supervisor, Rural Broadcasting, Kheda District, who is stationed at Nadiad.

OFFICE OF THE DISTRICT STATISTICAL OFFICER, KHEDA DISTRICT, NADIAD

The office of the Bureau of Economics and Statistics, Ahmadabad is the apex office concerned with the collection and compilation of statistical data so very essential for planning and development programmes of the State. It has a statistical office in each district, working under the administrative control of the District Panchayat. The District Statistical Officer is responsible for collection and improvement in the quality of the basic statistics at the district level. Some of the important activities carried out by the District Statistical Officer are publication of District Statistical Abstract, collection of data pertaining to prices, progress of Community Development Programme and Five Year Plan statistics, conduct of various socio-economic surveys, spot studies, evaluation of schemes, etc. So far as the statistics of the district are concerned, he acts as a link between Government and the panchayats. The District Statistical Officer is assisted by the Statistical Assistants at the taluka level.

PART VI—WELFARE DEPARTMENTS

CHAPTER XIV

LOCAL SELF-GOVERNMENT

INTRODUCTION

The history of Local Self-Government dates from ancient time onwards. The Shanti parva of the Mahabharat, describes the importance of politics (*Rajdharama*).

The importance of Local Self-Government institutions is linked up with the rise of Aryan civilization thousand years ago. *Mahajans* and guilds were given wide powers in those days. The rulers, especially in the Maurya and Gupta periods paid close attention to the views of city corporations, Janapadas and municipalities. Subsequently even during age of the Afghan-Mughal period (1000 A. D. to 1850 A. D.) the system of city corporations and village panchayats continued without stop.

Local Self-Government as a conscious process of administrative devolution and political education dates from the financial reforms of Lord Mayo's Government. In his famous resolution of 1870, the need for financial decentralisation was felt as an aid to economy and efficiency in administration. As a result, the Government of India transferred to Provincial Government certain departments of administration of which education, medical services and roads deserve special mention. The Provincial Governments were given a grant smaller than the actual expenditure on the departments and were required to meet the remainder by local taxation. The second stage in the history of Local Self-Government was reached, when the famous resolution of 1882 was issued by Lord Mayo. It was the first real step in the experiment in grafting upon the paternal System of Indian administration, the democratic form of Local Self-Government. The experiment was made with the expectation of providing better services and greater amenities of life, and local bodies were meant to be a training ground for running democratic institutions.

The Local Self-Government bodies played an important part in the district since ancient times. At present following Local Self-Government institutions function in the district, viz., (1) municipalities, (2) village or gram panchayats/nagar panchayats, (3) taluka panchayats and (4) district panchayat.

MUNICIPALITIES

Early History

The credit for establishing the first municipality in the district goes to British Government which established a municipality at Kheda in 1857. After Kheda, municipalities were established at Kapadvanj (1863), Dakor (1864), Nadiad (1866), Anand (1889), Umreth (1889) and Borsad (1889). Municipalities were also established in areas of former Baroda State at Petlad (1876), Vaso (1882) and Bhadran (1895-96). In Khambhat the municipality was established in 1910.

During this period, the progress of local bodies was co-ordinated with the expansion of education. In 1882, Lord Ripon issued the resolution. This resolution has been truly described by some as the "Magna Charta Local Self-Government." In the year 1884, the Government of Bombay did away with the distinction of the District and the City Municipalities by enacting the "Bombay Act, No. II of 1884." In 1901, the Bombay District Municipal Act came into existence. The distinction between the city municipalities and other municipalities was brought back again, as it was realised out of experience that for big cities where scientific methods of laying gutter and drainage existed, an increase in the number of municipal members was naturally essential and at the same time, it was necessary to give special powers to their administrators. Under this new Act, a liberal element in the constitution of a municipality was added with the provision of having at least half of the total members elected. In 1907-08, the Government of India appointed the Royal Commission. The Government of India issued a resolution dated 28th April, 1915 as a result of the recommendations made by Royal Commission.

The Montague Chelmsford Report accepted the Royal Commission's recommendations pertaining to municipalities. This Commission also recommended that, in conformity with the provisions of the Act, municipalities should enjoy full liberty to impose and alter taxation. But, in cases where no maximum limit has been prescribed by law in matters of taxation, sanction of the higher authority should be obtained for any increase in taxation.

In 1921, the Government of Bombay expanded the sphere of franchise and included in the electoral rolls for the municipal elections those persons who paid taxes, who were eligible for voting, who were voters of the Legislative Assembly and who resided in the municipal area or within a distance of two miles from the same. Moreover, separate representation was accepted for the Muslims and special wards were constituted for them. Owing to the expansion of the sphere of franchise, there was a proportionate rise in the use of right to vote. Till 1924, women had no right to contest

CHAPTER XIV—LOCAL SELF-GOVERNMENT

municipal elections. But with the Act, No. IV of 1924, this disability was removed and they were given the right to contest.

In 1938, the Government of Bombay took a decisive step in the history of Local Self-Government by passing the Bombay Act, No. IX of 1938. It abolished nominations in municipalities and permitted the Muslims to vote in the general constituencies, provided they did not desire a separate constituency. It also made due provision for necessary representation of Harijans, backward communities and women by creating reserved seats for them. Subsequently till formation of Gujarat State few changes were made in legislation.

Period from 1960 onwards under the Gujarat State

In 1961 there were 15 municipalities in the district, viz., Vaso, Nadiad, Kapadvanj, Kheda, Mahamadabad, Anand, Umreth, Dakor, Vadasinor, Sojitra, Dharmaj, Petlad, Khambhat, Borsad and Bhadran. The Democratic Decentralisation Committee appointed by the State Government recommended formation of gram panchayats at places having population of 10,000 and below and nagar panchayats at places having population between 10,000 to 30,000. These and other recommendations were accepted by the Government and on that basis the Gujarat Panchayats Act, 1961 was enacted. As a result, these 15 municipalities underwent structural transformation. At present there are seven municipalities in the district viz. Anand, Umreth, Kapadvanj, Khambhat, Nadiad, Petlad and Borsad. Municipalities in Gujarat are now being governed by the Gujarat Municipalities Act, 1963 enforced with effect from 1st January, 1965. The Act provides for elected councillors and reservation of seats for women, Scheduled Castes and Scheduled Tribes. Every municipality is vested with functions relating to the provisions of water supply, drainage, lighting disposal of night-soil and rubbish, medical aid, care of the sick particularly at the time of out-break of epidemics, extinguishment of fires, protection of life and property of the people and registration of vital statistics.

The Act empowers a municipality to levy taxes on buildings, lands, vehicles, water supply and drainage, lighting, etc., octroi on animals or goods, sanitary cess and special cess on education.

Income and Expenditure of Municipalities

The municipalities have various obligatory and discretionary functions. The Gujarat Municipalities Act, 1963 has made a provision for raising sources of income, for fulfilling their duties and functions in their jurisdictions. The sub-joined Statement XIV-1 shows income and expenditure of Anand, Umreth, Kapadvanj, Khambhat, Nadiad, Petlad and Borsad Municipalities for the year 1969-70.

STATEMENT XIV-1
Income and Expenditure of Municipalities, 1969-70

Sl. No.	Name of Municipality	Area within Municipal Limits (in Sq. Km.)				Population within Municipal Limits 1971				Total seats including nominations				Classification of members				Total Income less opening Balance)	Total 12
		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
1	Anand	21.13	59.165	25	25	2	2	2	2	2	2	2	2	2	2	2	2	9,006	11
2	Umroth	20.20	24.225	25	25	2	2	2	2	2	2	2	2	2	2	2	2	798	25
3	Kapedvanj	19.21	30.748	25	25	2	2	2	2	2	2	2	2	2	2	2	2	1,984	25
4	Khambhat	69.24	62.097	35	35	3	3	3	3	3	3	3	3	3	3	3	3	3,152	35
5	Nadiad	23.58	1,08,269	35	35	3	3	3	3	3	3	3	3	3	3	3	3	4,766	35
6	Petlad	2.28	39,535	25	25	2	2	2	2	2	2	2	2	2	2	2	2	2,359	25
7	Borsad	24.89	30,738	25	25	2	2	2	2	2	2	2	2	2	2	2	2	1,040	25

Sl. No.	Name of Municipality	Income derived from				Total Expenditure (excluding closing balance)	Expenditure Incurred					
		Rates and Taxes	Realisation under Special Acts and Properties	Grants and Contribution for General Purposes	Miscellaneous		General Administration and Collection Charges	Public Safety	Public Health and Conveyance	Education	Contribution for General purposes	Miscellaneous
1	2	13	14	15	16	17	18	19	20	21	22	23
1.	Anand	2,169	450	577	5,810	8,819	446	50	1,968	437	5	5,913
2.	Umroth	555	47	143	53	647	142	43	317	39	10	96
3.	Kapedvanj	703	250	40	991	1,842	169	41	607	318	206	707
4.	Khambhat	1,441	169	427	1,115	3,037	235	153	1,393	46	328	1,004
5.	Nadiad	2,877	128	1,078	383	4,857	433	192	2,179	887	328	838
6.	Petlad	749	862	331	417	2,378	224	103	698	256	491	1,097
7.	Borsad	487	168	301	104	1,346	143	46	609	57	491	491

Source : Annual Administration Report, 1969-70, published by Panchayat and Health Department.
Extracted from—
Census 1971, Kheola District Part X-C-1, Departmental Statistics and Full Count Tables.

NADIAD MUNICIPALITY

The Nadiad Municipality was established on 15th May, 1866. It was considered as town municipality till 31st March, 1883 and from 1st April, 1883, it was known as city municipality. With the enactment of the Bombay Municipal Boroughs Act, 1925, the Nadiad City Municipality was considered as Nadiad Borough Municipality along with other municipalities in the State. The municipality at present is governed by the Gujarat Municipalities Act, 1963 and has been converted into Nagarpalika from 1st January, 1965. The area of the municipality was 28.58 sq. km., from 1st January, 1965. The area of the municipality was 28.58 sq. km., in 1971. At present it is 28.49 sq. km., According to the 1971 Census the population is 1,08,269 persons. There were in all 35 members, out of whom 2 belonged to Scheduled Castes and 3 were women. However, after the last election, held on 3rd December, 1972, there are 40 members out of whom 2 are from Scheduled Castes and 3 are women.

Elections

Since 1866, when the municipality was established, Government official and prominent citizens were appointed by Government for the purpose of municipal administration. The municipality was given power to elect half of the full members, one year before the Municipal Act of 1884 was passed. The Board consisted of 16 members. In 1866-67, the first Board came into existence. There were 18 members of the municipality out of whom 9 were elected by the people and 9 were nominated by the Government. The strength of the Board was increased to 25 from 1st April, 1922 when 20 members were elected and 5 nominated. The Revised Election Rules were sanctioned and came into effect from 1st April, 1928. The strength of the Board now increased to 32 out of whom 26 were elected and 6 rest nominated. In 1939, the number was increased to 34, Under the new constitution all the members were elected. The principle of nomination was abolished. According to the provision of Gujarat Municipalities Act, 1963 the strength of Board was increased to 35. As it has exceeded the total population of 1 lakh, there are 40 members.

The Municipal elections were held for a period of 3 years in past. Since 1962, the term of the municipality is for a period of 4 years. The last general election was held on 3rd December, 1972.

The municipality discharges its various functions through the following committees, viz.,

1. The Executive Committee,
2. The Sanitary Committee,
3. The Water Works Committee,

4. The Public Works Committee,
5. The Dispensary Committee,
6. The Legal Committee,
7. The Finance Committee,
8. The Primary School Building Committee,
9. The Octroi Committee,
10. The Drainage Committee,
11. The Fire Brigade Committee,
12. The Cultural and recreation Committee, and
13. The Town Planning Committee.

The Chief Officer is the executive head of the municipality. The main sources of income are consolidated tax, octroi, water tax, special sanitary cess, theatre tax, licence fees, rent on land and buildings, Government grants, etc. The expenditure is mainly incurred on general administration, primary education, water supply and drainage schemes, street lighting, public health, roads, etc.

Water Supply

The present water supply scheme which exists in the town, came into force in 1950. The expenditure incurred on this scheme was Rs. 23,64,526. The scheme has been divided into two parts, viz., (1) Head Works and (2) Distribution Scheme. The head water works is located on the bank of the river Shedhi about 4.8 km., away from the town. The municipality has drilled eight bores for the supply of water to the town. The present daily water supply is about 35 lacs gallons. There are about 9,575 private water connections. The municipality has provided 216 public stand posts in different localities of the town including in backward and poor areas also.

Roads

The total length of roads maintained by the municipality is 178.632 km., out of which asphalted roads claim 37.351 km., cement concrete roads 0.257 km., stone paved roads 40.233 km., and *kachcha* roads 100.791 km.

Conservancy and Drainage

The municipality had employed 157 sweepers to clean about 178.632 km. of surface roads twice a day. The municipality also employed 18 scavengers for removing night-soil and rubbish. The municipality maintained 3 refuse lorries to meet the demand of disposing rubbish and night-soil. 28 dust-bins had also been provided by the municipality. The refuse is used for filling low-lying areas. There are 230 public latrines and 78 public urinals. There is underground drainage system in the whole of the

town. It came into force in 1955. At present there are about 8,487 drainage connections. The sullage water of the town is drained to Kamla Disposal Works, Kamla village about 1.32 km., away from the town. For this purpose one Central Drainage Pumping Station is built up near Nadiad-Kapadvanj road and two sub-pumping stations are erected one at Marida Bhagol and the other at Malav tank. The sullage water is used for agricultural purposes.

Public Safety

The municipality maintained four fire fighters, two trailer pumps and two ambulance cars. One ambulance car is used for carrying dead bodies. The Fire Brigade unit was created in 1946-47. It consists at present of one Fire Superintendent, nine attendants and six drivers.

Street lighting

In 1972-73, there were in all 1,705 electric lights, out of which 1,562 were ordinary lights, 103 mercury lights and 40 tube-lights.

Gardens

Five gardens are being maintained by the municipality. No radio set has been installed so far in them.

Education

The Act of 1884 entrusted the management and control of primary education to the municipality. But from 1st May, 1926, the Municipal School board was established and it was given the management of primary education. Since 1st May, 1926, the Nadiad Municipality is considered as "authorised municipality," for the purpose of primary education. In the beginning there were 16 primary schools under the municipal school board of which eight were for girls. The "Prathmik Shikshak Samaj" constituted a committee known as "Primary School Building Committee" in 1946. The aim of the committee was to collect funds for the construction of school buildings. As many as 15 buildings were constructed with the help of this committee. There are in all thirty six primary schools run by municipality. The municipality also runs one girls high school named Shri Santram Municipal Girls High School from 10th June, 1968.

Markets

There are two slaughter houses within municipal limits. One is of *Kasai Panch* and the other is maintained by municipality. In 1972-73,

total income realised from slaughter house maintained by municipality was Rs. 1,584.

Housing

The municipality has constructed twenty-nine quarters and they have been given to Harijan employees on a nominal rent Rs. 3 per year. The municipality has also given a loan of Rs. 6,75,000 with the interest of 5 per cent to its employees for the construction of buildings and two housing societies have been constructed so far.

TOWN PLANNING

The Town Planning Scheme Nadiad No. 1 has been sanctioned by Government under their resolution Panchayats and Health Department No. GH/P/71/204/TPS/1670/8181/P, dated 15th November, 1971. The area covered under this Scheme is on the the western side of the Railway station. The Scheme is being implemented.

The Development Plan of the Nadiad Municipality has been sanctioned by the Government under Panchayats and Health Department Resolution No. DVP/1655/9092/P, dated 8th February, 1966. The plan is being implemented.

ANAND MUNICIPALITY

The Anand Municipality was established in 1889. The municipality at present is governed by the Gujarat Municipalities Act, 1963. The present area of the municipality is 21.13 sq. km. According to the 1971 Census, the population is 59,155 persons. Moreover, in 1971 according to the Census there were 25 members. However, in 1974, there were in all 35 members, out of whom 2 were from Scheduled Castes, 3 were from women.

The municipality discharges its various functions through the following committees, viz.,

1. The Executive Committee,
2. The Public Works Committee,
3. The Dispensary Committee,
4. The Maternity Home Committee,
5. The Water Works Committee,
6. The Sanitary Committee,

7. The Octroi Committee,
8. The Town Planning Committee,
9. The Transport Committee,
10. The Drainage Committee,
11. The Legal Committee,
12. The Sports Committee,
13. The Garden Committee, and
14. Light Committee.

The Chief Officer is the executive head of the municipality.

Election

The first election was held on 12th February, 1912. At that time there were 6 elected and 6 nominated members. In all, 18 elections have been held. The last election was held on 3rd December, 1972.

Water Supply

The present water works was constructed in 1964. Recently the municipality has constructed four tube-wells, one over head tank with 2 lakh gallons capacity, and one underground tank with a capacity of 6 lakh gallons. The water is supplied through pipe-line and approximately five thousands private connections have been given. The municipality supplies 20 to 22 lakh gallons of water per day.

Roads

The total length of roads maintained by the municipality is 94.59 km., out of which cement roads claim 4.92 km., asphalted roads 10.67; metalled roads 57.00 km., and *kachha* roads 22.00 km.

Conservancy and Drainage

There is underground drainage system in the municipal areas. The municipality employs 112 sweepers to clean about 94.59 km., of surface roads once a day. In all 58 dust bins have also been provided by the municipality.

Public Safety

The municipality maintains one fire fighter and employs 2 persons.

Street Lighting

In 1972-73 there were 1,644 tube-lights.

Gardens

In Anand four gardens are being maintained by the municipality.

Education

The municipality has taken over the responsibility of primary education. In 1972-73, it maintained 13 primary schools.

Markets

The municipality maintains one vegetable market which was constructed in 1960-61 at a total cost of Rs. 1,60,160. In 1972-73, total income realised from this market was Rs. 67,631.

Bus Service

The municipality has started bus service from May, 1973. In 1973 there were two buses and two routes. Average number of passengers carried per day was approximately 1,200.

Housing

The municipality has provided 40 quarters to Harijan employees and 8 quarters to staff members.

TOWN PLANNING

The town planning schemes No. 1 and 2 have been finalised.

PETLAD MUNICIPALITY

The Petlad municipality was established in 1876 during the time of former Baroda State. The municipality at present is governed by the Gujarat Municipalities Act, 1963. The present area within the municipal limits admeasures 2.28 sq. km. According to the 1971 Census it has a total population of 19,535 persons. There are in all 25 members out of whom three are from Scheduled Castes and two from Scheduled Tribes and two from women.

The municipality discharges its functions through the following committees, viz.,

1. The Executive Committee,
2. The Power House Committee,
3. The Public Works Committee,
4. The Law Committee,
5. The High School Committee,
6. The Sanitary Committee,
7. The Octroi Committee,
8. The Garden Committee,
9. The Shops and Establishments Committee,
10. The Town Hall Committee,
11. The Dispensary Committee,
12. The Cattle Pond Committee,
13. The Town Planning Committee,
14. The Stadium Committee, and
15. The Water Works Committee.

The Chief Officer is the executive head of the municipality.

Water Supply

The piped water is supplied in the town at the rate of 12 gallons per person per day. The water supply which is divided two stages is under execution. The first stage of Water Works Scheme is completed. The total cost of the first stage of water works was Rs. 8,42,940. The second Stage is likely to cost Rs. 8,75,255.

Roads

The total length of roads is 17.6 km.

Conservancy and Drainage

The municipality had employed 149 persons to clean the roads and streets. There is no drainage system in the town. The waste water is disposed by means of open gutter system. Arrangement for removal of refuse to the depots is by means of tractors attached with trailers. The annual expenditure incurred on refuse is used for preparing manure. The collection of rubbish amounted to Rs. 1,985 in 1972-73. The income realised from the manure was Rs. 2,958 in the same year.

Public Safety

The municipality maintains one portable fire pump called 'Firex' for the purpose of extinguishing fire.

Street-lighting

In 1972-73 there were 1,408 lights out of which 250 were tube-lights, 20 mercury lights and rest were ordinary lights. The total annual expenditure on street-lighting amounted to Rs. 1,22,599 in 1972-73.

Markets

At present there is no municipal market in the town. The municipality however proposes to construct markets at various places during 1973-74.

Education

The municipality runs N. K. High School and contributes Rs. 53,240 towards primary education.

THE KAPADVANJI MUNICIPALITY

The Kapadvanj Municipality was established in 1863. It was governed under the Bombay District Municipality Act, 1901, up to 1st January, 1965. The municipality at present is governed by the Gujarat Municipalities Act, 1963. The present area within the municipal limits admeasures 19.21 km. According to the 1971 Census, it has the total population of 30,748 persons. There are in all 25 members. Out of them, two are from the Scheduled Castes and two from women. Even now there has been no change in total number of members. After 1910 in all 14 elections took place. The last election took place on 18th October, 1970.

The municipality discharges its functions through the following committees, viz.,

1. The Executive Committee,
2. The Octroi and Toll Committee,
3. The Public Works Committee,
4. The Water Works Committee,
5. The Sanitary Committee,
6. The Hospital Committee,

7. The High School Committee,
8. The Lighting Committee, and
9. The Law Committee.

The Chief Officer is the executive head of the municipality.

Water Supply

The scheme of water supply and drainage was sanctioned in 1924. It was completed in 1928 at a cost of Rs. 4,57,298. Water is taken directly from the River Varansi. On account of increase in population, the water supply was found inadequate. Therefore, in 1946-47, the revised water supply and drainage scheme was prepared at the estimated cost of Rs. 9,65,876. The scheme was divided into two parts, namely water supply scheme and the drainage scheme. For the water supply scheme, the sum of Rs. 9,83,300 was sanctioned. The scheme was completed in 1960-61.

The water is filtered at the filtration plant. For the last five years due to scanty rainfall, the river has not a steady supply of water. Therefore, the municipality has constructed 3 tube-wells on the upper side of the River Varansi. From these wells water is pumped and supplied to the town.

Roads

The total length of roads maintained by the municipality is 29.38 km., of which the asphalted roads cover 8.43 km., the cement roads 1.50 km., the water-bound macadam 2.76 km., and the murrum roads 17.09 km.

Conservancy and Drainage

There is underground drainage system since 1925. There are 2,613 drainage connections in the town. There is no basket type private or public latrine. There are 140 public latrines and 1,818 private flush latrines. The effluent is used for irrigating 94 acres of land and the annual income from this source is Rs. 18,000.

The municipality has employed 78 sweepers to clean roads and bye-lanes twice a day. It has also employed 4 Mukadams and 20 sweepers to clean drainage connections. The municipality maintains one motor and one tractor-trailer to meet the demand of disposing rubbish and night-soil. The refuse is used for reclamation of low-lying areas. No compost manure is prepared by the municipality.

Public Safety

The municipality maintains one fire fighter and one fire-pump attached with the tractor to extinguish the fire. It has also 90 fire-hydrants. The fire brigade unit consists of 4 firemen and one driver.

Street-lighting

There were in all 1,026 electric lights, out of which 832 were ordinary lights, 193 tube-lights and one mercury light. The total annual expenditure on street-lighting amounted to Rs. 49,898 for the year 1972-73.

Education

The municipality has taken the responsibility of primary education since 1st April, 1965. It contributed Rs. 1,29,305 towards primary education in 1972-73. It also runs one high school.

Markets

The municipality has not constructed any market. But it has constructed 72 shops. In 1972-73, total income realised from these shops amounted to Rs. 43,576. This municipality also runs one hospital called Sheth J. B. Mehta General Hospital.

KHAMBHAT MUNICIPALITY

The Khambhat municipality was established in 1910 during the time of former Cambay State. The municipality at present is governed by the Gujarat Municipalities Act, 1963. The present area of the municipality is 69.24 sq. km. According to 1971 Census, it has a total population of 62,097 persons. There are in all 35 members, out of whom 2 are from Scheduled Castes and Scheduled Tribes, 3 from women. There is no change in respect of membership which has remained at 35 since 1971 Census.

The municipality discharges its various functions through the following committees, viz.,

1. The Executive Committee,
2. The Sanitary Committee,
3. The Water Works and Drainage Committee,
4. The Garden Committee,

5. The Balamandir Committee,
6. The Dispensary Committee,
7. The Octroi Committee,
8. The Dharmashala Committee,
9. The Law Committee,
10. The Finance Committee, and
11. The Public Works Committee.

The Chief Officer is the executive head of the municipality. The main sources of income are octroi, house tax, Government grants, private water connection fees, general and special sanitary cess, general water rate, theatre tax, wheel tax, rent realised from municipal properties and markets. The expenditure is mainly incurred on general administration, public safety such as fire fighting, street light, water supply, drainage, conservancy including road cleaning, watering and scavenging.

Water Supply

The municipality has a piped water supply system. The water is supplied from the overhead tank, having capacity of 1,30,000 gallons. The head water works was constructed at the cost of Rs. 3,50,000 in 1916. The municipality has also provided for three underground tanks for the storage of water. Municipality at present supplies water normally for 10 hours and about 20 gallons per head per day.

Roads

The total length of roads maintained by the municipality is 75.74 km., out of which asphalted roads claim 29.53 km., cement roads 5.07 km., *pacca* roads 2.88 and *kachcha* roads 38.26 km.

Conservancy and Drainage

The municipality employs 125 sweepers to clean about 75.74 km., of surface roads. The streets and pavements of the town are cleaned once a day and the main roads are cleaned twice a day. The refuse is collected in the 48 dust-bins placed at different places in the city. Compost manure is prepared from the night soil and refuse. Sweepers are provided handcarts to carry night soil. Municipality has already started the work of underground drainage in the city. More than 1500 buildings have been given house connections under this drainage system.

The expenditure incurred for collection of rubbish and night soil and preparing manure was Rs. 6,98,207 in 1972-73. The income realised from sale of manure was Rs. 11,940 in 1972-73.

Public Safety

The municipality maintained one merry weather fire fighter, one fire fighter fitted on the truck and one fire trailer pump. The staff consists of at present of one fire brigade foreman, six firemen and one driver.

Street-lighting

In 1972-73 there were in all 2,626 electric lights, out of which 362 were tube-lights, 3 flood lights and 2,261 ordinary lights.

Markets

The municipality maintains one vegetable market, one meat market and one fish market. The vegetable and meat markets were constructed during the time of former State. The fish market has been constructed by the municipality at the cost of Rs. 5,560. In 1972-73, total income realised was Rs. 61,499.

Housing

The municipality has provided *kachcha* houses to 139 Harijans families. The cost of construction of these houses was Rs. 17,000.

Education

The municipality has not taken up the responsibility of primary education. It contributes an amount of Rs. 79,914 every year for primary education. The municipality runs seven Balmandirs.

It also runs one library called Smt. Saraswati Vrijgovinddas Dalal Pustakalaya. It has recently started one children library called Patel Chimanlal Chhaganlal Tamakuwala Bal Pustkalaya.

TOWN PLANNING

The Government of Gujarat has sanctioned the Development Plan of Khambhat. This plan is under implementation.

BORSAD MUNICIPALITY

This Municipality was established in 1889. It was constituted and governed under the Bombay District Municipal Act, 1901. The Municipality at present is governed by the Gujarat Municipalities Act, 1963. According to 1971 Census area within the Municipal limits admeasures 24.89 sq. km.

It has a total population of 30,738 persons. There are in all 25 seats out of which two are reserved for women and two for Scheduled Castes. The first election took place on 20th October, 1970. Thereafter one by-election had taken place in 1974-75.

The municipality discharges its functions through the following committees, viz.,

1. The Managing Committee,
2. The Octroi Committee,
3. The Water Works Committee,
4. The Public Works Committee,
5. The Sanitary Committee,
6. The Dispensary Committee,
7. The Lighting Committee,
8. The Gymkhana Committee,
9. The Garden Committee,
10. The Agriculture Committee, and
11. The Drainage Committee.

The Chief Officer is the executive head of the municipality.

Water Supply

The municipality has purchased the water works in 1945 from a company at total cost of Rs. 1,40,000. Thereafter municipality got two improvement schemes executed by Government at a cost of about Rs. 7 lakhs. The municipality has constructed one more bore and an engine room with wire fencing, etc.

Roads

The total length of roads maintained by the municipality is 72 km., of which asphalt roads claim 2.80 km., cement concrete roads 0.15 km., metalled roads 8.90 km., and *kachcha* roads 60.15 km.

Conservancy and Drainage

The municipality has employed 27 sweepers to clean about 72.00 km., of surface road twice or once a day. Municipality has provided 38 dust-bins. The refuse is used for preparing manure. The income realised from manure amounted to Rs. 500 in 1972-73, while expenditure incurred on preparing

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DISTRICT GAZETTEER : KHEDA

manure amounted to Rs. 13,740. There is an open drainage system. The underground drainage scheme is in operation.

Public Safety

The municipality maintains one fire fighter. It consists at present of one driver, a conductor and a fireman.

Street-lighting

In 1972-73 there were 608 electric lights, out of which 41 were mercury lights, 120 tube-lights 447 ordinary lights.

Education

The municipality is not maintaining primary schools, a high school or library of its own. It gives grants to the library and to other institutions. It also pays contribution towards primary education.

Market

The municipality maintains two markets, viz., vegetable and mutton markets. There are 44 stalls in vegetable market and 23 stalls in mutton market. In the year 1972-73, total income realised from both the markets was Rs. 10,739.

TOWN-PLANNING

The Development plan of Borsad has been sanctioned by the Government on 24th April, 1964. The plan is in force. The Town-Planning Scheme No. 1 proposed by the municipality was prepared by the Assistant Consulting Surveyor to Government, Vadodara.

UMRETH MUNICIPALITY

The Umreth municipality was established in October 1889. Till 1911 the Presidents and Councillors were nominated by the Government. From 1912 Councillors began to be elected. At present the municipality is governed under the provisions of the Gujarat Municipalities Act, 1963. The present area within the municipal limits admeasures 20.20 km. According to the Census of 1971, it has a population of 24,225 persons. Since 1971 Census out of 25 members two seats are reserved for Scheduled Castes and two for women.

The municipality discharges its functions through the following committees, viz.,

1. The Executive Committee,
2. The Public Works Committee,
3. The Sanitary Committee,
4. The Dispensary Committee,
5. The Drainage Committee,
6. The Light and Garden Committee,
7. The School Committee,
8. The Water Works Committee, and
9. The Legal Committee.

The Chief Officer is the executive head of the municipality.

Water Supply

The municipality has arranged for piped-water supply. The scheme was completed in 1955 at a total cost of Rs. 8,92,000 approximately.

Roads

The total length of roads maintained by the municipality was 32.19 km.

Conservancy and Drainage

The municipality employs about 45 sweepers, who clean roads twice a day. Besides 12 persons have been employed to clean latrines and 6 persons for collecting night-soil. In all 10 dust-bins have been provided by the municipality. The refuse is used for preparing manure. The income realised from the manure was Rs. 631 in 1972-73.

Public Safety

The Fire Brigade is not maintained by the municipality. It has, however provided for fire hydrants and maintains one hand propelled fire pump.

Street-lighting

In 1972-73 there were 771 lights, out of which 56 were tube-lights, 15 mercury lights and 700 ordinary lights. The total annual expenditure in the year 1972-73 was Rs. 54,867.

TOWN PLANNING SCHEME

Prior to Independence, the town Planning activity in the district and Princely States of Cambay and Balasinor whose territories now form part of the district was practically absent. However the history in brief is given below. Tracing the history of town planning in the district, it may be mentioned that the Bombay Town Planning Act, 1915 was applied to the district and the draft Town Planning Scheme of Nadiad in the mission area was prepared and sanctioned and an Arbitrator was appointed under that Act. Later on, the Town Planning Scheme was withdrawn at the instance of the Nadiad Municipality. The work of preparation of master plan was undertaken under post-war reconstruction scheme No. 139 and accordingly the Master Plans of Nadiad and Kapadvanj towns were prepared in the district. Moreover, as the preparation of Master Plan was not obligatory on the part of local authority, the town planning schemes in the district did not show any significant progress even after Independence and during the First Five Year Plan. It was, therefore, felt that unless it was made obligatory on the part of a local authority to prepare a Master Plan of the area within its jurisdiction within a prescribed time limit and unless suitable legal provision was made for its enforcement, the local authority would not undertake the work of preparation of a Master Plan. In order to remedy this situation, the Bombay Town Planning Act, 1954 was enacted. The new Act came into force from 1st April, 1957. Under this Act it was made obligatory on the part of every local authority to prepare a Development Plan of the area within its jurisdiction within 4 years from 1st April, 1957. After the formation of the Gujarat State, the need of a uniform legislation for all the three constituent units of Gujarat State, viz. Gujarat, Saurashtra and Kutch was felt and the Bombay Town Planning Act, 1954 was, therefore amended by the Bombay Town Planning (Gujarat Extension and Amendment) Act, 1967.

The Town Planning and Valuation Department in the Gujarat State performs manifold activities in the sphere of both town planning and valuation of lands and buildings and provides consultancy services to Government. Since most of the local authorities have no technical staff of their own, it has been decided by the Department to prepare development plans for local authorities.

The Bombay Town Planning Act, 1954 repealed the earlier Act and was brought in force from 1st April, 1957. The preparation of development plan for Anand under the new Act was undertaken by the department at the instance of the Anand Municipality. Some preparatory spade work was also done for Khambhat prior to bifurcation of the Bombay State.

Since the formation of Gujarat State, the following development plans were prepared by the department at the instance of the concerned local authority.

These are for Khambhat, Mahemadabad, Dharmaj, Petlad, Nadiad, Sojitra, Umreth, Borsad, Vaso, Kheda, Kapadvanj and Anand.

The progress of town planning in the district is evident from the Statement XIV-2.

STATEMENT XIV-2

The details of Development Plans of Towns in the District

Sl. No. 1	Name of the town 2	Approximate cost of acquisition of sites reserved in the Development Plan 3	Date on which Development Plan came into force 4
1	Khambhat	7,80,825	15-4-1970
2	Petlad	1,74,092	1-3-1968
3	Umreth	3,04,250	1-1-1965
4	Kheda	1,03,169	1-12-1966
5	Mahemadabad	2,54,010	1-4-1966
6	Nadiad	28,35,901	1-4-1966
7	Borsad	1,85,715	1-6-1963
8	Kapadvanj	4,24,655 (Revised)	1-10-1958
9	Dharmaj.. .. .	2,84,960	1-5-1972
10	Sojitra	2,76,000	15-5-1972
11	Vaso	94,750	21-4-1972
12	Anand	8,13,900	1-7-1967

Source : Assistant Consulting Surveyor to Government, Vadodara.

KHEDA DISTRICT LOCAL BOARD

History

The Kheda District Local Board has a chequered history. In 1863 A. D., the Local Boards Act was enacted by which the Kheda District Local Committee and 7 Taluka Committees conducted the work relating to Local Self-Government and other matters. Subsequently in 1884, the Bombay Local Boards Act was enacted. According to this Act for the entire district a District Local Board was formed and Taluka Local Boards came into existence for talukas. The tenure of the Board was for 3 years and elections were held at the interval of 3 years. The Collector acted as president in the District Local Board, and the Vice President was elected. The budget of the entire district was sanctioned by the District Local Board while that of taluka was sanctioned by the Taluka Local Board. The functions of the District Board during this period related to maintenance of roads, dispensaries, schools, construction of well, etc. The headquarters of the District Local Board during the period was at Kheda. In 1921-22, the headquarters was shifted to Nadiad. A new provision was now introduced whereby the President was also to be elected from amongst the elected members. The Board consisted of 9 elected members and 5 nominated members. The position of the Taluka Board was as follows : 6 to 10 members were elected and 2 to 3 were nominated.

The Local Boards Act, 1923

This Act came into existence and thereafter the elections were held in the year 1925-26. According to this Act, the District Local Board consisted of 22 members elected and 6 nominated by Government. The position of the Taluka Boards was as follows. For Nadiad, Anand and Borsad 12 members were elected and 4 were nominated while for Mahemadabad, Matar, Thasra, Kapadvanj, 9 were elected and 3 were nominated. The tenure of the Boards was 3 years. Taluka Boards were discontinued from 1938 onwards and consequently the District Local Board was enlarged. The provision for nominating members by Government was discontinued. The total number of membership was 42. Out of this 32 were elected and 10 seats were kept as reserved. The number was increased to 50 in 1948. After the integration of States and Estates in 1949 the area of Kheda district was enlarged. Accordingly, the jurisdiction of Kheda District Local Board was also increased.

The composition, activities and income and expenditure of Board till the enactment and implementation of Gujarat Panchayats Act, 1961 is given below.

DISTRICT LOCAL BOARD

General

There were sixty members in the Board as on 14th July, 1952. In all 8 seats were reserved, four for Scheduled Castes and Scheduled Tribes and four for women.

Constitution

There was one standing committee consisting of 10 members.

Personnel

The Board consisted of President, Vice President, Chief Officer, Engineer and Clerks and Subordinate staff including technical personnel.

Functions

The Board carried out following functions :

(a) *Public Health*—In order to control the diseases, the board distributed tablets and also supplied injections. In 1957-58, there were in all following types of dispensaries, viz., 19 allopathic, 17 ayurvedic, 7 veterinary, 11 maternity wards and 26 Subsidised Medical Practitioners' Centres. There were 5 midwives and 3 unqualified nurses.

(b) *Communications*—The total road mileage under the jurisdiction of the Board in 1957-58 was as under :

	Sq. Km.
1. Asphalt	... 176.998
2. Water bound Macadam	... 27.741
3. Un-metalled	... 149.257

In addition to the above mentioned roads following roads were transferred to the Board by Public Works Department, viz.,

	Sq. Km.
1. Asphalt	... 71.540
2. Water bound Macadam	... 38.790
3. Un-metalled	... 32.750

The length of approach road given for maintenance to the Board was 59.401 sq. km. The annual expenditure on road construction and maintenance was Rs. 1,788 and 2,880 respectively.

(c) *Water Supply*—The Board constructed in 1956-57, two wells out of its own funds. 64 wells were constructed under the village water supply scheme.

In addition to this, expenditure was also incurred on general administration, civil works, buildings, etc. An account of income and expenditure of the Kheda District Local Board is given in the table below :

Income and Expenditure of District Local Board, 1960-61

Head 1	Income (in Rs.) 2	Head 3	Expenditure (in Rs.) 4
Total	1,616,602	Total	1,988,372
Land revenue	283,856	Refunds	407,299
Local rates	535,687	Administration	89,239
Interest	44,725	Law and Justice	1,278
Police	1,052	Medical Scientific and other	412,308
Medical	148,807	Minor departments... ..	36,882
Scientific and other minor departments	5,009	Pension	19,531
Miscellaneous	367,039	Miscellaneous	80,761
Irrigation and minor works	230,427	Civil public works	941,074

Source : *District Census Handbook 1961, Kheda.*

The District Local Board ceased to function and was replaced by the district panchayat after the application of the Gujarat Panchayats Act, 1961 from 1st April, 1963.

PANCHAYATS

If the attainment of political freedom has any meaning for the rural areas, it should provide them with the means and opportunities for economic and social betterment. In order to achieve these objectives, the people

must have their own organisation for evolving and implementing rural development programmes, which cannot be better fulfilled than through the institutions of village panchayats. The Planning Commission has rightly assigned a place of pride to the panchayats in the task of decentralising the local administration and in giving them the necessary scope for initiative, planning and execution of schemes aiming at the welfare and development of the village economy.

The movement for forming village panchayats started in the district as early as 1940-41. However, the movement gathered momentum only after 1950-51. Subsequently with the passing of Gujarat Panchayats Act, 1961, the Panchayati Raj progressed tremendously.

In past the village panchayats in the Kheda district were governed by the Bombay Village Panchayats Act, 1933 in old Bombay State. Subsequently the Bombay Village Panchayats Act, 1958 was enacted. The Bombay Village Panchayats Act, 1958 is described below.

The Bombay Village Panchayats Act, 1958

After the formation of bilingual Bombay State, as there were different Acts prevalent in different areas, a new Act called the Bombay Village Panchayats Act, 1958 was enacted. Under this Act, a district village panchayat mandal was constituted for the district, for exercising powers of supervision, guidance and control over panchayats in the district. In order that the representatives of village panchayats may have an effective voice in shaping the policy in regard to matters concerning village panchayats, seven to twelve members were elected to the mandal by Sarpanchas in the district from amongst themselves.

The important features of the Act are as under :

- (1) reservation of two seats for women in every village panchayat,
- (2) constitution of Gram Sabha of all residents in the village who are entitled to vote,
- (3) establishment of a district village panchayat mandal for every district,
- (4) secretary of a village panchayat to be a Government servant and to be paid by Government,
- (5) training of village panchayat secretaries to be provided by Government,

(6) entrusting the work of collection of land revenue (including cesses) to village panchayats,

(7) payment of land revenue grant to all village panchayats in the State on an uniform basis at a rate not less than 25 per cent of the ordinary land revenue and not exceeding 30 per cent of the ordinary land revenue, and

(8) constitution of a group nyaya panchayat for a group of five villages or more.

Thus in the Act, it would be observed that Government had taken a number of measures to activate the village panchayats and training of rural people in the village administration.

Functions—The panchayats were given more powers and functions under this Act. They have been enumerated in section 45 of the Act and they fall under the different spheres as :

- (i) maintenance of sanitation and health ;
- (ii) maintenance of sanitary public works ;
- (iii) maintenance of self-defence and village defence ;
- (iv) spread of education and culture ;
- (v) running of village administration ;
- (vi) maintenance of welfare of the people ;
- (vii) improvement of agriculture and preservation of forests ;
- (viii) improvement of breeds and protecting cattle ;
- (ix) revival and encouragement of village industries ; and
- (x) collection of land revenue.

After the formation of Gujarat State on 1st May, 1960, the concept of Democratic Decentralisation gained momentum. The State of Gujarat alike other States of India also strove to achieve Democratic Decentralisation by introducing Panchayati Raj. The circumstances leading to the enactment of Gujarat Panchayats Act, 1961, and the subsequent development that has taken place are described in the subsequent pages.

Democratic Decentralisation

In the First Five Year Plan, in the role of local bodies, implementation of development programmes was emphasised. It indicated that the general policy of Government should be to encourage them to assume responsibility for as large a portion of administrative and social services within their areas, to the extent possible. As these local bodies depended mostly upon Government grants which were subjected to various conditions and restrictions, their activities were too limited to produce any discernible impact on the rural areas. As a result, the real object underlying the formation of Local Self-Government institution was frustrated.

The proposals of the Planning Commission for the Second Five Year Plan stressed the needs for creating within the district a well-organised democratic structure of administration in which the village panchayats were to be organically linked with popular organisations at a higher level. In such a structure, the functions of the popular body would include the entire general administration and development of the areas, other than such functions as law and order, administration of justice and certain functions pertaining to the revenue administration. In this background the Balvantray Mehta Committee was appointed to go into the question of the working of Community Projects and National Extension Service. After detailed inquiries, the Committee came to the conclusion that community development could not progress without responsibility and power which would be possible only under a process of democratic decentralisation from a village to the district level. They further held that Community development could be real only when the community realises its responsibilities, exercises its necessary powers through its chosen representatives and maintains its continuous interest in local administration. With this object in view, they recommended an early establishment of statutory elective local bodies which alone could lead to effective rural development. They also recommended that necessary resources, powers and authority should be vested in such bodies. In effect, the Committee recommended that if the experiment of democratic decentralisation were to yield maximum results, it was necessary that all the three tiers of the scheme, viz., Village Panchayat, Panchayat Samiti and Jilla Parishad should be started at the same time and operated simultaneously in the whole district. In May, 1958, the National Development Council accepted the recommendations of the Committee with regard to the "democratic institutions functioning either at the village level or at the block or taluka level or the district level and that the process of democratisation should be completed as speedily as possible. As agreed in the meeting of the Standing Committee of the National Development Council in January 1958, the pattern of democratisation would be worked out by the State Governments in the light of their own conditions and requirements. As a consequence,

the Government of Gujarat appointed a committee in July 1960, under the Chairmanship of the Revenue Minister to study this question and to make recommendations. The committee submitted its report, on 31st December, 1960. Their recommendations were incorporated in the Gujarat Panchayats Act, 1961 which provided for a three tier system, viz., the gram/nagar panchayats which were already in existence at the lowest level, the taluka panchayats at the taluka level and the district panchayat at the district level. This democratic decentralisation came to be subsequently called the Panchayati Raj.

THE GUJARAT PANCHAYATS ACT, 1961

The Panchayati Raj was ushered in the districts of Gujarat on April 1, 1963 when taluka and district panchayats providing the middle tiers of the democratic decentralisation scheme were formally inaugurated. The introduction of the scheme which vests the elected bodies at all levels with wide powers and provides them with necessary funds and trained administrative personnel was completed with the formation of the State Panchayat Council on May 1, 1963.

The Gujarat Panchayats Act, 1961 has been amended recently. In April 1973, the Gujarat Assembly passed the Panchayats (Amendment) Bill. This Bill sought to reform the institutional set up of the Panchayats in the State, on the recommendations of Shri Jinabhai Darji Committee. It provides for sweeping changes in the election pattern of panchayats. It provides for the direct election of village sarpanch instead of the present practice of electing the sarpanch by village panchayat members. It seeks to do away with the practice of *ex-officio* and co-opted members of the panchayats at the village, the taluka and the district levels. As a result, the village sarpanchs and taluka panchayat presidents will be automatically debarred from becoming *ex-officio* members of the taluka and district panchayats, respectively. This will affect village sarpanchs who used to become *ex-officio* members of panchayats. The amended Act also seeks to provide more representation on panchayats to women and proportionate representation to Adivasi and Harijans. Another significant provision in the amendment for setting up is provision of social justice committees at all levels to safeguard the interest of weaker sections of the society. These changes are incorporated at the appropriate places.

The Gram Sabha

All adult persons whose names are included in the list of voter maintained for a gram shall be deemed to constitute a Gram Sabha of the gram. A Gram Sabha has to hold annually at least two meetings, provided

that the Sarpanch may, at his option and if required by taluka panchayat or district panchayat may call a meeting of the Gram Sabha. It has to consider annual statement of accounts, administration report, development and other programmes of works and the audit notes and replies thereto and any other matter which the taluka panchayat or district panchayat, may require to be placed before the meeting of the Gram Sabha.

The Gram Sabha is required to carry out such other functions as prescribed in the Gujarat Gram Panchayats (Gram Sabha Meetings and Functions) Rules, 1964.

The Gram Panchayat/Nagar Panchayat

A gram panchayat is constituted for a local area, the population of which is less than 10,000 and a nagar panchayat is constituted for a local area the population of which normally exceeds 10,000 but does not exceed 20,000. Such a local area may be a revenue village, or a group of revenue villages or hamlets forming part of a revenue or such other administrative unit or part thereof. The number of members of a gram panchayat varies from 7 to 15 and that of a nagar panchayat from 15 to 21. By the recent amendment, the sarpanch is to be elected by ballot by qualified voters of the gram from amongst themselves and the upsarpanch shall be elected by the members of gram panchayat from amongst themselves and a nagar panchayat will elect a Chairman and Vice-Chairman from its own members.

Provision is made for reservation of seats for women in the following manners :

- (i) two seats where the total number of seats does not exceed seven,
- (ii) three seats where the total number of seats exceed seven but does not exceed eleven, and
- (iii) four seats where the total number of seats exceeds eleven :

and one seat for a member of the Scheduled Castes and one seat for the Scheduled Tribes in every gram panchayat. In addition to allotment of one reserved post for the Scheduled Castes, more seats are allotted on the basis of their population in the gram/nagar. Provision is also made for the reservation of the members of the Scheduled Tribes on the population basis. In case of the nagar panchayat for women following amendment is made : Four seats where the total number of seats does not exceed eighteen and five

seats where the total number of seats exceeds eighteen shall be reserved for women.

Duties of a gram/nagar panchayat are specified in the Act. If the funds permit, the gram/nagar panchayat has discretion to take up certain other activities such as education, medical relief, promotion of social, economic and cultural well-being of the inhabitants of its areas and arranging public receptions, ceremonies or entertainments within its jurisdiction.

Taluka Panchayat

The taluka panchayat under the amended Act, shall consist of elected and associate members from amongst themselves. The number of elected members of taluka panchayat will depend on the population of the taluka and such members will be elected from the qualified voters of the taluka concerned. The total number of members varies from 15 to 31; 15 where the population of the taluka does not exceed sixty thousand, 19 where it does not exceed one lakh, 23 where it does not exceed one and half lakhs, 27 where it does not exceed two lakhs and 31 where it exceeds two lakhs. Out of the total number of seats, following provision is made for reservation of seats for women (i) three seats where the total number of seats is fifteen, (ii) four seats where the total number of seats is nineteen (iii) five seats where the total number of seats is twenty three and (iv) six seats where the total number of seats is either 27 or 31. Provisions for reserved seats for Scheduled Castes and Scheduled Tribes are made in the following manner :

(a) for the Scheduled Castes, such number of seats as may be determined by the State Government so that the number of seats so determined bears, as nearly as may be, the same proportion to the number arrived at by deducting from the total number of seats specified in sub-section (3) the number of seats reserved for women under clause (a) as the population of the Schedule Castes in the taluka bears to the total population of the taluka :

(b) for Scheduled Tribes, such number of seats as may be determined by the State Government so that the number of seats so determined bears, as nearly as may be, the same proportion to the number arrived at by deducting from the total number of seats specified in sub-section (3) the number of seats reserved for women under clause (a) as the population of the Scheduled Tribes in the taluka bears to the total population of the taluka :

Provided that the reserved seats may be allotted by rotation to different constituencies in a taluka in the prescribed manner.

The following shall be the associate members of a taluka panchayat namely :

(i) members of the Gujarat Legislative Assembly elected from any constituency in the taluka or part thereof :

(ii) Presidents of all the municipalities within the revenue taluka or mahal and where any administrator or person has been appointed to perform the functions and exercise the powers of any such municipality, such administrator or person :

(iii) a representative of the District Co-operative Union of the district in which the taluka panchayat is functioning, nominated by the Managing Board of the Union :

(iv) a representative of the District Co-operative Bank of the district in which the taluka panchayat is functioning nominated by the Managing Board :

(v) One such representative of the Taluka Co-operative Purchase and Sale Union or of an agricultural produce market committee in the taluka, nominated by the State Government :

Provided that the representatives to be so nominated under clauses (iii) to (v) shall be persons ordinarily residing in the taluka.

An associate member of the panchayat shall have the right to speak or otherwise take part in the proceedings of the panchayat or of such committee of the panchayat as may be prescribed but he shall not be entitled to vote in any such proceedings.

The functions of the taluka panchayat as scheduled in the Act relate to sanitation, health, education, culture, social education, community development, agriculture, irrigation, animal husbandry, village and small scale industries, co-operation, women's welfare, social welfare, rural housing, pastures and relief against natural calamities. As in the case of gram/nagar panchayats, a taluka panchayat has certain discretionary functions.

The District Panchayat

The district panchayat consists of elected and associate members and has a President and a Vice-President elected by its elected members from amongst themselves. The number of elected members of a district panchayat

varies from 31 to 51-31 members where the population of the district does not exceed ten lakhs; 35 members where the population does not exceed twelve lakhs, 39 where the population does not exceed fourteen lakhs, 43 where the population does not exceed sixteen lakhs; 47 where the population does not exceed eighteen lakhs and 51 where the population exceeds eighteen lakhs. Out of the total number of seats provision is made for reservation of seats for women and the Scheduled Castes and Scheduled Tribes as under :

(a) For women (i) six seats where the total number of seats is thirty one, (ii) seven seats where the total number of seats is thirty five, (iii) eight seats where the total number of seats is thirty nine, and (iv) nine seats where the total number of seats is either forty seven or fifty one.

(b) for Scheduled Castes, such number of seats as may be determined by the State Government so that the number of seats so determined bears, as nearly as may be, the same proportion to the number arrived at by deducting from the total number of seats specified in the Act, the number of seats reserved for women under clause (a) as the population of the Scheduled Castes, in the district bears to the total population of the district.

(c) for the Scheduled Tribes, such number of seats as may be determined by the State Government so that the number of seats so determined bears, as nearly as may be, the same proportion to the number arrived at by deducting from the total number of seats specified in the Act the number of seats reserved for women under clause (a) as the population of the Scheduled Tribes in the district bears to the total population of the district :

Provided that the reserved seats may be allotted by rotation to different constituencies in a district in the prescribed manner. The following shall be the associate members of the district panchayat, namely :

(i) members of the House of the people elected from the areas within the jurisdiction of the district panchayat or part thereof ;

(ii) members of the Council of States residing in the revenue district ;

(iii) members of the Gujarat Legislative Assembly elected from the area within the jurisdiction of the district panchayat or part thereof ;

(iv) the Collector of the revenue district ;

(v) Presidents of all municipalities within the revenue district and where any administrator or person has been appointed to perform the

functions and exercise the powers of any such municipality such administrator or person :

(vi) One of the directors of the Managing Board of the District Co-operative Bank in the district as may be nominated by the Board ;

(vii) a representative of the District Co-operative Union in the district as may be nominated by the Managing Board of the Union ;

(viii) one such representative of the District Co-operative Purchase and Sale Union as may be nominated by the Managing Board of the Union.

An associate member of the panchayat shall have the right to speak or otherwise to take part in proceedings of the panchayat or of such committee of the panchayat as may be prescribed but he shall not be entitled to vote in any such proceedings.

The district panchayat is vested with administrative and executive powers. It is responsible for various developmental activities in the district such as establishing and maintaining dispensaries, public health centres and allied institutions. It has been entrusted with a wide range of educational activities. It manages primary education and uses the agency of taluka panchayats to supervise it. It co-ordinates and integrates community development schemes and looks after the development of irrigation, agriculture, animal husbandry, public health, medical relief, social welfare, cottage and small scale industries, collection and maintenance of statistics, etc. All these functions have been transferred to the district panchayat on an agency basis. A large number of executive functions such as registration of co-operative societies, approval of amendments to their byelaws, calling of or extending the period for the calling of annual general meetings of co-operative societies and such other functions as were exercised by the Registrar, Co-operative Societies, under the Co-operative Societies Act, have also been transferred to the district panchayat.

Progress in the Establishment of Panchayats

The detailed analysis of Gujarat Panchayats Act, 1961 shows that the three-tier system panchayats is one of the accepted systems for Local Self-Government. The work of panchayats is not confined for a few civic amenities or some social or economic services. These institutions play a major role in the social and economic activities.

The following table shows the total number of taluka panchayats, gram panchayats and nagar panchayats in the district from 1961-62 to 1971-72.

Sl. No. 1	Year 2		Number of taluka panchayats 3	Number of gram panchayats 4	Number of nagar panchayats 5
1	1961-62	.. ..	..	800	..
2	1962-63	.. ..	..	806	..
3	1963-64	.. ..	10	806	5
4	1964-65	.. ..	10	811	7
5	1965-66	.. ..	10	815	7
6	1966-67	.. ..	10	816	7
7	1967-68	.. ..	10	817	8
8	1968-69	.. ..	10	819	8
9	1969-70	.. ..	10	820	8
10	1970-71	.. ..	10	820	8
11	1971-72 (30 June, 1972 )	.. ..	10	822 (711 were independent and 111 were group gram panchayats)	8

Source :

1. District Census Handbook 1971, Part X-C-I, Kheda District, p. 39.
2. The District Development Officer, District Panchayat, Nadiad.

From the foregoing table it would be seen that there were 822 gram panchayats, 8 nagar panchayats and 10 taluka panchayats in 1971-72 in the district.

Income and Expenditure of gram, taluka and district panchayats are described below.

From the sub-joined Statement XIV.3 it will appear that Government grants are given to all the institutions of the Panchayati Raj. The village panchayats, taluka panchayats and district panchayat get their shares in fixed percentage from the land revenue collected. However, there are several distinguishing features. To start with, in the case of gram panchayats gifts and donations amounted to Rs. 6,47,417. It is significant to note that neither taluka panchayats nor district panchayat could get any gift or donation from the public. The gram panchayats got such an amount as donation presumably to commemorate the memory of some family members by construction of a school room, library, or water works at the villages. Secondly, it is only the gram panchayats which are found to levy taxes and fees. Broadly speaking, the Panchayati Raj bodies are run practically from Government grants and revenues. Apparently, very little effort is made by the taluka panchayats or the district panchayat to levy taxes.

Statement XIV.4 shows items on which expenditure is incurred by gram panchayats, taluka panchayats and district panchayat.

STATEMENT XIV-3

Income of Gram Panchayats, Taluka Panchayats and District Panchayat, 1971-72

Gram Panchayats 1	Rs. 2	Taluka Panchayats 3	Rs. 4	District Panchayat 5	Rs. 6
Government Grants (Land Revenue)	14,52,467	Government Grants	1,30,25,474	Government Grants	1,47,55,705
Gifts and Donations	6,47,417	Statutory Grants as Land Revenue Grants	20,89,999	Statutory Grants (Education and Medical)	1,71,602
Taxes, fees	75,17,388	Education and Medical	1,23,95,589	Land Revenue	2,84,633
Others	71,26,094	From District Panchayat's own fund	3,28,707	Local Fund Cess	10,98,164
		Others	8,96,892	Others	95,39,029
Total	1,67,43,866		2,87,36,661		2,58,49,193

Source : District Development Officer, District Panchayat, Nadiad

STATEMENT XIV-4

Expenditure of Gram Panchayats, Taluka Panchayats and District Panchayat, 1971-72

Sl. No.	Item	Gram Panchayats Amount in Rs. 3	Percentage 4	Taluka Panchayats Amount in Rs. 5	Percentage 6	District Panchayat Amount in Rs. 7	Percentage 8
1	Sanitation and health	..	35.85	9,28,368	2.59	66,46,929	21.95
2	Public works	..	25.31	6,78,813	1.90	89,93,375	29.70
3	Education and culture	..	9.57	2,39,69,064	66.92	11,62,738	3.84
4	Administration	..	23.15	33,09,989	9.30	3,33,989	1.10
5	Welfare of people	..	0.83	2,60,079	0.73	9,95,804	3.29
6	Agriculture, preservation of forests and animal husbandry	..	2.31	13,82,791	3.86	38,39,256	12.68
7	Village and cottage industries	..	0.82	58,627	0.16	1,32,001	0.44
8	Collection of land revenue and maintenance of land records	..	1.13	5,42,474	1.52	..	..
9	Village defence	..	1.03	4,294	0.01	..	..
10	Co-operation	..	..	..	..	7,911	0.03
11	Other miscellaneous	..	..	46,60,208	13.01	81,66,683	26.97
	Total	..	100.00	3,58,15,707	100	3,92,78,886	100.00

Source : District Development Officer, District Panchayat, Nadiad.

The expenditure pattern varies with the levels of Panchayati Raj and the development programmes. The gram panchayats spend the largest amount (35.85 per cent) on sanitation and health followed by (25.31 per cent) on public works, (23.15 per cent) on administration, and (9.57 per cent) on education and culture. For collection of land revenue and maintenance of land records, they spend about 1.13 per cent. For agriculture, preservation of forests and animal husbandry, village defence, welfare of people and village and cottage industries they spend 2.31 per cent, 1.03 per cent, 0.83 per cent and 0.82 per cent respectively.

In case of taluka panchayats, the maximum expenditure (66.92 per cent) is spent on education and culture, followed by (13.01 per cent) miscellaneous and (9.30 per cent) on administration. On agriculture, sanitation and health and public works, they spend about 8.35 per cent. In comparison to the gram panchayats they spend least on public works, sanitation and health and welfare of people.

In the case of district panchayat, the bulk of expenditure (29.70 per cent) is incurred on public works, presumably transferred by the State Government for execution. About 26.97 per cent is spent on other miscellaneous, 21.95 per cent sanitation and health, 12.68 per cent on agriculture, 3.84 per cent on education and culture. About 4.86 per cent is spent on welfare of people, administration, village and cottage industries and co-operation.

Panchayati Raj in Kheda district

It has been seen previously that the active participation of panchayats is essential and inevitable in the progress of planning and its implementation as well as for the generation of necessary resources. As a result of the greater awareness, panchayats have taken initiative in certain matters without depending merely on Government assistance and resources. Some of the activities of Panchayati Raj institutions are outlined below.

Agriculture

Panchayats have concentrated on agricultural development. The use of improved seeds, fertilisers etc., has increased. In 1969-70 in the district 99048.6 metric tonnes of fertilisers was used. Improved varieties of seeds amounting to 2,17,178 Kgs. of groundnut seeds and 20,57,600 of wheat seeds were distributed in the same year. The local leaders have done commendable work in co-ordinating procurement of seeds, fertilisers and credit facilities in time.

Irrigation

The Kheda District Panchayat has taken effective measures to increase the area under irrigation. The number of irrigation wells in the district rose from 21,895 in 1963-64 to 24,342 in 1968-69 while number of oil engines rose from 2,421 in 1963-64 to 5,215 in 1968-69. The number of electric motors/pumps also rose from 1,340 in 1963-64 to 2,613 in 1968-69 and number of tube wells rose from 6 to 56 during this period.

The other activities of the district panchayat related to animal husbandry, co-operation, drinking water supply, health centres, education, roads and welfare of the weaker sections.

CHAPTER XV

EDUCATION AND CULTURE

Education

HISTORICAL BACKGROUND

Indigenous System

In the early part of the 19th century, the indigenous system of education held the field. The indigenous schools were those in which instruction in the elements of knowledge was communicated. They were originated and supported by local people. These schools were almost, if not, always, conducted by Brahmans. In large towns, the schools were generally handed down from father to son. The schools had hardly any continuity and sprang up or vanished according to the local demand or its absence. The average number of pupils per school was about 15 and the number of pupils varied from 2 to 150. There were a few schools which were conducted for the benefit of the pupils of one community or caste. The pupils generally came from upper strata of Hindu community. No regular monthly fees were paid in cash to the teachers. But cash payments were made on different occasions, *i. e.*, either at the commencement of education, or on completion of certain stages of instructions and at the time of leaving schools. This payment varied from place to place and according to the capacity of the parents. There was also the practice in Gujarat of offering gifts in kind to teachers. Often, the boys begged something for their master from the strangers visiting the village or from well-to-do parents on marriage occasions. The age of pupils varied from 6 to 14, and the average duration of school life was 2 or 3 years.

The curriculum of indigenous schools was *Mulakshara*, *Nama*, *Dhat*, *Anks* or multiplication tables, mental arithmetic, letter-writing, writing of agreements, bonds and *hundies*.

The school accommodation was generally of very poor kind. So often, it was a portion of a religious or public building. Some schools were housed in the rooms attached with temples or religious buildings, or Dharmashalas. So often the school house was the Master's own property.¹

STATE SYSTEM

Indigenous system was replaced gradually by the State system of education, which was introduced in the district by the British. The foundation of the State system was laid in the year A. D. 1826 by

1. SYED NURULLAH AND NAIK, J. P. *A History of Education in India*, 1951.

establishing 2 vernacular schools at Kheda and Nadiad. The salary of the teachers, the rent of the school buildings and books were provided by the Government. The schools were administered by the Collector. The textbooks and reports for the schools were prepared by Hind Shala Mandli. In the year 1830 A. D., 3 more Government schools were started each in Mahudha, Kapadvanj and Umreth. In the year 1840 A. D., the Board of Education came into existence and the responsibility of education was handed over to it. In the year 1838 A. D., one more school was opened at Matar and in the year 1848 A. D., school was started at Mahemadabad. All these schools were under the charge of a Superintendent. A Senior student or a student of upper standard generally helped the teachers in teaching. In the year 1854 A. D., to promote education, a new scheme was implemented by the Government. According to this scheme, the Government would open a school in the village if the villagers were prepared to contribute a school building, and half the salary of the teachers and other expenses. In the Government schools, the subjects taught were, grammar, mathematics, geography and history. Generally, Brahmans were taking education with the ultimate object of getting Government service. The Rajput and Koli landlords were eager to send their children to Government schools. But the Traders and Money-lenders were reluctant to send their children to Government schools.¹

In the year, 1856 A. D., 2 English schools were started one at Nadiad and another in Kaira (Kheda). The total number of primary schools was 97 (in the year 1865-66 A. D.) and the number of students was 9,635. In the year 1877-78, the number of primary schools rose to 190 and the number of students rose to 14,930. Out of these 190 Government schools, 181 were Gujarati schools, 6 were Urdu schools, 2 were Anglo-vernacular schools and one was a high-school. Over and above this, there were 61 private schools in the district. The details of private schools are as under :

Sub-Division	Schools	Pupils
Kapadvanj	11	523
Thasra	8	228
Mahemadabad	7	338
Matar	3	34
Nadiad	7	160
Anand	13	525
Borsad	12	241
Total	61	2,049

Source : CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panchmahals*, (1879), p. 132.

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panchmahals*, (1879), p.133.

In the year 1877-78 A. D., there were 28 town schools in the district. The details of such institutions are given below

Town Schools, 1877-78 A. D.

Town 1	No. of Vernacular Schools		Urdu Schools 4	Anglo- Vernacular Schools 5	High Schools 6	No. of Students 7
	Boys 2	Girls 3				
Kapadvanj	2	1	..	..	..	452
Kaira (Kheda)	1	1	1	1	..	472
Nadiad	4	1	1	1	1	1,481
Mahudha	3	1	1	..	..	626
Umreth	3	1	1	..	..	..
Borsad	2	1	..	..	..	385
Total	15	6	4	2	1	3,416

Source : CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panchmahals*, (1879), p.138.

In the same year, there were 162 village schools in the district of which 158 were boys schools and 4 were girls schools. The details of such schools are as under :

Village Schools, 1877-78 A. D.

Sub-Division 1	Villages 2	Population 3	Vernacular Schools	
			Boys 4	Girls 5
Kapadvanj	85	72,760	9	..
Thasra	100	85,601	18	1
Mahemadabad	59	73,073	17	1
Nadiad	91	117,548	27	..
Matar	82	78,673	30	..
Anand	73	185,998	28	1
Borsad	89	132,314	29	1
Total	579	685,967	158	4

Source : CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panchmahals*, (1879), p. 139.

From the above table it can be seen that during this period there was one school per 3.58 inhabited villages.

In the district during the year 1881 A. D., there were 205 schools with 16,107 pupils. The number of students rose to 27,261 in 1891 A. D., and 27,911 in 1901 A. D.

In 1901 A. D., the district was fourth in the Presidency, in the literacy returns, 9.9 per cent of the population was able to read and write (17.9 males and 0.9 females).

In 1903-04 A. D., the district had 365 schools, out of which 84 were private schools attended by 17,474 pupils, including 2,581 girls. Besides one high school, there were 14 middle and 266 primary schools. Of the 281 public institutions, one was managed by the Education Department and 246 by the local or municipal boards, while 30 were aided and 4 were unaided.¹

Over and above, the government efforts, Christian Missionaries had done very notable work in the field of education. There were 351 vernacular, 2 Anglo-vernacular and 2 industrial schools conducted by these Missionaries in the district during 1904 A. D. They had started their activities in the year 1884 A. D.²

STATE OF EDUCATION IN THE FORMER BARODA STATE

Petlad and Sojitra areas of this district were parts of the former Baroda State. In the year 1871 A. D., there were 2 vernacular schools with 100 students in Petlad town and there were 10 village schools with 500 students in the same taluka. The Anglo-vernacular school at Petlad was opened in the year 1873 A. D., and the one at Sojitra was opened in the year 1878 A. D. The number of students were 38 and 62 respectively.

In Petlad town during the year 1882, there were 2 Gujarati schools, (1 for boys and 1 for girls), 1 Urdu and 1 Marathi school. The number of students were 649 in all these four schools.

In Sojitra there were two schools, one Gujarati boys' school with 404 students, and one girls' school with 125 students during the same period.³

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, Kaira and Panchmahals, (1870), pp. 132-139.

2. *Imperial Gazetteer of India*, Vol. XIV, 1908.

3. *Gazetteer of the Bombay Presidency*, Vol. VII, Baroda, (1883), pp. 473-493.

In Cambay State, during the year 1893-94 A. D., there were 26 educational institutions with 2,013 students. Details of these institutions are as under :

Type of Institution 1	No. of Institutions 2	No. of Scholars 3
High School	1	56
Primary Boys' Schools	22	1,755
Primary Girls' Schools	3	202
Total	26	2,013

Source : *Gazetteer of the Bombay Presidency*, Vol. VI-B, Rewa Kantha, Cambay and Surat, (1904), p. 34.

According to the *Imperial Gazetteer of India*, Vol. IX, 1908 A. D. : "In Cambay State during the year 1903 A. D., there were 26 public schools including a high school and 2 girls' schools, the total number of pupils in these schools was 1,880. Besides these, there were 15 private schools with 551 pupils."

In the year 1864 A. D., in the Balasinor State, there were two vernacular schools with 419 students. The number of schools during the year 1878 A. D. were 3 (2 for boys and 1 for girls) with 448 students.¹

During the years 1904-1921 A. D., the development of educational activity was little bit slow. In the year 1905-06, in Kheda district (British territories), there were 323 schools under public management while the number of private schools was 197. The number of pupils in public schools was 25,448 and in private schools was 5,229. The details of these schools are as under :

Public and Private Educational Institutions in Kheda, 1905-06 A. D.

Sl. No. 1	Type of Institution 2	Public		Private	
		Institu- tions 3	No. of students 4	Institu- tions 5	No. of students 6
1	High Schools	2	501	..	..
2	Middle Schools	12	717	..	..
3	Primary Schools	306	23,758	114	3,100
4	Technical & other special schools	3	502	..	..
5	Other Schools	..	..	83	2,129
	Total	323	25,478	197	5,229

Source : *Gazetteer of the Bombay Presidency*, Vol. III-B, Kaira and Panch Mahals, (1914), p. 29.

1. *Gazetteer of the Bombay Presidency*, Vol. VI, Rewa Kantha, Narukot, Cambay and Surat States, (1880), p. 87.

In the year 1921-22 A. D., there were 436 public schools with 37,400 students and 178 private schools with 9,180 students. The details of these schools are as under :

Public and Private Educational Institutions in Kheda, 1921-22 A. D.

Sl. No.	Type of Institutions	Public		Private	
		Institutions	Scholars	Institutions	Scholars
1	High Schools	3	724	3	763
2	Middle Schools (English)	1	81	6	317
3	Middle Schools (Vernacular)	431	36,545	166	7,984
4	Primary Schools	1	50	..	..
5	Technical & other special schools	..	..	3	116
	Total ..	436	37,400	178	9,180

Source : *Gazetteer of the Bombay Presidency, Vol. III-B, Kaira and Panch Mahals, (1926), p. 38.*

In the areas of Baroda State, the control of village schools was handed over to the Local Boards on an experimental basis in 1905 A. D. The Education Commission appointed by the State in 1910 A. D., found that the experiment had failed and suggested the department to take over the charge of these schools. The State had introduced compulsory education in 9 villages of Amreli district as an experiment in the year 1893 A. D. The experiment, being successful, compulsory education was introduced throughout the State in the year 1906-07 A. D. Because of compulsion, a number of new schools were opened in the areas of Petlad, Sojitra, Bhadran and Dharmaj. According to the *Gazetteer of the Baroda State, 1923 A. D.*, there were 152 primary schools in Petlad area (118 for boys and 34 for girls schools). In addition, there were 5 Anglo-vernacular schools and 3 high schools, each at Petlad, Sojitra and Dharmaj. Of these 118 were primary schools for boys and 28 were Antyaj schools. In the Bhadran Mahal, there were 52 schools and one high school.

In the Cambay State, during the year 1910-11 A. D., there were 42 schools of which 35 were primary schools for boys, 4 primary schools for girls, one Anglo-vernacular school, one high school and one special institution. The number of students in high school was 203. The number of students in Anglo-vernacular school was 32. The number of students in boys' primary schools was 1912 and in the girls' schools it was 274. There

were 26 inmates in the special school. The number of schools rose to 52 in the year 1921-22 A. D. Of these, one was a high school, one Anglo-vernacular school, 39 primary boys' schools, 9 girls' schools and 2 special schools. The total number of pupils in these schools was 4,703 (3,901 boys and 802 girls). The number of pupils in the Anglo-vernacular school and in the high school was 45 and 378 respectively. The number of pupils in primary schools for boys and in primary schools for girls was 3,407 and 802 respectively. In special schools, there were 71 pupils.¹

In the Balasinor State, during the year 1911-12 A. D., the control of the schools was under the Education Department of the Agency. The total number of schools in the same area was 13, of which 2 were Anglo-vernacular schools, 9 Gujarati schools (7 for boys and 2 for girls), and 2 Urdu schools (1 for boys and 1 for girls). The total number of pupils in these schools was 1,073. In the year 1921-22 A. D., the number of schools rose to 15 and the number of students increased to 1,442. Of these, 2 were Anglo-vernacular schools, 10 were vernacular schools (8 for boys and 2 for girls), and 3 were Urdu schools (1 for boys and 2 for girls). The primary education was made free in the State.²

In the year 1931 A. D., there were 435 primary schools (420 boys schools and 15 girls' schools) in the district with 39,298 pupils (22,580 boys and 16,718 girls) in the district. On the eve of Independence, the number of schools in the district rose to 961. The total number of pupils was 69,919 (42,329 boys and 27,590 girls).

The progress during this period in the field of secondary education was also noteworthy. In the year 1931, there were 34 secondary schools. The number rose to 66 in the year 1947. The decennial progress of the secondary schools is as under :

Secondary Schools in Kheda District, 1871-1950 A. D.

Year	1871-80	1881-90	1891-1900	1901-10	1911-20	1921-30	1931-40	1941-50
No. of Secondary Schools	2	8	10	17	27	34	47	70

Source : State Institution of Education, Ahmadabad.

- Gazetteer of the Bombay Presidency, Vol. VI-B, Rewa Kantha, Cambay and Surat, Bombay, (1926).*
- Annual Administration Reports of the Balasinor State for the year 1911-1912 D. and 1921-22 A. D.*

There were only 3 colleges in the district before Independence, each at Petlad, Nadiad and Vallabh Vidyanagar. The college at Petlad was teaching Arts subjects, the college at Nadiad was teaching Science subjects and college at Vallabh Vidyanagar was an Agriculture college.

GROWTH OF LITERACY SINCE 1951

According to the Census of 1951, there were 469,380 literates in the district of Kheda as constituted then and formed 29.18 per cent of the total population. The percentage of male literates was 40.80 while that of female literates 16.42. In 1961 A. D., the percentage of literacy rose to 36.26 (48.45 for males and 22.74 for females). According to the 1971 Census, the percentage of literacy has risen to 42.53 (males 55.09 and females 28.48). Thus, during the period of 20 years (1951-1971 A. D.), the literacy percentage has risen from 29.18 to 42.53.

POPULATION GROWTH AND LITERACY

The growth of population during the period 1951-61 to 1961-71 A. D., was 22.64 per cent and 23.61 per cent respectively. As against this, the general literacy in the district during these periods was 7.08 per cent and 6.27 per cent respectively. It indicates that the rate of growth of literacy is not keeping pace with that of the population.

The percentage of literacy to total population by age and sex is given for total/rural/urban in the following statement.

STATEMENT XV-1

Literacy Percentage by Age-groups, 1971

Age-groups 1	Total			Rural			Urban		
	Persons 2	Males 3	Females 4	Persons 5	Males 6	Females 7	Persons 8	Males 9	Females 10
All ages	42.53	55.09	28.48	38.45	51.94	23.41	58.89	67.67	48.97
5-9	33.73	39.19	27.32	30.09	36.37	22.67	50.05	52.07	52.25
10-14	68.12	80.46	52.74	64.17	78.61	45.89	83.54	87.92	78.40
15-19	67.53	80.90	51.41	62.83	78.51	44.20	84.27	89.20	78.03
20-24	60.47	79.31	40.52	56.32	76.57	33.71	77.86	87.80	65.77
25-34	50.77	70.29	30.57	46.57	67.48	25.08	67.51	81.34	52.83
35+	37.45	53.92	19.66	32.69	49.28	14.73	53.79	72.76	39.44
Age not stated	42.25	36.08	55.56	31.25	28.57	38.46	65.21	56.55	78.95

Source :

Director of Census Operations, Gujarat State, (Provisional Data).

Literates among children in the age-groups 5-9 and 10-14 constituted 33.73 per cent and 68.12 respectively of whom males accounted for 39.19 and 80.46 per cent and females 27.32 and 52.74 per cent respectively. The highest percentage of literacy among persons was found in the age-group 10-14 in total and in rural areas, while in urban areas it was found in the age-group 15-19. The highest percentage among males was recorded in the age-group 15-19 in total and urban areas, while in rural areas it was found in the age-group 10-14. It is interesting to note that among females the highest percentage of literacy was recorded in the age-group 10-14 in total/rural and urban areas. The percentage of female literacy recorded progressively decreasing in the higher age-groups. This speaks of the keen interest taken by people in the sphere of female education in recent years. The following statement furnishes the sex-wise details of literacy by rural/urban area for each taluka of the district.

STATEMENT XV-2

Rural/Urban Literacy by Sex, 1971

Name of District/ Taluka/Mahal 1	Total/ Rural/ Urban 2	Literates (Number) 3	Percentage of total popula- tion 4	Literate males 5	Perce- ntage of total male popula- tion 6	Literate females 7	Perce- ntage of total female popula- tion 8
District Total	T	1,042,551	42.53	713,001	55.09	327,550	28.48
	R	754,564	38.45	537,494	51.94	217,070	23.41
	U	287,987	58.89	175,507	67.67	112,480	48.97
Mahamadabad	T	63,338	36.58	45,337	50.12	18,001	21.77
	R	44,993	41.12	74,754	54.63	31,239	25.84
	U	18,345	55.72	11,263	65.40	7,082	45.10
Nadiad	T	179,891	47.79	118,765	59.48	61,126	34.54
	R	105,993	41.12	74,754	54.63	31,239	25.84
	U	73,898	62.16	44,011	70.06	29,887	53.31
Anand	T	200,337	50.20	133,915	62.52	66,422	35.93
	R	133,179	45.66	91,788	58.99	41,391	30.13
	U	67,158	63.29	42,127	71.90	25,031	52.68
Petlad	T	126,316	49.21	80,989	59.48	45,327	37.61
	R	95,640	46.82	62,523	57.54	33,117	34.64
	U	30,676	58.50	18,466	67.13	12,210	48.97
Borsad	T	127,185	42.25	88,540	55.39	38,645	27.37
	R	110,983	41.06	78,347	54.50	32,636	25.70
	U	16,202	52.71	10,193	63.37	6,009	41.01

STATEMENT XV-2—*contd.*

Name of District/ Taluka/Mahal	Total/ Rural/ Urban	Literates (Number)	Percentage of total popula- tion	Literates males	Percentage of total male popula- tion	Literates females	Percentage of total female popula- tion
Khambhat	T	90,904	41.11	60,869	52.30	30,035	28.87
	R	55,996	35.21	40,117	47.64	15,879	21.22
	U	34,908	56.22	20,752	64.52	14,156	47.99
Mator	R	18,355	36.61	34,511	49.44	13,844	22.23
Kapadvanj	T	99,634	36.93	70,998	50.72	28,636	22.06
	R	81,789	34.22	60,369	48.70	21,420	18.62
	U	17,845	58.04	10,629	66.36	7,216	48.99
Vadasinor	T	39,364	29.93	30,000	44.30	9,364	14.68
	R	30,207	26.90	23,976	41.54	6,231	11.41
	U	9,157	47.68	6,024	60.17	3,133	34.07
Thasra	T	67,227	35.33	46,077	49.04	18,150	20.12
	R	47,429	30.72	37,035	42.64	10,394	14.19
	U	19,798	55.18	12,042	63.62	7,756	45.75

Source : District Census Handbook 1971, Kheda District, Parts X-A & B.

According to the Census of 1971, the highest percentage of general literacy was recorded in the Anand taluka (50.20) and lowest in the Vadasinor taluka (29.93). In the urban areas, the percentage of general literacy is comparatively higher than that in the rural areas. In the urban areas, Anand taluka had the highest per cent of general literacy (63.29) obviously because of concentration of educational activities whereas it was lowest in the Vadasinor taluka (47.68). The highest percentage of literacy in the rural areas was found in the Petlad taluka (46.82). This can be ascribed to the educational and literacy drive by the former Baroda State.

The general literacy for males was highest in Anand taluka (62.52) and that for females in the Petlad taluka (37.71). This can be ascribed to a number of measures taken by former Baroda State such as compulsory primary education and promotion of female education. The lowest percentage of literacy for both the sexes was in the Vadasinor taluka (44.30) for males and (14.68) for females.

In the case of urban areas, the highest percentage of literacy for males was recorded in the Anand taluka (71.90) and for females the highest percentage of literacy was returned in the Nadiad taluka (53.31).

The lowest percentage both for males and females was recorded in the Vadasinor taluka ; 60.17 per cent for males and 34.07 per cent for females.

In the rural areas, the highest percentage of males literacy (58.99) was found in the Anand taluka and for females, it was in the Petlad taluka (34.64). The lowest percentage both for males and females was in the Vadasinor taluka (41.54 and 11.41 respectively).

EDUCATIONAL STANDARDS

The true picture of the educational standards in the district can be had from the Census (1971) statement shown below.

STATEMENT XV-3

Educational Levels in Urban and Rural Areas, 1971

Sl. No.	Educational Levels	Urban			Rural		
		Persons	Males	Females	Persons	Males	Females
1	Total	489,030	259,348	229,682	1,062,357	1,034,928	927,434
1	Illiterate	201,044	83,837	117,207	1,207,793	497,429	710,364
2	Literate (without educational level)	103,932	57,173	46,759	376,877	250,757	126,120
3	Primary	84,597	47,835	36,762	236,948	176,445	60,503
4	Middle	26,540	17,195	9,345	89,749	69,294	20,455
5	Matriculation or Higher Secondary	61,660	44,221	17,439	43,326	34,380	8,946
6	Non-technical diploma or certificate not equal to degree	135	100	35	1,059	925	134
7	Technical diploma or certificate not equal to degree	679	424	255	886	845	41
8	Graduates and above	10,443	8,363	2,080	5,719	4,848	871
A.	Graduate degree other than technical degree	6,124	4,647	1,477			

STATEMENT XV-3—contd.

Sl. No.	Educational Levels	Urban			Rural		
		Persons	Males	Females	Persons	Males	Females
B.	Post-Graduate degree other than technical degree	1,180	1,008	172	..	..	..
C.	Technical degree or Diploma equal to degree or Post-Graduate degree	3,139	2,708	431	..	..	..
(i)	Engineering and Technology	1,688	1,571	117	..	..	..
(ii)	Medicine	529	459	70	..	..	..
(iii)	Agriculture Veterinary and Dairying	245	240	5	..	..	..
(iv)	Teaching	647	408	239	..	..	..
(v)	Others	30	30	..	..	..	..

Source : Office of the Director of Census Operation, Gujarat, Provisional Data.

This Statement clearly shows the common pattern of standard of education in the urban and rural areas. Generally, the standard of education is lower in the countryside than in the towns as availability of educational facilities in towns is comparatively greater. As worked out from the statement 61.55 per cent of the total rural population was illiterate as against 41.11 per cent for the urban areas.

In recent years, appreciable progress in the field of higher and technical education has been made in the district. This is because of the establishment of the Sardar Patel University at Vidyanagar in the district. According to the 1971 Census, in the urban areas 7,304 persons received Higher Education (Graduate and Post Graduate degrees) other than technical degrees and 3,139 persons were reported to have acquired technical qualifications. It is interesting to note that of the persons taking post S. S. C. courses, 30.06 per cent held technical degrees and 69.94 per cent had university degrees or post-graduate degrees other than technical degrees.

Among the technical courses, 'Engineering', 'Medicines', Agriculture and Teaching are given preference. Females have also started taking benefits of higher education.

PRE-PRIMARY EDUCATION

Pre-primary education is the education of the child below the age of 6. It begins from 3rd or 4th year. During this period, the foundations of habits of mental, moral and physical health are formed. Pre-primary School is commonly known as Balwadi, Balmandir, Shishu Vihar, etc., in Gujarati. Wilhem August Froebel, the German educationist, is known as the father of pre-primary education. In 1837 A. D., he gave this name to such a school. In India, the credit of introducing this system goes to the Missionaries. The literature regarding Montessori School was available in English in 1911. An article in 'The Times of India' was published on Montessori system in 1914. Late Smt. Sarladevi Sarabhai, Late Shri Motibhai Amin, and Late Shri Darbar Gopaldas of Vaso, were attracted by this new approach in the field of child education. Shri Motibhai Amin was highly impressed by a book called 'Montessori Hand Book'. Being inspired and encouraged by this book, he suggested Darbar Gopaldas to open a Balmandir at Vaso on this pattern. As a result, the first Montessori School of Gujarat came into existence in 1915 at Vaso. Thereafter, a number of Balmandirs were opened at several places in the district. At present, most of the taluka headquarters and towns of the district have Balmandirs. The following table shows the progress of pre-primary education during the period from 1968-69 to 1972-73 in the district.

Year	No. of Balmandirs	No. of students		
		Boys	Girls	Total
1968-69	116	2,814	2,250	5,064
1969-70	96	3,050	2,321	5,371
1970-71	90	2,957	2,189	5,126
1971-72	96	2,973	2,287	5,260
1972-73	106	3,767	2,942	6,709

Source : Administrative Officer, Kheda District Panchayat, Nadiad.

Out of 106 Balmandirs, 12 prominent Balmandirs of the district, are situated at Karamsad, Napad, Pij, Vaso, Dharmaj, Kanisa, Vatadara, (Khambhat taluka), Navagam (Matar taluka), Kathlal (Kapadvanj taluka), Virpur (Vadasinor taluka), Ghodasar and at Bharoda (Anand taluka).

1. RAJYAGOR S. B., *Education in Gujarat* (1854-1954), 1958, p. 187.

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DISTRICT GAZETTEER : KHEDA

Over and above these, there were 65 Balwadis in the district in 1973-74 with 2,880 students (2,045 boys and 835 girls).

Grant-in-aid to pre-primary schools is paid only in the rural areas subject to deficit, out of which Government bears 2/3 and the District Panchayat bears 1/3 of the deficit. No grant-in-aid is now paid to pre-primary schools in the Municipal areas.

PRIMARY EDUCATION

After the merger of Baroda State with Bombay State, free and compulsory primary education received a great impetus. In 1953-54, the Government launched an intensive drive for providing schools to as many villages as possible and adopted the policy of opening one school in every village with a population of 500 and over. As a result of this campaign, in 1960-61, out of 963 villages in the district 911 or 94.40 per cent were covered with primary schools. An appreciable progress was made in this direction in the Petlad and Borsad talukas, where all the villages were provided with primary schools. With the introduction of the Panchayati Raj in Gujarat from 1st April, 1963, primary education, except in authorised municipal areas has been transferred to the District Panchayat. The District Panchayat discharges its responsibility through the Education Committee. The Education Department appoints an Administrative Officer in the District Panchayat. In the urban Areas, the responsibility for the primary education is entrusted to the authorised municipalities, which are also given grants in accordance with rules. According to the 1971 Census, there were only 6.49 per cent villages of the district deprived of the facilities of the primary schools. The number of scholars per one thousand population was 122, the number of scholars per primary school came to 177 and the area covered per school was 4.63 sq. kms. Out of 1,448 schools, 429 were single teachers schools in non-municipal areas. The number of scholars per teacher came to 39 in 1971.

The following table gives details about the progress made in the field of primary education after the introduction of Five Year Plans in 1951.

Year 1	No. of pupils			
	No. of Primary schools (includ- ing basic) 2	Boys 3	Girls 4	Total 5
1951-52	..	..	..	..
1956-57	..	1,266	114,594	61,340
1961-62	..	1,375	135,677	72,684
1966-67	..	1,525	168,735	91,857
1973-74	..	1,615	192,271	104,760
	..	1,716	211,746	110,569
				322,315

Source :

Administrative Officer, Kheda District Panchayat, Nadiad.

As can be seen from the above, primary education registered a remarkable progress during the Three Plan periods. The number of primary schools rose from 1,266 in 1951-52 to 1,525 in 1961-62 and 1,716 in 1973-74, while the number of pupils also rose from 175,934 to 260,592 and 322,315 respectively during the same period.

COMPULSORY EDUCATION

From 1st June, 1947, compulsory primary education was introduced in the district under the Bombay Primary Education Act, 1947. The Act covered children of the age-group 7-8 years, residing in towns with a population of more than one thousand according to the 1941 Census. This scheme was extended by stages as shown below :

Year	Age-group		
1948-49	..	..	7-9
1949-50	..	..	7-10
1950-51	..	..	7-11

During the First Five Year Plan, compulsory education was introduced from 1st August, 1954 for the age-group 7-8 years in towns having a population of one thousand or more according to the 1951 Census. This scheme was applied to other age-groups as shown below :

Year	Age-group		
1953-56	..	..	7-9
1956-57	..	..	7-10
1957-58	..	..	7-11

During the Second Five Year Plan, compulsory education was introduced from 1st September, 1956, in all the towns having a population between 500 and 999. Excepting a few villages, the scheme was gradually extended to the following age-groups, from 1st, October, 1956 to include small villages with a population of even less than 500 souls.

Year	Age-group		
1956-57	..	..	7-8
1957-58	..	..	7-9
1958-59	..	..	..
1959-60	..	..	7-10

*66th Session, Indian National Congress "Souvenir" Bhavnagar, 1961, p. 230.

In the villages of this district, which were under former Baroda State, the Compulsory Education Act, 1906 was in force. The age-group covered by this Act was 7-12 for boys and 7-10 for girls. After the merger, the Bombay Compulsory Primary Education Act, 1947, was universally introduced in the district.

Primary School Teachers

As per Government rules, every teacher is expected to teach 40 students but in the rural areas, the number of students per class is less than 40, and so he is required to teach more than one class. In urban areas the number of pupils is sometimes more than 40 and the schools are required to run in shifts, due to lack of accommodation. In 1963-64 there were 7,699 teachers but their strength decreased to 7,352 in 1968-69, because some of the posts were vacant. The details of the trained and untrained teachers are as under :

Teachers in Primary Schools

Year 1	No. of Teachers in Primary Schools			Percentage tage of Males and Females teachers		No. of Trained Teachers 7	Percen- tage of Trained Teachers 8	
	Males 2	Females 3	Total 4	Males 5	Females 6			
1963-64	..	6,185	1,564	7,699	79.69	20.31	4,923	67.94
1966-67	..	5,545	1,617	7,162	77.42	22.58	5,320	74.72
1970-71	..	5,632	1,666	7,298	77.17	22.83	6,819	93.44
1973-74	..	6,149	2,320	8,469	72.61	27.39	8,389	98.58

Source :

- (1) Kheda Jilla Panchayat, Pragati Darshan, 1970.
- (2) Administrative Officer, Kheda Jilla Panchayat, Nadiad.

BASIC EDUCATION

The concept of basic education was developed by Mahatma Gandhi. The main idea of basic education is that it should centre round some form of manual work, and the children should not get merely academic knowledge but should also learn some simple craft to inculcate in them a sense of self reliance, responsibility, initiative and resourcefulness.

Soon after assuming power in the Bombay Province, the Congress Ministry in 1937, wanted to introduce basic education on an experimental basis. For this, some secondary teachers and inspecting officers were sent

for training in basic education to Jamia Malia and Sevagram. Meanwhile, Shri Narhari Parikh, who was the president of the Advisory Board for the basic education, started a basic school in the Thamna village in Kheda District, with the co-operation of Gujarat Vidyapith. Somehow the school was closed in 1942-43. The failure of the experiment was partly due to the lack of interest and proper response from the people. On the eve of Independence, there were 193 basic schools with 21,154 students in the district, of which 47 were junior basic schools and 146 were senior basic schools.

After Independence, when Congress Ministry came back to power in Bombay, an intensive programme of basic education was promoted by the Education Department. The Government decided to teach crafts in these basic schools, such as kitchen gardening, spinning, wevaing, paper work, card-board modelling and agriculture. There was also one private basic school at Bochasan in the year 1951-52. In the year 1956, the number of school at Bochasan in the year 1951-52. In the year 1956, the number of basic schools rose to 268 (72 junior basic and 196 senior basic). In the year 1960, the number of schools rose to 330 and the number of students to 1,02,944. In the year 1971-72, the number of basic schools in the district was 365 of which 65 were junior and 300 senior basic schools. Out of these schools, 11 were teaching purely spinning, 219 spinning and weaving, and 62 kitchen gardening and the agriculture. The number of students covered under the basic education in the district during the year 1971-72, was 1,23,035. The details of basic schools with crafts are as under :

Crafts in Schools

Year 1	Purly spinning 2	Spinning and weaving 3	Kitchen gardening and Agriculture 4	Card board modelling 5	Total 6
1947 ..	..	185	8	..	193
1951 ..	..	250	10	..	260
1956 ..	..	256	12	..	268
1961 ..	7	288	35	..	330
1966 ..	..	312	55	..	367
1971-72..	11	292	62	..	365

Source :

Administrative Officer, Kheda District Panchayat, Nadiad.

1. RAYANOR S. B., *Education in Gujarat* (1854-1954), 1958, pp. 83 to 86.

TRAINING FACILITIES FOR PRIMARY SCHOOL TEACHERS

For qualitative improvement of primary education, it is very necessary that the primary teachers should have good academic and professional qualifications. In this field, the preliminary work was done by Missionary Society in this district, before Independence. The first training college for women was started by the Missionary Society at Borsad in the year 1911. Another College for men named Motibhai Amin Adhyapan Mandir was started at Anand by the Charotar Education Society in the year 1945. In the year 1947, the Government started a Basic Training College for men at Kathlal (Kapadvanj taluka).

Four more training colleges were added after Independence, at Nadiad, Sunav, Bochasan and Limbasi, out of which colleges at Sunav and Nadiad were for training of women teachers. By now there are at present seven training colleges in the district and they admit about 50 students in each class every year.

The details of the training institutions are as under :

Primary Teachers Training Colleges in the District

Sl. No. 1	Name of the Institution 2	Location 3	Year of establishment 4	Men/Women 5	Management 6	Pupils 1973-74 7
1	M. B. Training College for women	Borsad	1911	Women	Private Agency	95
2	Motibhai Amin Adhyapan Mandir	Anand	1945	Men	..	175
3	Government Basic Training College	Kathlal	1947	..	Government	207
4	S. V. Basic Training College	Nadiad	1950	Women	Private Agency	185
5	M. B. Shah Basic Training College	Limbasi	1950	Men	..	81
6	Basic Training College	Sunav	1962	Women	..	140
7	Vallabh Vidyalaya Basic Training College	Bochasan	1964	Men	..	91

Source : Director of Education, Gujarat State, Ahmadabad.

SECONDARY EDUCATION

Secondary education constitutes a vital link between the primary and the college education. Broadly speaking, secondary schools are intended to impart education suitable for pupils in the stage of adolescence.

After Independence, progress of secondary education has been very rapid in the district. The following table shows that considerable progress had been made by the district in the secondary education.

Year 1	No. of Schools 2	Students		
		Boys 3	Girls 4	Total 5
1951	72	16,078	3,396	19,474
1956	80	21,821	5,342	27,163
1961	130	33,942	13,452	47,394
1966	218	52,693	23,501	76,284
1968-69	228	58,911	27,103	86,014
1972-73	293	76,624	39,639	1,16,263

Source : District Education Officer, Nadiad, District Kheda.

The above statement shows a remarkable growth between 1956-1966, when there was an addition of 129 schools and 49,121 students. In the year 1972-73, the number of institutions rose to 293 and that of students to 1,16,263 (76,624 boys and 39,639 girls). It is interesting to note that during the period 1951-72, 221 new schools were added, and the number of students increased was 96,789.

STATEMENT XV-4

The Area per School and the Population Served by Each School is as Under

Sl. No. 1	Name of the taluka 2	Area in sq. km. 3	Population 4	No. of secondary schools 5	Area covered per school sq. km. 6	Population per school 7
1	Mahamadabad	497.0	173,152	24	20	7,214
2	Nadiad	662.8	376,627	49	14	7,846
3	Anand	676.0	399,076	45	15	9,069
4	Petlad	474.1	256,693	30	15	8,556
5	Borsad	609.4	301,054	29	21	10,751
6	Khambhat	1,195.8	221,139	15	85	15,795
7	Matar	577.0	132,094	10	58	13,208
8	Kapadvanj	985.8	269,764	27	36	10,375
9	Vadasinor	552.3	131,513	14	42	10,116
10	Thasra	659.9	190,285	16	41	11,892
District Total		7,194.0	2,451,387	259	28	9,464

Source : District Education Officer, Nadiad, District Kheda.

It is interesting to note that about 70.00 per cent of the schools are located in five talukas, viz., Nadiad, Anand, Petlad, Borsad and Kapadvanj. The highest number of secondary schools 49 is found in Nadiad taluka, and the lowest in Matar taluka is 10. From the above table, it is clear that in Matar taluka area covered per secondary school is 58 sq. km., while in Nadiad, Anand and Petlad talukas, the area covered per school is 15 sq. km. In the rest of the talukas of the district, area covered per school exceeds 20 sq. km. It is noteworthy that Khambhat taluka stands last where the area covered per school is 85 sq. km., as the number of schools is less. In the talukas of Mahamadabad, Nadiad, Anand and Petlad the population covered per school is below 10,000, while in the rest of the talukas, population covered per school is above 10,000.

POST BASIC SECONDARY SCHOOLS

In 1973-74 there were 2 Post Basic Secondary Schools in the district. The table given below gives details of these schools.

Sl. No. 1	Location 2	Taluka 3	Year of establishment 4	Management 5	No. of Students (1973-74)		
					Boys 6	Girls 7	Total 8
1	Dethali	Matar	1955	Gujarat Vidya-pith, Ahmadabad	79	10	89
2	Salol	Borsad	1970	Mahikantha Seva Mandal, Salol	79	10	89

Source : District Education Officer, Nadiad, District Kheda.

Multipurpose Schools

Multipurpose school is a high school with provision for variety of courses from which students can choose according to their psychological and vocational needs.

The Government of India had appointed the Secondary Education Commission in 1952, under the Chairmanship of Dr. A. Lakshmanswamy Mudaliar, to review the entire field of secondary education and made recommendations. One of the important recommendations of this commission was establishment of multi-purpose schools as a corrective to the existing "Single Track" system. In these institutions the provision is also made for subjects like fine arts, technology, commerce, agriculture, home-science in addition to the general subjects, in the curriculum. In the year 1971, there were 10 such schools in the district with 7,959 students.

Different streams introduced in Multi-purpose schools are as under :

Type of Streams	No. of Schools
Commerce	5
Agriculture	3
Home Science	1
Technical	1
Total	10

PHYSICAL EDUCATION

Physical education in the modern sense had its beginning after 1854. There were isolated gymnasia conducted by individuals interested in physical training. A band of revolutionaries of 1857, who had settled in Gujarat started a movement of physical education at Vadodara. Freedom Movement created enthusiasm among the young men to do something for the country, and physical education was one of the most important activities for them.

In the district, late Shri Ambubhai Purani had started one gymnasium at Nadiad in the year 1917. In the year 1918, late Shri Motibhai Amin also started one gymnasium at Anand, and made physical education compulsory for the students of the D. N. High School and the boarding. In the year 1919, the Charotar Education Society started the activities of *Vir Sammelan* and thus the physical education activities received importance. As a result, a number of gymnasia came into existence at Kapadvanj, Bhadran, Sojitra, Dharmaj, Virsad, etc. Credit for this extensive activities of physical education goes to Chhotubhai Purani, Ambubhai Purani, and Ravajibhai Patel. Since 1925, sports competitions were regularly held in a number of towns and cities of Gujarat. From 1927, Ravajibhai Patel started a movement of organising summer camps for physical education with co-operation of the Charotar Education Society.

At present, physical education is a curricular subject in general but a compulsory subject in the primary and secondary schools of the State. At primary level, one period per day is allotted to physical education in the State. From 1974 Physical Education has been introduced as a voluntary subject at the S. S. C. Examination. The teacher to be qualified in physical education is required to be C.P.Ed. (under graduate) or D.P.Ed. (graduate degree). The details of these activities and schemes sponsored in the district are described below :

The district sports were organised by the District Sports Council. The District Collector was the President and the District Education Officer was the Secretary of the Council.

After 1973, this pattern is discontinued and sports competitions are now held twice in a year as autumn and winter meet under the auspices of All India Schools Games Federation under the control of the District Sports Council. It is a statutory body framed (constituted) by the Government of Gujarat, whose chairman is the District Education Officer, and secretary is Government servant under the control of the Director of Youth and Cultural Activities, Gujarat State.

Sports competitions are held twice (the autumn meet and the winter meet) a year at the district, the State level and at the National level for secondary schools only. Generally sports competitions are held at Taluka (Sept-Oct.), District (Nov.-Dec.) and State (January). The competitions are held for three categories of participants, viz., (1) Age-group 1-15 years, (2) Age-group 15-18 years, and (3) Open for all.

In the year 1972-73, in all 8,806 students participated at taluka level sports competitions. Out of these, 547 participated at district level competitions. 4 participants were sent at the State level competitions held at Gandhinagar in the Year 1972-73. 2 students were sent for the national sports competitions.

There are also some non-official agencies working in the field of physical education like the Nadiad Vyayam Pracharak Mandal, Nadiad and the Charotar Education Society.

Some of the Vyayam Shalas in Kheda district are as under :

1. D. V. S. Sarvajanik Vyayam Mandal, Nadiad.
2. J. P. Kantharia Sarvajanik Kanya Vyayam Mandir, Nadiad.
3. Charotar Education Society Vyayam Mandir, Anand.
4. Tilak Vyayam Mandir, Vaso.
5. Vyayam Mandir, Bhadran.
6. Sarvajanik Kanya Vyayam Mandir, Petlad.
7. Harshnath Vyayam Mandir, Virsad.
8. Motilal Nehru Vyayam Mandir, Alina.
9. Sarvabhavan Sarvajanik Vyayam Mandir, Petlad.
10. M. S. Patel Vyayam Mandir, Nar.
11. V. N. Vyayam Mandir, Dharmaj, and
12. Kanya Vyayam Mandir, Vaso.

HIGHER EDUCATION

Before Independence, in the field of higher education, the progress of the district was very slow, as the main occupation in the district was agriculture. The students seeking higher education used to go to Ahmadabad or Vadodara

or Bhavnagar where good hostel facilities were available. Afterwards, 3 colleges were opened each at Petlad, Nadiad and Vallabh Vidyanagar. At Petlad, a college teaching Arts subjects was opened in 1946. Science section was added to it in the year 1947. At Nadiad, the Science College was started first in 1947. Thereafter in the year 1948 the Arts section was opened. In the year 1947 a College for Agriculture was also started at Anand with the donations from Sheth Mansukhlal Chhaganlal and Sheth Maganlal Goenka.

It is interesting to note the activities of Vallabh Vidyanagar, a growing centre for educational activities in various fields. From an humble beginning of Arts, Science and Agriculture Colleges, Vallabh Vidyanagar has become one of the most outstanding centres of learning, not only in Gujarat but in the whole of India. It is a living monument of Sardar Vallabhbhai Patel. The credit for this goes to late Shri Bhailalbhai D. Patel, popularly known as Bhaikaka and to late Shri Bhikhabhai K. Patel, founder of this town ship and also to Shri H. M. Patel, I. C. S. (Retd.). They planned to establish a centre of education where educational facilities are provided to villagers near their homes from primary school to the university post-graduate studies and that also could serve as a laboratory for the study of rural problems. Shri Bhaikaka, hoped to develop this centre into a model town. To fulfill this dream, two institutions, were established in 1945 :

- (i) The Charutar Vidya Mandal for educational activities.
- (ii) The Charutar Gramoddhar Mandal for industrial and reconstructional activities.

Right from its earliest establishment, the ideas and methods have been unique. Co-operation of people was sought at every stage of its development. The progress of the centre has been phenomenal, during a short span of about 25 years.

In the year 1958, when Sardar Patel University was established, the number of institutions affiliated to it was 6 with 4,657 pupils, (including two sections of Post-graduate classes in Science and Commerce). In the year 1972-73, the number of institutions rose to 17 with 11,305 students, showing 183.33 per cent rise in the number of institutions and 142.75 per cent in the number of students. In the year 1973, 17 colleges teaching various subjects were affiliated to it.

Besides this University, some colleges of this district are also affiliated with the Gujarat University, Ahmadabad, and Agricultural University, Ahmadabad. Out of 46 colleges in the district, 26 are affiliated to the Gujarat University and 3 to the Gujarat Agricultural University.

Among these educational institutions 18 colleges are teaching Arts subjects, 12 colleges are for Commerce, 8 for Science, 7 for Education and 4 are Law Colleges. Besides these, there are institutions imparting training in specialised subjects like English, Technical subjects, Pharmacy, Home-Science, Dairy-Science, Agriculture, Veterinary-Science and Animal Husbandry. The total number of these specialised institutions is 8.

Recently the Sardar Patel University has started I. A. S. Training Centre at Vallabh Vidyanagar.

Out of the total number of colleges in the district, there were 29 colleges/sections teaching professional subjects like : Law, Commerce, Medicine, Pharmacy, Agriculture, Engineering, Education, etc., while the rest are teaching non-professional subjects like Arts, Science, etc.

The following statement shows the details of these institutions and colleges in the district :

STATEMENT XV-5
Colleges in the Kheda District

Sl. No.	Location	Name of the College	Year of establishment	Whether housed in its own building or in a rented building	Management	Hostel facilities	Subjects taught	No. of students			
								1971-72		1972-73	
								Males	Females	Total	Total
1	2	3	4	5	6	7	8	9	10	11	12
Affiliated Colleges : Gujarat University											
<i>Nadiad (T.)</i>											
1	Nadiad	Jethabhai Jhaverbhai College of Science	1947	rented	The Nadiad Education Society, Nadiad	Yes	Science	894	202	1,096	831 158 989
2	Nadiad	C. B. Patel Arts College	1948	own	"	Yes	Arts	376	313	689	349 381 739
3	Nadiad	Shri Mohanlal Shantilalchand Bhagat and Chandulal Sanilalchand Sonawala Law College	1959	own	"	Yes	Law	190	26	216	191 21 212
4	Nadiad	Shri I. V. Patel College of Commerce	1960	...	"	Yes	Commerce (B.Com. and M.Com.)	1,095	148	1,243	1,280 186 1,466
5	Nadiad	Univ.-Trust Surajbhai Mahila Arts College	1966	own	Sardar Vallabhbhai Samaj Seva Trust, Nadiad	No	Arts	..	231	231	196 196

STATEMENT XV-5—contd.

Sl. No.	Location	Name of the College	Year of establishment	Whether housed in its own building or in a rented building	Management	Hostel facilities	Subjects taught	No. of students			
								1971-72		1972-73	
								Males	Females	Total	Females
1	2	3	4	5	6	7	8	9	10	11	12
17	Khambhat	Smt. B. C. J. College of Education	1968	own	Shri Khambhat Taluka Sarvajanik Kela vani Mandial, Khambhat	No	B. Ed.	101	14	115	78
18	Khambhat	Shri M. N. College of Pharmacy	1970	own	..	Yes	Diploma and Degree	156	1	157	196
19	Khambhat	Shri Chimanlal Vaidyal Shah Law College	1970	own	..	Yes	Law	40	7	47	51
Kapadvanj (T.)											
20	Kapadvanj	Shah K. S. Arts College & B. M. Parekh Commerce College	1961	own	Kapadvanj Kelavani Mandial, Kapadvanj	Yes	Arts	140	109	249	159
			1964	own	..	Yes	Commerce	292	7	299	328
21	Kapadvanj	Parekh Brothers Science College	1961	own	..	Yes	Science	159	34	193	139
Vadasinor (T.)											
22	Vadasinor	C. and S. H. Desai Arts and Smt. L. K. L. Doshi Commerce College	1969	rented	Shri Balasinor Vidya Mandial, Vadasinor	Yes	Arts	107	52	159	..
							Commerce	142	3	145	..

DISTRICT GAZETTEER : KHEDA

STATEMENT XV-5—contd.

Sl. No.	Location	Name of the College	Year of establishment	Whether housed in its own building or in a rented building	Management	Hostel facilities	Subjects taught	No. of students			
								1971-72		1972-73	
								Males	Females	Total	Females
1	2	3	4	5	6	7	8	9	10	11	12
Thasra (T.)											
23	Dakor	Bhavan's College, Dakor	1962	..	Bharatiya Vidya Bhavan, Bombay	N.A.	Arts Science	..	..	..	..
24	Dakor	Bhavan's Jaghodaben College of Commerce	1970	rented	..	Yes	Commerce	244	28	272	374
Mahamadabad (T.)											
25	Kheda	Arts and Commerce College	1964	own	N.A.	N.A.	..	..	..	..	..
26	Kheda	Secondary Teacher's Training College	1968	own	Ahmadabad Kelavani Mandial, Trust	Yes	..	85	25	110	82
Sardar Patel University Affiliated Colleges :											
27	Vallabh Vidyanagar	Vithalbhai Patel Maha Vidyalaya	1947	own	Charutar Vidya Mandial, Vallabh Vidyanagar	Yes	Science	1,034	140	1,174	1,132
28	Vallabh Vidyanagar	Bhikhabhai Jivabhai Vaniya Maha vidyalaya	1951	own	..	Yes	Commerce	1,095	119	1,214	1,169

STATEMENT XV-5—*contd.*

Sl. No.	Location	Name of the College	Whether housed in its own building or in a rented building	Year of establishment	Management facilities	Hostel facilities	Subjects taught	No. of students					
								1971-72			1972-73		
								Males	Females	Total	Males	Females	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
29	Vallabh Vidyannagar	Nalini and Arvind Arts College	own	1959	..	Yes	Arts	1,020	401	1,421	1,067	419	1,486
30	Vallabh Vidyannagar	M. B. Patel College of Education	own	1960	Sardar Patel University	Yes	B. Ed., M. Ed., Ph.D.	323	143	466	364	114	478
31	Anand	Anand Arts College	Rented	1963	Shri Ramkrishna Seva Mandal, Anand	Yes	Arts	1,219	290	1,509	1,335	230	1,565
32	Vallabh Vidyannagar	Rajratna P. T. Patel Science College	own	1961	Charutar Vidya Mandal, Vallabh Vidyannagar	Yes	Science	733	96	829	659	94	753
33	Vallabh Vidyannagar	T. V. Patel Arts College	rented	1964	..	Yes	Arts	746	254	1,000	744	204	948
34	Anand	Anand Law College	rented	1964	Shri Ramkrishna Seva Mandal, Anand	Yes	Law	183	7	190	240	11	251
35	Vallabh Vidyannagar	H. M. Patel Institute of English	1965	Charutar Vidya Mandal, Vallabh Vidyannagar	Yes	B. Ed., M. Ed.	..	226	94	320	209	104	313

DISTRICT GAZETTEER : KHEDA

STATEMENT XV-5—*contd.*

Sl. No.	Location	Name of the College	Year of establishment	Whether housed in its own building or in a rented building	Management facilities	Hostel facilities	Subjects taught	No. of students					
								1971-72			1972-73		
								Males	Females	Total	Males	Females	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
36	Anand	M. B. Patel Science College	1967		Charotar Education Society, Anand	Yes	Science	223	69	292	179	67	24
37	Anand	Anand Commerce College	1970	rented	Shri Ramkrishna Seva Mandal, Anand	Yes	Commerce	203	21	224	309	22	331
38	Anand	C. P. Patel Commerce and Arts College	1970-71 (Comm. 1971-72)	rented	Sardar Patel Education Trust, Anand.	No	Arts	164	8	172	296	21	317
39	Anand	N. S. Patel Mahila Arts College	1970	rented	Sardar Patel Education Trust, Anand	No	Arts	297	18	315	371	40	411
40	Anand	New Mahila Arts College	1971	rented	Shri Ramkrishna Seva Mandal, Anand	Yes	Arts	..	398	398	..	535	535
41	Vallabh Vidyansagar	Home Science College	1971	own	Charutar Vidyada Mandal, Vallabh Vidyansagar	Yes	Home Science	..	113	113	..	104	104
								50	50	50	..	110	110

Sl. No.	Location	Name of the College	Whether housed in its own building or in a rented building	Year of establishment	Management	Hostel facilities	Subjects taught	No. of students					
								1971-72		1972-73			
								Males	Females	Total	Males	Females	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
42	Anand	N. H. Patel College of Education	1971	rented	Sardar Patel Education Trust, Anand	No	B. Ed.	63	47	110	87	56	143
43	Anand	Birla Vishvakarma Mahavidyalaya (Engineering)	1948	own	Charutar Vidya Mandal	Yes	Engineering	1,419	7	1,426	1,361	6	1,367
Gujarat Agricultural University Affiliated Colleges :													
44	Anand	B. A. College of Agriculture	1947	own	Gujarat Agricultural University, Anand	Yes	B. Sc. (Agri.), M. Sc. (Agri.), Ph.D.	738	1	739	788	1	789
45	Anand	Dairy Science College	1961	own	Government of Gujarat	Yes	B. Sc. (Dairy Technology)	116	..	116	116	..	116
46	Anand	Gujarat College of Veterinary Science and Animal Husbandary	1964	own	Government of Gujarat	Yes	Veterinary Science and Animal Husbandary	161	..	161	165	..	165

TECHNICAL EDUCATION

In the past, an urgent need was not felt for technical education as the district has mainly dependent on agriculture. Professional education was imparted through a system of apprenticeship, which trained an individual in the technique of production handed down from father to son. Such education was hereditary and traditional. With the adoption of modern mechanised means of production, the need for imparting professional and technical education was keenly felt. Such facilities during the pre-merger days were very meagre. Systematic attempts were, therefore, required to achieve the goal of planned economic development by making additional provision for scientific and technological studies and research under the Five Year Plans to meet the growing demand of industry for technically qualified personnel. In the year 1972-73, there were 2 Engineering Colleges, 1 Polytechnic and 10 Technical High Schools (including Multipurpose schools) in the district. Details of these institutions are as under :

STATEMENT

Technical

Sl. No. 1	Name of the Institutions 2	Location 3	Year of Estab- lishment 4
1	Birla Vishvakarma Maha Vidyalaya	Vallabh Vidyanagar	1948
2	Dharmasinh Desai Institute of Technology	Nadiad	1968
3	B. & B. Polytechnic	Vallabh Vidyanagar	1958
4	P. N. Technical High School	Kapadvanj	1951
5	V. N. Technical High School	Dharmaj	1959
6	S. Z. Multipurpose High School	Khambhat	1960
7	V. B. Multipurpose High School	Sumav	1934
8	M. U. Patel High School	Vallabh Vidyanagar	1963
9	Dharmasinhji Desai Technical High School	Nadiad	1965
10	C. M. Patel High School	Khambholaj	1967
11	Vallabh Vidyanagar Technical Institute	Vallabh Vidyanagar	1956
12	G. J. Sharda Mandir, C/o. M. U. Patel High School, Vallabh Vidyanagar	Vallabh Vidyanagar	1963
13	St. Marry's High School	Nadiad	1967

XV-6

Institutions

Subjects taught in the institution 5		No. of students 1972-73 6	
A. Post Graduate		B. Degree : 1965	
1 Civil Engineering	2 Mechanical Engineering	3 Electrical Engineering	13 1,365
A. Degree		B. Diploma	
1 Chemical Engineering		1 Chemical Engineering	319 114
Diploma			519
1 Civil Engineering	2 Mechanical Engineering	3 Electrical Engineering	
4 Construction and Structure	5 Agro-Industrial Engineering		
A. S. S. C. E. Std. VIII to XI		B. Certificates	
1 Workshop Technology Grade-I	2 Geometrical and Machin Drawing	3 Elements of Mechanical and Electrical Engineering	280 81
A.1 W. T. Grade-I		B.1 Wireman	
2 G. & M. D.	3 Elements of Mechanical and Electrical Engineering	2 Electrician	
A.1 W. T. Grade-I		B.1 Wireman	
2 G. & M. D.	3 Elements of Mechanical and Electrical Engineering	2 Electrician	128 36
A.1 W. T. Grade-I		B.1 Wireman	
2 G. & M. D.	3 E. & E. Engineering	2 Electrician	316 96
A.1 W. T. Grade-I		B.1 Wireman	
2 G. & M. D.	3 E. M. & E. Engineering	2 Electrician	171 122
A.1 W. T. Grade-I		B.1 Wireman	
2 G. & M. D.	3 E. M. & E. Engineering	2 Electrician	203
A.1 W. T. Grade-I		B.1 Wireman	
2 G. & M. D.	3 E. M. & E. Engineering	2 Electrician	168 64
A.1 W. T. Grade-I		B.1 Wireman	
2 G. & M. D.	3 E. M. & E. Engineering	2 Electrician	148
A.1 W. T. Grade-I		B.1 Wireman	
2 G. & M. D.	3 E. M. & E. Engineering	2 Electrician	133
A.1 W. T. Grade-I		B.1 Wireman	
2 G. & M. D.	3 E. M. & E. Engineering	2 Electrician	10
A.1 W. T. Grade-I		B.1 Wireman	
2 G. & M. D.	3 E. M. & E. Engineering	2 Electrician	46
A.1 W. T. Grade-I		B.1 Wireman	
2 G. & M. D.	3 E. M. & E. Engineering	2 Electrician	

COURSES IN COMMERCE

Commercial education in the State is provided through three types of institutions, (1) the Commerce Colleges, (2) the Commercial High Schools and the Multipurpose Schools with Commerce as a course and (3) the Commercial institutions.

The Commerce Colleges are affiliated to the University and provide a three year degree course after pre-Commerce. There are eleven such Colleges in the district each at Vallabh Vidyanagar, Nadiad, Petlad, Khambhat, Borsad, Mahudha, Kapadvanj, Kheda, Dakor and two colleges at Anand.

The commercial high schools and multipurpose schools provide a pre-vocational courses of commercial education along with general education. These schools provide instructions in such courses as short-hand, type-writing, accountancy and secretarial practice. The course extends over four years, standards VIII to XI and has a general popularity as a multi-purpose course in secondary schools. They are listed below :

- (1) The Vijay High School, Khambhat,
- (2) The V. N. High School, Dharmaj (Petlad taluka),
- (3) Sheth M. R. High School, Kathlal (Kapadvanj taluka),
- (4) The Balasinor High School, Vadasinor,
- (5) The D. N. High School, Anand,
- (6) The J. M. Desai High School, Thasra,
- (7) The M. K. M. High School, Mahudha (Nadiad taluka),
- (8) The Sardar Patel Vinay Mandir, Vasad (Anand taluka),
- (9) The S. Z. Waghela School, Khambhat,
- (10) The Sharda High School, Anand,
- (11) The C. N. Vidyalaya, Kapadvanj,
- (12) Sheth M. P. Municipal High School, Kapadvanj,
- (13) The Sardar Patel High School, Nadiad, and
- (14) The Sardar Patel High School, Karamsad, (Anand taluka).

Over and above these there are 20 private commercial institutions conducting classes in type-writing, short-hand, secretarial practice, accountancy, etc.

WOMEN EDUCATION

Before Independence, education of girls did not make much progress. In 1865-66, there were 4 girls' schools in the district of Kheda. It rose to 13 in 1873-74, the number decreased to 10 in 1877-78. The total number of girl students was 309 in 1865. This number rose to 517 in 1873, and 765 in 1875. Out of these 10 schools, 6 were in towns, each at Kapadvanj, Kheda, Nadiad, Mahudha, Umreth and Borsad and four were in the villages of Thasra, Mahamadabad, Anand and Borsad talukas.¹ In Petlad the first girls' school was opened in 1875, by the ruler of the former Baroda State. In 1881, there were two girls' schools each at Petlad and Sojitra. The number of girl students in both these schools was 125. In 1885, Maharaja Sayaji Rao III stressed the importance of female education in a memorandum which ran as under..... "It was the declared policy of the Department of Education (Baroda State) to open schools for girls in all places where a sufficient number of students was coming forth and where sufficient number of girl students were not forthcoming, girls under 12 years of age were admitted to the boys' school. Special prizes and scholarships were also given."²

During this period the state of education and female literacy in the Cambay State, was very low. This can be seen from the Census returns of 1872, out of 33,372 total Hindu females, only 23 were able to read or write or being taught.³ In Balasinor State in the year 1878-79 there was one girls' school.⁴ During this period separate schools for girls were started only at the primary level.

In 1931, in the Kheda district the number of girls' schools (primary) was 15. The number of girls taking primary education during this year was 16,718. Out of these 3,868 were in girls' schools. On the eve of Independence the number of schools had gone up to 34 and the number of students to 9,472 in girls' schools. The total number of girls taking primary education during this period was 27,590.

The progress of female education in the primary section was very remarkable after Independence. This can be clearly seen from the following table.

1. CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panch-Mahals*, (1879), p. 134.

2. *Gazetteer of the Baroda State*, Vol. II, (1923), p. 314.

3. *Gazetteer of the Bombay Presidency*, Vol. VI, *Rewakantha, Narukot, Cambay and Surat*, 1881.

4. *Ibid.*

Primary Education

Year	No. of girls' schools and students		No. of girls studying in mixed schools	Total No. of girls students in primary schools
1	(a)	(b)	4	5
1951-52	50	15,966	45,374	61,340
1956-57	75	23,281	49,403	72,684
1961-62	80	29,450	62,407	91,857
1966-67	87	31,734	73,026	104,760
1971-72	86	30,944	74,144	105,088

Source : Administrative Officer, Kheda District Panchayat, Nadiad.

It can be seen from the above table, that there is a rapid expansion in the number of primary girls' schools which rose from 50 in 1951-52 to 86 in 1971-72. During the same period, the number of girls studying in mixed schools rose from 45,374 to 74,144. The total number of girls taking primary education rose from 61,340 to 105,088 (*viz.*, increase of 71.32 per cent) during the period from 1951-1971. These facts clearly indicate that reluctance of the parents to send their daughters to the mixed schools is gradually disappearing. However, separate primary schools for girls still hold the fort.

In the field of secondary education, the progress of female education was comparatively less. One of the factors responsible for this was the absence of separate secondary schools for girls in the district. In the earlier stage separate schools for girls were started only in the primary sector. As such, by and large, girls discontinued their studies after completion of the primary stage. Early marriage was also another important factor for discouraging girls taking secondary education. Up to 1935, there was no separate high school for girls in the district. Vithal Kanya Vidyalaya, Nadiad, was the first girls' secondary school started in the year 1935 in the district. On the eve of Independence there were 3 such schools in the district. The number rose to 10 in the year 1961. In the year 1972-73, the number of girls' schools was 20 with 8,990 students. The total number of girls taking secondary education was 48,629.

At the University level, girls started taking interest very late. In the year 1972-73, there were 3 colleges for women in the district each at Nadiad, Anand and Vallabh Vidyanagar. The college at Nadiad was started in the year 1966. Thereafter New Mahila Arts College at Anand and Home

Science College at Vallabh Vidyanagar were started in the year 1971. In the year 1972-73, the number of females taking higher education was 4,300 in the district.

There were three training Colleges for women teachers in the district for primary education each at Borsad, Nadiad and Sunav.

SOCIAL EDUCATION

In the beginning, the social education was confined to adult education only. In this district, pioneer work in the field of adult education was started in the year 1915 at Vaso. For the benefit of labourers of Rangshala, a night school at Petlad was started. The night school at Vaso continued its services for 25 years and was managed by Vaso Yuvak Mandal. The teaching aids, books and teachers were provided by the Mandal. In 1937, the Government of Bombay Province having taken interest in spread of literacy, the movement for adult education got momentum. A committee was formed for necessary propaganda work and on the basis and recommendations of this committee, the adult education courses were divided into two classes, the necessary teaching aids and books were provided by the Government. According to this scheme, the social workers conducting such classes were given financial aid to the extent of Rs. 4 for every adult passed in the first test and Rs. 5 for every adult passed in the second test. This night school activity continued upto 1944. After Independence, the movement of adult education was started again with great vigour and force. In the year 1947, under the chairmanship of Shri Kanaiyalal Nathalal Desai, 'Gujarat Pradeshik Praudh Shikshan Samiti' was constituted. Thereafter, for every district, such committees were formed. According to this new scheme, the areas of the district for the purpose of adult education were divided into : (i) Compact areas and (ii) Non-compact areas. In the compact areas, there was a provision for a school for every 10 miles area. It was conducted on an experimental basis. In this district, Thasra was selected as compact area in the beginning and there was considerable success. Thereafter six more compact areas were taken up, namely, Matar, Kapadvanj, Mahamadabad, Khambhat and Vadasinor. In the year 1948, instead of adult education, new term "Social Education" was coined and according to this new scheme, together with literacy drive, the participants were taught basic concepts of cleanliness, health, village panchayat, civics, administration, etc. As it stands now, besides spread of literacy, social education is a movement for preparing citizens who can participate with understanding in the activities around them and develop their latent faculties. In order to achieve these wide objectives, the programme of social education needed to be oriented to local needs and conditions as well as to the cultural level of the particular locality. In view of these objectives since 1970, with the co-operation of the UNESCO, a novel programme for farmers was launched

by the Gujarat State. According to this new scheme, the farmers are made literate with their daily occupational activities, giving them basic knowledge and know-how of modern agricultural techniques. Thus through use of new tools and experience they are made literate. Such farmers training centres are organised and conducted by the Agriculture Department. This programme is supported by rural broadcasting section of All India Radio, through which the problems and technical knowledge of elementary agricultural operations together with the experience of progressive cultivators are brought to the knowledge of other farmers.

The Education Department also conducts its activities in co-ordination with other departments. In this district, this new oriented programme of functional literacy was first launched from December, 1973 at Anand.

Efforts are made to promote adult education in the district. The progress made so far is as follows :

Sl. No.	Year	No. of social education classes	Adult made literates
1	2	3	4
1	1955-56	28	782
2	1961-62	20	631
3	1966-67	11	516
4	1971-72	2	71

Source : Administrative Officer, District Panchayat, Kheda, Nadiad.

From the above table, it can be seen that from the year 1966-67 onwards, the movement of social education has lost its momentum.

ORIENTAL EDUCATION

Sanskrit—Special attention was given to the learning of Sanskrit in the former Baroda state. In 1915, Maharaja Sayajirao-III, started State level institution for education of *purohits*, *puraniks*, *pandits* and *shastris* to meet the social needs of the times. The special features of the provision for Sanskrit learning was known as "Shravan Mas Dakshina Examination," which attracted candidates from far off places. Since then, advanced courses in several branches of Sanskrit learning were prescribed. A number of scholarships were given to the scholars studying at the institution. Oriental schools engaged in imparting education in Sanskrit were a fixed sum

as grant. In the Kheda district is the year 1860, one Sanskrit Pathshala was established at Petlad by the former Baroda State. Before merger it was managed by the Baroda State. At present it is managed by Gujarat State. The details of these Sanskrit Pathshalas at Petlad, Nadiad and Dakor are as under :

Sl. No.	Name of the institution	Year of establishment	Management	No. of students 1973
1	2	3	4	5
1	Rajkiya Sanskrit Pathshala, Petlad	1860	Govt. of Gujarat	32
2	Shri Narayan Sanskrit Maha-Vidyalaya, Petlad	1922	Raj Ratna Narayanbhai Trust	37
3	Khadayata Sanskrit Pathshala, Nadiad	1920	Board of the Trustees	36
4	Dakor Sanskrit Pathshala, Dakor	1917	Board of the Trustees	50

Source : District Education Officer, Nadiad.

Gyan Bhandars

As a result of efforts made by some British officers having scholastic bent, modern library movement was started in st. 1900 (1844 A. D.). Before that the collection of books and manuscripts was made by individual scholars or religious centres like temples and *upashrayas*. The greatest contribution of such collection during the mediaeval period was made by Jain scholars who had collected books not of their own religious sects but of other important Hindu and Buddhist religions. These books were handwritten and illustrated with colourful pictures. Others were written on metal-plates and on palm-leaves. Normally, ink they used was black but there were often handwritten manuscripts written in silver or golden ink. After 500 to 600 years, of their writing and drawing, the colours are still fresh without having faded. In Kheda district, there are a number of Jain Bhandars in which manuscripts of great value are collected. Besides Khambhat town, such Bhandars exist at Kheda, Kapadvanj, Nadiad and Mahudha. In Khambhat, Jain Bhandar of Shantinath is well-known for collection of palm-leaves manuscripts. In the year 1882-83 A. D., a foreign scholar Dr. Pitterson had visited this Bhandar and had prepared a list of manuscripts in his report. Munishri Punyavijayji, a Jain scholar prepared a list of collection of manuscripts of this Bhandar. Vedic manuscripts were mostly under the possession of temple authority or individual scholars.

In Khambhat town, there are 4 Jain Bhandars.

- (i) Shri Shantinath Tadpatriya (palm-leaves) Jain Bhandar,
- (ii) Shri Samrat Vijayanemisuriji Maharaj-no-Bhandar,
- (iii) Jain Sadhu Shri Nitivijayji Maharaj's Bhandar, and
- (iv) Pujyaji-no-Bhandar.

From the point of view of number of books, Suri Samrat Granth Sangraha, stands first. In Shantinath Tadpatriya Bhandar, there are 291 manuscripts written on palm-leaves, of which a number of them are decorated with colourful paintings. From literary point of view, it is very useful for research work, as there are a number of very old manuscripts. There are some books written between 12th to 15th centuries of *Vikram Samvata*. Of these books, there are Jain scriptures, stories and grammar. Dharmabhuday Mahakavya is well preserved here. In Shri Samrat Vijayanemisuri Maharaj's bhandar, there are about 20,000 handwritten manuscripts, most of which are written on paper. The third Bhandar of Shri Nitivijayji Maharaj has 5,000 Jain religious books. The manuscripts written in *Vikram Samvat* 1232 on paper is preserved in this Bhandar. In this Bhandar manuscripts written in golden ink and illustrated with colourful pictures are well preserved. Besides these, three are also Shri Shantilal Manilal's collection written during the 20th century on palm-leaves and Kalpasutra written in silver ink and number of Navsmarna's copies

In Kheda town, there is Shri Sumatiratna Suri's Bhandar containing more than 1,000 old books written on paper.

At Nadiad, there is one Bhandar of Munishri Narottamvijayaji and there is also in Sarvajani Library, a number of handwritten books collected by Smt. Dahilaxmi. In this Dahilaxmi collection, there is a Prakrit book of devsurikrit વડમણ્ણ ચરિય written in *Vikram Samvat* 1522. In this collection also there is one chapter on dramatics, " રસ કુંજલ ", with 9 pages written by Shrikanth, who was a respectable poet in the Darbar of Shatrushalya, a ruler of Jamnagar.

At Mahudha, there is one Bhandar of Muniwara Shri Pandit Kirtimunjji. About 1,000 books are collected in this Bhandar. In this collection, books written by Yashovijaya Upadhyaya are in good number.

Kapadvanj

At Ashtapad Mandir, Punch Upashraya and Mithabhai Upashraya, there are 3 small collections of printed books. Among these three,

Ashtapadji-no-Bhandar is comparatively big. In the Bhandar of Ashtapad there is a " નવમર્ણસુત્ર " written with golden ink.¹

SPREAD OF EDUCATION AMONG BACKWARD CLASSES AND TRIBES

The details of literacy and education among Scheduled Castes and Scheduled Tribes for the Urban and Rural areas as returned by the 1971 Census are given below :

	Total population of Scheduled Castes and Scheduled Tribes			Literate and educated persons			Illiterate persons		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
Total	73,473	91,379	82,094	59,264	43,267	15,997	114,209	48,112	66,097
Rural	144,954	76,140	68,814	47,561	34,995	12,566	97,393	41,145	56,248
Urban	28,519	15,239	13,280	11,703	8,272	3,431	16,816	6,967	9,849

Source : District Census Hand book 1971, Kheda District, Part X-C. I.

These figures reveal a low level of literacy among the Scheduled Castes and Scheduled Tribes. The level of literacy among those living in rural areas was very low. The level of literacy if their female is comparatively low. Only 15,997, out of a total of 82,094, i. e., 19.49 per cent were returned as literates against the 28.48 per cent general literacy of female in the Kheda district.

Social conditions prevailing during the period of the East India Company's rule were oppressive and non-congenial to the spread of education among Backward Classes. Because, Hindus treated Harijans with contempt, they did not allow them to integrate with the main stream of social life. Very little effort was, therefore, attempted by the Company for educating Harijans prior to 1884. During this period, the policy adopted was called "Downward Filtration Theory", which restricted the educational efforts of the Company to the upper classes only. This neglect of education of Harijans was compensated to some extent by the efforts of the Missionaries. They had already made some headway in the field of education of Harijans before newly established Department of Education could do anything. During this period

1. SHAH P. C. AND SHAH C. P., *Charotar Savrasangraha* (Gujarati), Part I, 1954.

(1854-1902), missionary schools and some indigeneous schools to some extent provided educational facilities to the Backward classes.¹

For the Education Department there were two alternatives, either to open the special school for Harijans or to throw open all Government schools to the Harijan students. But because of strong opposition from upper classes, the department could do very little in the matter of providing facilities to the Harijan pupils in the common schools. In the Kheda district, for instance, insistence of the Governmental efforts to admit Harijan boys "led to five of six large schools being closed for years, to the huts and crops of the depressed class people being burnt in one village and to imposition of heavy punitive post on that village for two years." Such instances were very common during this period. Inspite of the difficulties, a fair amount of progress was made in the field of Harijan Education. This was due to the provision of separate schools for Harijans and to the firm policy of the department in insisting that all public schools should be open to all communities. According to the *Administration Report of Balasinor State* (1915-16), there was one M. E. Mission *chamar* school at Vadasinor. Over and above, awakening of the people by nationalist leaders and social reformers also created a climate of sympathy and justice. During this period, Government followed a fairly liberal policy of encouragement to the education of the Harijans. The greater importance was placed on admission of Harijans boys to the common schools and considerable success was achieved in Bombay province. The Harijan boys generally had to sit apart from the other pupils and were not allowed to share the common activities of the school. The period (1902-21), was note worthy, as during this period good progress in this field was achieved. The methods employed to encourage the spread of education among the Harijans were (i) exemption from fees, (ii) grant of scholarship or other precursory assistance, (iii) provision of hostel, (iv) grant at more liberal rates to private schools engaged in the work, and (v) training of Harijan teachers.

Awakening among the caste Hindus to do away with the stigma of untouchability created favourable conditions promoting education for Backward Classes. The Servants of India Society, Poona had done useful work in spreading the education among the Backward Classes. Shri Amratlal Thakkar, popularly known as Thakkar Bapa joined this society and he was mainly responsible for the spade work in this field in Gujarat. In 1924 the Gujarat Antyaj Parishad was held at Borsad, and Gujarat Antyaj Mandal was established at Ahmadabad. Shree Thakkar Bapa was the President and Shree Indulal Yagnik was the Secretary. Thereafter in the district this Mandal had started one Ashram at Nadiad and three Antyaj schools at Bodal, Pamol and Chhapra villages. During this period Antyaj Seva Mandal

1. NURULAH AND NAIR J. P., *History of Education in India*, (1951), p. 420.

was conducting three Antyaj schools each at Nadiad, Pamol and Vasana. In 1929, one Harijan Ashram was started at Bodal. In the year 1932, the Jilla Harijan Sevak Sangha was established.¹

In 1932, a Backward Class Board consisting of officials, non-officials and a separate Backward Class Department under an I. C. S. officer was created to watch over the interest of all Backward Classes. This Department was reorganised in 1947 and it was divided into five divisions. As a result, an independent Backward Class Welfare Officer came into existence in the district. The former Baroda State also made great contribution in this field, particularly when Sayaji Rao Gaikwad III of Baroda assumed office. He opened 18 special boarding schools for Harijans in his State. The credit for greater contribution for the cause of Harijan education goes to Mahatma Gandhiji and to the Indian National Congress. The Congress became the earnest champion of Harijans. During the period (1937-47), in the Province on assumption of the office (1937-38) the Congress Ministry, also took various steps to spread the education among the Harijans. These measures included, in abolition of special schools, admission to Harijans in common schools in terms of perfect equality, award of scholarships; total or partial exemption from examination fees or grant of subsidies, reservation of seats in educational institutions, special facilities to Harijan children, conduct of special vocational courses in occupations, commonly practiced by Harijans, (like tanning), etc.

After Independence, in the Ex-Bombay State, various steps were taken to encourage education among the Backward Classes. Their pupils were exempted from payment of fees in the upper primary classes. In the lower standards, they got free supply of books, slates, etc. Lump-sum-aid was also given to deserving students. They were also given concessions for the admission in the primary school certificate examination. Secondary and technical education was free to all Backward Class pupils, irrespective of their parents' or gaurdians' income. They were also awarded special scholarships, lump-sum assistance for purchase of books and stationery and they were also granted examination fees. Students were also given room-rent charges for residing in hostels attached to non-Government schools.

For higher education, Backward Class students were also awarded tuition fees, scholarships etc., according to their parents' income. They were also given examination fees, hostel facilities and assistance for purchase of books, stationery, etc. All Backward Class students receive free primary and secondary education. They were also given free education in a number of agricultural and fisheries schools in the Bombay State.¹

1. First Five Year Plan, Bombay State, Kaira District, (1951-52 to 1955-56).

In 1951-52, there were six Backward Class hostels in the district. During the same period, there were 21,310 Backward Class students studying in primary schools in the district. During the First Five Year Plan, four more hostels were added. Out of these, two were for girls each at Kheda and Bodal (Borsad taluka) and eight were located at different places of the district each at Kheda, Matar, Nadiad, Vadasinor, Mahemadabad, Bochasan (Borsad taluka), Borsad and Petlad.¹

After the formation of the Gujarat State, these schemes were also continued in the State.

A brief description of some of the main schemes for promoting education among the Backward Classes is given below.

Concession in fees, etc.

(a) Primary as well as secondary education is free to all classes of the students. In addition, the Backward Class students studying in std. VIII to XI are given annual scholarships ranging from Rs. 60 to Rs. 90. They are also given examination fees for appearing at the S. S. C. Examination and scholarships are also given so as to defray the expenditure on books and stationery, on statutory-cum-poverty basis to Backward Class students.

Under the Government of India scheme for the award of scholarships to the Backward Class students for the post-S. S. C. Examination studies, the State Directorate of Social Welfare awards scholarships to eligible students for prosecuting post-Secondary School Courses. The amounts of scholarship vary from Rs. 27 to Rs. 42 per month per student according to the subjects offered (Arts, Science, Medical, Engineering, etc.) and their attendance and also whether they are staying in hostels or are day scholars. The scheme is being administered by the State Government since 1959-60.

With a view to facilitating the admission of the students of the Backward Classes to various courses in institutions providing higher education and in hostels attached to them, Government has reserved certain percentage of seats for them in these educational institutions.

Over and above these educational concessions, voluntary agencies conducting Backward Class hostels are granted financial assistance.

During the year 1972-73, there were 20 hostels for the students of Backward Classes in the district, viz.,

1. Biji Panchvarshiya Yojana, Bombay State, Kheda Jillo, 1959.

- (1) Ravjikaka Kanya Chhatralaya, Kheda,
- (2) Acharya Gidvani Chhatralaya, Mahemadabad,
- (3) Thakkar Bapa Kanya Chhatralaya, Bodal (Borsad taluka),
- (4) Kalyan Chhatralaya Salol (Borsad taluka),
- (5) Vidyarthi Chhatralaya, Ramnagar (Borsad taluka),
- (6) Vasant Chhatralaya, Ramnagar (Anand taluka),
- (7) Adarsh Chhatralaya, Kheda (Khambhat taluka),
- (8) Vallabh Vidyalaya Chhatralaya, Bochasan (Borsad taluka),
- (9) Navjivan Chhatralaya, Navagam (Matar taluka),
- (10) Rastriya Vidyarthi Chhatralaya, Dakor (Thasra taluka),
- (11) Sanskar Mandir, Vadasinor,
- (12) Kanya Chhatralaya, Vadasinor,
- (13) Kanya Chhatralaya, Bharel (Borsad taluka),
- (14) Vatrak Khedut Vidyalaya, Nenpur, (Mahemadabad),
- (15) Uttar Buniyadi Chhatralaya, Kheda camp, (Mahemadabad taluka),
- (16) Shri V. L. Mehta Kumar Chhatralaya, Khambhat,
- (17) Shri Pachhat Varg Kanya Chhatralaya, Petlad,
- (18) Shri Thakkar Bapa Chhatralaya, Petlad,
- (19) Adarsh Kumar Chhatralaya, Kapadvanj, and
- (20) Sardar Chhatralaya, Nadiad.

There are five Balwadis in the district at present, of which, 2 are at Nadiad, and one each at Umreth, Kapadvanj and Petlad.

During the Third Five Year Plan the amount of financial assistance granted to the Backward Class students is shown as under :

*Financial Assistance given to Backward Class Students
1963 to 1972-73 are as Under*

Year 1	Name of the caste 2	Tuition fees		Examination fees		Scholarships	
		Expendi- ture Rs. 3	Stu- dents bene- fited 4	Expendi- ture Rs. 5	Stu- dents bene- fited 6	Expendi- ture Rs. 7	Stu- dents bene- fited 8
1963-64	(i) Scheduled Castes	129,876	2,132	3,360	226	52,530	978
	(ii) Scheduled Tribes	2,775	125	13	260	4,739	94
	(iii) Denotified Tribes	4,250	348	220	11	1,020	86
	(iv) Nomadic Tribes	7,158	460	240	12	4,620	98
1965-66	(i) S. C.	166,940	2,340	6,148	390	201,009	6,151
	(ii) S. T.	6,792	90	400	20	8,051	134
	(iii) D. T.	10,997	161	318	15	16,506	1,060
	(iv) N. T.	14,156	186	771	32	20,247	930
1968-69	(i) S. C.	225,873	3,011	10,260	513	235,420	4,799
	(ii) S. T.	7,037	88	430	22	5,820	168
	(iii) D. T.	23,068	300	760	38	13,995	348
	(iv) N. T.	19,630	244	700	35	30,690	488
1972-73	(i) S. C.*	90,318	964	4,519	209	53,945	1,016
(In Muni- cipal areas)	(ii) S. T.	2,338	26	120	6	2,900	61
	(iii) D. T.	11,395	172	410	20	6,360	146
	(iv) N. T.	9,143	117	385	18	8,780	193

*Social Welfare Officer, Nadiad, (State-level).

Source : Figures from 1963-64 to 1968-69 extracted from the ' Kheda Jilla Panchayat Darshan', 1970, Nadiad.

EDUCATIONAL MANAGEMENT

In the early stage, the Government and the chiefs were solely responsible for promoting modern education. Later on, conditions began to change, public spirited and enthusiastic persons formed educational societies to promote education of the people. The private enterprise played its part adequately in the field of secondary education in the former Bombay State, as the general policy of the Government of Gujarat was that secondary

education should be conducted by private agencies with financial assistance from the State. The activities of some of the leading educational societies in the district are given below :

(1) Charotar Education Society, Anand

The Charotar Education Society is one of the leading institutions to start all round educational activities in the Kheda district. Shree Bhokhare, the Boarding Superintendent of Petlad Boarding had suggested to start an educational society on the line of the Deccan Education Society of Poona. His suggestion was not accepted for the time being on financial grounds.¹ Later on Shri Ambalal Patel of Sojitra made the same suggestion to Late Shri Motibhai Amin. Shri Motibhai Amin went Poona to get on-the-spot information about the constitution and working of the Deccan Education Society. Thereafter the Charotar Education Society was founded in 1916. The aim of the society was to spread primary, secondary, higher, commercial and technical education in villages and towns of the district.

During the year 1972-73, the following institutions were under its management :

Sl. No. 1	Type of Institution 2	Name of the Institution 3	No. of pupils 1972-73 4
1.	Pre-Primary	Shishu Vihar	398
2.	Primary	Ambalal Balshala	800
3.	Secondary	Dadabhai Navroji High School (boys)	1,346
4.	"	Kasturba Kanya Vidyalaya (girls)	1,100
5.	"	Sardar Vallabhbhai Patel High School	530
6.	"	Mahatma Gandhi Vidyalaya (Co-education)	435
7.	Higher education	Shri M. B. Patel Science College	249
8.	Training College	Shri Motibhai N. Amin Adhyapan Mandir (Primary Training)	178

1. RAJYAGOR S. B., *Education in Gujarat*, (1854-1954), 1958.

Thus, the Charotar Education Society had done yeomen service to the cause of education in the Kheda district.

(2) *Shri Ramkrishna Seva Mandal, Anand*

Shri Ramkrishna Seva Mandal was established in 1955. Since 1972-73, it conducts, the following institutions : (1) The Anand High School, (2) The Anand English Medium School, (3) The Anand Arts College, (4) The Anand Commerce College, (5) The Anand Law College, and (6) New Mahila Arts College.

(3) *The Kapadvanj Kelavani Mandal, Kapadvanj*

The Kapadvanj Kelavani Mandal started its activities with the establishment of Shri Navchetan Vidyalaya at Kapadvanj in the year 1940 with 102 students on its roll. Thereafter the Mandal had started a number of institutions. In the year 1972-73, the following institutions were under its management.

Sl. No. 1	Type of Institution 2	Name of the Institution 3	Year of establishment 4	No. of students 5
1	Pre-Primary ..	Shri Jadavba Shishu Kendra	1967	213
2	" ..	Shri Mugut Bal Mandir	1936	80
3	Primary ..	Shri Navchetan Kishor Mandir	1968	807
4	High School ..	Shri Champaklal Navchetan Vidyalaya. (Multipurpose School)	1940	1,166
5	Technical High School	Shri P. N. Technical High School	1951	..
6	Colleges ..	Shri K. B. Arts, and V. M. Parekh Commerce College	1964	Arts 442 Com. 419
7	" ..	Shri Parikh Brothers Science College	1961	145
8	Chhatralaya ..	Harijan Chhatralaya	1936	58

The Mandal also conducts Shamaldas Hunnar Udyog Shala and M. K. Vidyarthigriha.

(4) *The Nadiad Education Society, Nadiad*

The citizens of Nadiad, who started a Science College in 1947, established the Nadiad Education Society in 1948. Following institutions are under its management :

Sl. No. 1	Type of Institution 2	Name of the Institution 3	Year of establishment 4	No. of students 1973 5
1	High School ..	V. M. Bhagat and S. C. Sonawala High School	1962	450
2	College ..	J. J. College of Science	1947	1,150
3	" ..	C. B. Patel Arts College	1948	..
4	" ..	I. V. Patel College of Commerce	1960	1,510
5	" ..	M. S. Bhagat and C. S. Sonawala Law College	1959	225
6	Hostel ..	Uttarsanda Hostel	1948	..
7	" ..	New Hostel	1963	..
8	" ..	Mahila Hostel	1972	..

(5) *The Balasinor Vidya Mandal, Vadasinor*

The Balasinor Vidya Mandal was established in the year 1968. It conducts Arts and Commerce Colleges. The number of students in Arts section was 436 and in Commerce was 232. There is a hostel facility for the college students.

(6) *Sardar Patel Education Trust, Anand*

This society was established in the year 1969 to promote higher education in the district. In 1973-74, the following institutions were under its management :

Sl. No. 1	Type of Institution 2	Name of the Institution 3	Year of establishment 4	No. of students		
				Boys 5	Girls 6	Total 7
1	Arts College ..	Shri N. S. Mahila Arts College	1970	..	535	535
2	Commerce and Arts ..	Shri C. P. Patel Commerce and Arts College	1970	Arts 196 Commerce 371	21 40	217 411
3	College of Education	College of Education	1971	B. Ed. ..	..	143

(7) *Edward Memorial High School Trust, Borsad*

This trust was established in the year 1953 with a view to provide educational facilities to the people of the Borsad taluka. It conducted the following institutions in 1973 :

Sl. No. 1	Type of Institution 2	Name of the Institution 3	Year of establishment 4	No. of students 5
1	Primary School	Parikh C. J. Trust Primary School	1966	310
2	High School	Edward Memorial High School, Borsad	1908	1,350
3	High School	Borsad High School (girls)	1966	573
4	Arts and Commerce Colleges	Patel J. B. Rundelwala Arts College and Patel A. M. Rundelwala Commerce College, Borsad	1964	1,187
5	Science College	Borsad Science College, Borsad	1966	175
6	Law College	Borsad Law College	1969	47
7	College of Education	R. C. Anada Shikshan Maha Vidyalaya, Borsad	1971	115

All the institutions are specious and well equipped with libraries, reading rooms, and laboratories for science. All the buildings of educational institutions under its management are owned by the Trust.

(8) *Khambhat Taluka Sarvajanic Kelavani Mandal, Khambhat*

This Mandal was established in 1959 to impart higher education to the people of the Khambhat taluka. In 1973-74, the following institutions were under its management :

Sl. No. 1	Type of Institution 2	Name of the Institution 3	Year of establishment 4	Students (1973-74)		
				Boys 5	Girls 6	Total 7
1	Arts College ..	Rajni Parekh Arts College	1960	106	193	299
2	Commerce College	Sheth Shri Keshavlal Bulakhidas Commerce College	1964	385	52	437
3	Science College	Bhikhuben Chandulal Jalundhwala Science College	1961	210	43	253 (1971-72)
4	Education College	Smt. Bhikhuben Chandulal Jalundhwala Education College	1968	78	37	115
5	Law College ..	Shri Chimanlal Vadilal Shah Law College	1970	51	2	53
7	Pharmacy ..	Shri M. N. College of Pharmacy	1970	196	1	197

Over and above, the Mandal conducts the Municipal Jubilee High School and Home Science classes.

(9) *The Cambay Education Society, Khambhat*

The Cambay Education Society, Khambhat, was established in the year 1916. Under its management there are following institutions: (1) Shri S. Z. Waghela High School with Technical and Commercial bias (for boys), (2) Shri M. S. Shroff Technical Training Centre, (3) Shri Madhavlal Shah High School, (4) S. D. Kapadia High School, Khambhat (for girls) and (5) Sheth J. J. Library.

The Mandal also provides facilities for type writing classes, electrical and wiremen apprenticeship and drawing classes. The number of students studying in three high schools was 2,612 (1,508 boys and 1,104 girls) in the year 1972-73.

The number of students in the primary sections was 739 (364 boys and 375 girls).

(10) *The Petlad Education Trust, Petlad*

The Petlad Education Trust was established in the year 1946. In 1972, following colleges were under the management of the trust. The details of each institution are given below :

Sl. No. 1	Type of Institution 2	Name of the Institution 3	Year of establishment 4	No. of pupils 1972			
				Boys 5	Girls 6	Total 7	
1	Arts and Commroe College	Shri R. K. Parikh Arts & Shri M.K. Patel Commerce College, Petlad	Arts	1946	164	174	338
			Comm- erce	1970	375	54	429
2	Science College	Shri R. K. Parikh Science College. Petlad		1947	102	24	126
3	Education College	College of Education		1970	80	30	110

Educational Activities of the Christian Missionaries in Kheda District

During the early rule of the East India Company, the Britishers did not take positive interest in educating Indian people. They were merchants and were more interested in expanding the trade and commerce. Therefore, prior to 1854, the pioneer work in the field of establishing modern educa-

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tional institutions was carried out by some social reformers, and some liberal minded European Officers with bent of research. Taking note of this, Shri S. K. De writes,

"We cannot but acknowledge with feelings of shame and gratefulness that the first and the earliest efforts at ameliorating rural conditions were made by handful of philanthropic Europeans, both civil and missionaries and who, in their liberal views moved ahead of their age."¹

In this district, there were a number of missionaries working and operating in different parts of the district. London Missionary Society established in 1841 started its work at the village Dehvan of Borsad taluka. But afterwards in 1860, it handed over the schools to I. P. Mission. This Mission had, under its management, one training college for women at Borsad and a number of primary schools and boardings. The Mission was also pioneer in women education.

Salvation Army was established in the year 1882 which started its activities in the Anand taluka. Over and above, it extended its activities to Vasad, Bhalej, Nadiad, Petlad, Borsad and Matar. Another missionary society called, Methodist Episcopal Society, which was established in the year 1888-89, had under its management, a number of schools, educational institutions and a technical school. Another society called "Christian Alliance" was established in Matar taluka. It had started its activities at Vansar village of Matar taluka. Thereafter, it shifted its activities to the Kheda camp. The activities of the Kheda camp was handed over to the Salvation Army by the Alliance and it made Mahamadabad its centre for its activities.

Roman Catholic Mission was established at Anand in 1893. Under its management, there were a number of schools, educational institutions, boarding houses, technical and industrial schools, etc.²

According to the *Imprial Gazetteer of India*, Vol. XIV, 1908 A. D., the Irish Presbyterian Mission stationed at Borsad and Anand, maintained 2 Anglo-vernacular schools and 46 vernacular schools and 4 orphanages. Methodist Episcopal Society at Nadiad, maintained 165 schools, an industrial school and an orphanage. The Christian Alliance at Matar Taluka maintained 9 schools, an orphanage and industrial school at Kheda. The Roman Catholic Mission at Anand maintained 19 schools, an industrial school and an orphanage. The Salvation Army maintained 112 schools. In

the year 1953, The Catholic Mission managed 102 primary village schools, 11 primary schools, with 3,642 students. It also managed St. Xavier High School at Anand. All the primary schools run by the Missionaries are now handed over to the District Panchayat.

Only following educational institutions are now managed by the Missionaries : 6 Secondary Schools (2 Nadiad, 3 Anand and 1 Petlad) and 1 Primary Teacher's Training College for Women, Borsad.

CULTURE

Under the political developments the gravity of literary tradition shifted first from Kanyakubja (Kanuj) to Dhara and later during the reign of Jayasimha Siddharaj (1094-1143) from Dhara to Anahillapataka, Stambhatirtha (Khambhat), India's chief port on the West Coast during mediaeval times.

The Rise of the Centres of Learning

Various towns and trade-centres fostering literary and other cultural activities, like Karpatavaniya (Kapadvanj), Madhupadra (Mahudha), Natapadra (Nadiad), Khetaka (Kheda or Kaira), Petalipadra (Petlad), Vadarasiddhi (Borsad), Bhalijya (Bhalej), Stambhanaka (Thamna) and Umreth, played an important part as centre of learning during Chaulukya and Vaghela period.

Stambhatirtha finds reference in a number of later Puranas. The *Padma-purana* makes mention of Khetaka where, according to the *Dasakumara-charita* of the 7th century, resided the husband of Ratnavali. But no literature that might have been composed during these times in the district has come down to us.

EARLY LITERARY DEVELOPMENT

Khambhat possesses one of the most important collections of old Jain manuscripts on both palm leaves and paper in our country in which the earliest one, the Acharangasutra-Tika composed by Silankacharya, in the Saka year (862 A. D.), was written in V. S. 1327 (1271 A. D.).

It is from the eleventh century onwards that we can trace the history of the literary activities in the district. Suracharya, a Jain monk, composed of course, at Khambhat, his *Nemichariya* in Prakrit prose in 1073 A. D., about fifty years after the sack of Somnath by Mahmud Ghaznavi and during reign of the Chaulukya King Karan (1064-94).

1. S. K. De, *History of Bengali Literature in 19th Century*, p. 54.

2. *Charatar Sarvasangraha*, Part-I.

Galteshvar Temple and Gujarati Style of Architecture

The *torana* at Kapadvanj which seems to have been built during the reign of Jayasimha Siddharaj is the first monument which we come across in the district, after the temple at Galteshvar, believed to have been constructed by Siyaka. It belongs to the Chaulukyan style of Karnataka, the only shrine of its type in Gujarat (H. Cousens, Chaulukyan Architecture 1926). It was indeed this type which, when fused with the earlier Nagara or the Rekha type of North India and Orissa, in Gujarat developed in about a century the Chaulukyan or the typical Gujarat style by the time of Karna in which the Sompura architects still construct Jain temples in Gujarat and Rajasthan. The district hardly possesses on record a single shrine in this style belonging to the Chaulukyan or the Solanki-Vaghela period (943-1297). They seem to have been destroyed or renovated.

Age of Hemachandracharya

Only two literary works of the 12th century have survived to this day, viz., the *Adinatha Charitra* by Vardhamanacharya completed in Khambhat in 1103 A. D., and the *pushpavati Katha* written in 1143 by Chamukhya at Kheda. This was the period of the great scholar Hemachandracharya patronised by Chaulukya rulers of Gujarat Jayasimha Siddharaj and Kumarapala (1143-1174 A. D.). Hemachandracharya was the greatest literary figure of this times in India. He identified Mahavira with Shiva, respected the Vedas and Somnath. To him Jainism was the noblest of doctrines which made up *dharma*. It was due to his efforts that the seat of India's greatest centre of learning was shifted from Dhara to Anahillapataka (Patan of Mahesana district) Udayana (Udala) the Governor of Khambhat during the reign of Jayasimha and Kumarapala, performed the Diksha-festival of Hemachandracharya at Khambhat.

The Gujarati Style of Painting

The distinctive Gujarati style of the Indian painting has long been recognised.¹ Its peculiar main features lie in the depiction of angularity in drawing, the three quarter view of the face with a further eye protruding into space, the pointed nose and the dress and ornaments typical of the post-Gupta sculpture. Irrespective of the present day State-borders, the Gujarati as the spoken language still extends to the Bagh series of low

1. MEHTA N. C., 'Gujarati Painting in the Fifteenth Century,' *Ragam* 22-23. 1925 : MAJUMDAR M. R., 'The Gujarati School of Painting and Some Newly Discovered Vaishnava Manuscripts', *J. Indian Society of Oriental Art*, X, 1942, etc.

hills running between the Vindhyan range and the Narmada. It was the natural border between Gujarat and Nimar (M. P. portion of the Narmada Valley) during the pre-Maratha times. The Bagh Caves having on their walls the fresco-paintings of the seventh to eighth centuries were formerly within Gujarat. The frescoes depict in a number of cases the scenes of the old Gujarati life including the Dandio-rasa (Cave II, Scene 4, Bagh, India Society, 1927, Plate D & E) in the classical Ajanta style. It is at Vellur (Ellora) near Aurangabad that we first come across the paintings in the Kailashnath Temple. They range in date from 8th to 11th centuries. The next links in the history of the Gujarati painting are provided by the miniatures on the palm-leaf manuscripts. The earliest dated 1100 A. D. occurs at Patan. After this those ones dated 1127 (Gnatra-sutra and three other Angas of the Svetamber Jain canon) and 1143 (Desavaikalika-laghu-wristti) come from the Shantinath Temple manuscript library at Khambhat.

THE COMING OF ISLAM

The Islam and its followers, the Musalmans or Muslims, were not new to Gujarat. Long before they had acquired a foot-hold in Sind in 711 A. D., they attacked unsuccessfully the Gujarat coast as the Arab sailors and soldiers of the Bagdad fleet in 677 (A. D.), and later in 736, A. D. 760, 776 and even in the ninth century. The later on traders mostly from the Persian Gulf, were during the tenth century established in considerable numbers in Khambhat and other cities of Gujarat. Encouraged to settle by the Chaulukyan kings, these merchants were treated with much consideration and allowed to manage their affairs, to practice their religion and to build their mosques. Mahmud Ufi (1211 A. D.) tells how Jayasimha Siddharaj inquired into an attack on some Muslim traders at Khambhat, punished the Hindus and gave the Muslims money to build a new mosque. In 1216 A. D., the ruler and gave the Muslims money to build a new mosque. In 1216 A. D., the ruler of Somnath had, according to *Rasmala*, several Muslim officers and also among them, a naval captain or *nakhuda* (Gur. *nakhavo*) and one branch of the Ahmadabad Kasbatis as descended from the Khorasani soldiers, who took service under the Vaghela Kings. The saints of the Shia sect were the first to set their foot on the soil of Gujarat. In 1067 A. D., Abdulla (Mulla Muhammad Ali), a missionary *dai*, came from Yemen to Khambhat and later founded the sect of the Vohras. Nuruddin, or Nur Satguru, as the Khojas call him, came from *Deilam* to Patan during the reign of Bhimadeva II (1179-1242 A. D.).

As regards the literary activities during these times in the district, Jivabhadragani wrote a commentary on the *Kshetra-Samasa* in 1217 A. D., and Sumatigani, the *Brihad darsana* in 1228 A. D., at Khambhat. Dakor or earlier Dankapur is believed to have become in this century a sacred place dedicated to Shri Ranchhodrai of Dwarka.

VASTUPAL AND KHAMBHAT

The personality, statesmanship, heroism and munificence of Vastupal evoked a chorus of literary praise. Somesvara (c. 1179-1262), the family priest of the Chaulukyas was a leading poet at his court. In canto III of his great works the *Kirtikaumudi*, Somesvara narrated how Vastupal was appointed at Khambhat. He sings the beauties of Khambhat in the traditional manner of Sanskrit. Vastupal himself was a poet and has left a poem the *Naranarayananda* dealing with the episode of Arjuna eloping with Subhadra, Sri Krishna's sister.

The first evidence of a dramatic performance in the Kheda district that has come down to us was played at Khambhat under the patronage of Vastupal. The play was the *Hamira-madamaradana* by Jayasimha Suri of Bharuch in which is celebrated the victory obtained by Viradhaval with the aid of Vastupal over the forces of a Muslim invader.

An inscription in a temple at Nagara near Khambhat dated V. S. 1292 (1236 A. D.) informs us that Vastupal restored the shrine of Jayaditya at Nagaraka. The images of Surya as well as of Brahma and other deities at this temple are the relics of the sculptural art of the Chaulukyan period.

The century that followed witnessed great changes, both political and cultural, not only in Gujarat but in India as a whole, with the establishment of the Muslim rule, rise of the New Indo-Aryan languages (the old stage of modern Indian vernaculars) which began to take the place of the *Apabhramsa*, in the field of literature and development of the skin movements of *Vaishnavbhakti* in Hinduism and *Tasavvuf* (Sufism) in Islam which began to influence highly the literature and fine arts. The Muslim Sultanate (1403-1576) that was firmly established at Ahmadabad reconquered the empire of Gujarat lost by the successors of Kumarpal.

THE FIRST WORK IN OLD GUJARATI

The *gautam-swami-rasa* by Rajasekhara Suri completed in 1355 at Khambhat is the first literary creation in Old Gujarati.

The period of the fifteenth century was mainly that of Narasinha Mehta (1415-81) and Mirabai (1403-70). Narasinha was for *Vedanta* based both on *Gnana* (knowledge) and *Bhakti* (devotion). His new movement of religio-social work through lyrics and devotional songs recited to the people, was based on the teachings of Vishnuswami of Karnataka.

From Palm-leaves to paper—Some further changes took place in this century. Paper introduced by the Muslims began to replace the palm-leaves

and *bhojapatras* as a writing and paintings material. Rajasthani commenced to separate from Gujarati-Bhili-Ahirini. *Vaishnava-bhakti* tended to develop more and more towards the cult of Radha and Krishna, initiated by Nimbarka in the South during the twelfth century and introduced in the East by Chaitanya (1486-1534) and in the North and the West by Vallabhacharya (1479-1531) and others in the century under reference, highly influencing the activities in literature, dramatics, painting and sculpture. The introduction of *Chuna* by the Muslims gave rise to semi-spherical domes and other rounded forms in the Indian architecture, which it lacked previously.

THE INTRODUCTION OF INDO-MUSLIM ARCHITECTURE

The *Roza* of Pir Arjun Shah at Petlad and the Jami Masjid at Khambhat (1325) are among the oldest Muslim monuments in Gujarat. The Mausoleum of Mubarak Sayyid (1484) at Mahamadabad (founded in 1479) is also reckoned to be a fine specimen of the Muslim architecture in Gujarat.

Parvata Setha at Khambhat patronised the copying of the eleven Jain *angas* on paper, and at the same place Ramachandra Suri wrote the *Chhatraprabandha* (1423) and Nana Suri the *Gajasukumara-rajarsi-sajjaya* (1491). At Umreth, Janardan Trivedi composed two poems in Gujarati, the *Usha-haran* and *Duti-Samvada*. It may be mentioned here that the messenger of the *Sandesarasak*, an *apabhramsa* work by Abdur Rehman (early 15th century) departs from Khambhat on his way to Vijaynagar. The poet gives vivid description of Khambhat which was then at the climax of its prosperity.

THE GUJARATI LITERATURE UNDER THE BHAKTI MOVEMENT

The impact of the *Vaishnava bhakti* gave rise to the recitation of the *akhyanas* initiated earlier by Narsinha and Bhalan. Vishnudas of Khambhat assisted by Haridas (a barber), Bhudardas and other pioneered it in the Kheda district during the sixteenth century. Sheddaji, also at Khambhat, composed the *Ambarisha-katha*, the *Rukmini-harana* and other works. Among the Jaina writers of Khambhat Javanyamaya, Kusalalabha and Tilakagani were prominent. Kahan wrote the *Okha-harana* at Umreth, and Bhima the *Agadadatta-rasa* at Nadiad. Sikandra *alias* Manjhu Gujarat, an inhabitant of Mahamadabad, gave us the *Mirat-i-Sikandari* in 1576, which is not only the first literary works in Persian in the district, but also the first history of the Gujarat Sultanate. It was during this period that Gujarat lost its Independence and became of *suba* of Akbar's Mughal empire. Meanwhile, the Rajput style was developing out of the Gujarati style of the Indian painting. During the reign of Akbar (1555-1605) and his successor Jahangir (1605-27) the Mughal style of painting grew as a result of the exotic Irani and Central Asian influences. But in the present state of our knowledge, the Kheda district has hardly anything to offer after the book illustrations from Khambhat to the history of painting before our own times.

A PERIOD OF DECLINE

The seventeenth century in which the three leading stars of Gujarati poetry, Akha, Premanand and Samal flourished, marks comparatively a set-back in the field of literary activity. The port of Khambhat was decaying on account of silting up and Surat was gradually taking its place. The decay of Khambhat port turned the direction of trade-routes leading to it towards Surat, affecting adversely the economy of the district. It was under these conditions that we notice hardly any Svetamber Jain contribution to literature at Khambhat during the century under reference. However, at Sojitra where the Digambaras had founded a seat of their *bhattarkas* (*Nandilata-gachchha* belonging to the (*Kashta-sangha*) Shri Bhushana Pattadhisa completed the *Santinatha-Purana* in 1652. At the same place, Devidasa, a *gandharava* by caste, wrote in Gujarati the *Bhagvat-sara*, *Rasa-Panchadhyaya* and other works between the years 1603 and 1612. Bhudar composed the *Harischandra-akhyana* (1618), Shivdas the *akhyanas* of *Kalavati* and *Jalandhara* (1623), and Mukund the *Chandrasahasakhyana* (1655) at Khambhat, Dvarko composed the *Krishnalila* (1623) at Dakor; and Avichaldas the *Aranya-parva* (1684-95) at Nadiad.

In the century that followed, the growing unruly conditions adversely affecting the economic stability of the people everywhere and the ravages of the towns and villages by the passing armies in the Kheda district retarded the activities in literature and arts. Both architecture and sculpture of the period bear witness to this grim reality. The lot of the helpless people contributed further for them to take more and more recourse to the submission to the Deity through stereotyped *bhakti*, listening to the *akhyanas* and the like rather to seek emancipation than to satisfy the aesthetic urge.

PRITAMDAS, THE MAIN LITERARY FIGURE OF 18TH CENTURY

The next century in literary field opens with a Hindi work the *Dilli-samrajya-varnana* (1710) by Venidas. Ranchhod of Torna-Khadal near Kapadvanj wrote the *Kakko* (1713); Ratno of Kheda the *Barmasi* (1739) and other works; Jivandas of Machhner on the Vatrak composed the *Guru-Sishya-Samvada* and Anubhavanand of Dakor the *Ambaji-no-garbo*. However, Pritamdas (1778-98) of the Bavla near Dholka, who settled at Sandesar in this district, was the most representative of his time. Just as Narasinha Mehta is considered unique for his *Prabhakia*, Samal for his *Chhappas*, Dhiro for his *kafis* and Bhojo for his *Chabkhas*, so Pritam holds the same position in the Gujarati literature for his *padas*. He has left for us the *Saras-gita*, *Gnan-kakko*, *Guru-mimamsa* and a few other works.

REFORMIST TENDENCIES

Some Reformist tendencies against the *Pushtimarga* of Vallabhacharya had already appeared on the horizon during the previous century, when Akho

(1615-74) directed his criticism towards it. In the eighteenth century Dayaram (1767-1852), with whom ended the old era in Gujarat, also raised his voice against it. The same reformist move led Swami Sahajanand to found his *Uddhava Sampradaya* or the Swaminarayan sect in Gujarat in about 1765 with its principal seat at Vadtal in the Kheda district.

The Transition between the Old and the New

The foreign British rule obtained a foot-hold in 1803 in Gujarat. Great changes began to take shape as a result of the introduction of the English education (1853-57), the printing press (1818) and the impact of the Western Civilisation. Dalpatram forms the link between the old and the new, and Narmad (1835-86) is the apostle of the New in Gujarat and the Gujarati literature. The noteworthy literary figures during this (nineteenth) century in the district were Kalyan (*padasangraha* 1827) and Uttamram (*Dankapura-mahatmya*, 1855) at Dakor, Bapu (*Gnan-na-dvadasha-masa*, etc. 1843) at Nadiad, and Kuber Swami (*Pada-Samgraha*, 1855) at Sarsa. From Malataj came a family of literary figures and scholars which had been active for the last three generations beginning with Chhotam or Chhotalal Kalidas Trivedi (1812-85 *Kapila gita*, *Dharma-prakash*, *Hamsa-bavani*, *Bhola Bhima-ni-varta*, *Siva-vivaha*, *Prahlad-nun-Akhyana*, *Angadavishti* and thirteen other works). His younger brother Vrajlal Kalidas Shastri (1825-93), who composed *Chandrasahas-nun-akhyana*, *Hitopadesa-sabdārtha*, *Gujarati bhasha-no-itihasa*, *Utsargmala*, *Rasa-ganga*, etc., was the first modern scholar in the district. He was the first scholar who traced the origin of the Gujarati language from Sanskrit through Prakrit. He assisted Taylor in his works on Gujarati grammar and etymology. He was an Assistant Secretary of Gujarat Vernacular Society (now Gujarat Vidya Sabha) at Ahmadabad and later taught Sanskrit in Government educational institutions at Vadodara and Ahmadabad.

The ('Sakshar-Nagri') Nadiad

The influence of the Western education and civilization began to express itself through the pen of the writers of later half of the nineteenth century, who received the Western education, Nadiad became the main focus of this trend in the literary field of Gujarat and received aptly the epithet of the City of Scholars. Govardhanram Madhavram Sakshara-Nagari or the City of Scholars. Govardhanram Madhavram Sakshara-Nagari (1855-1907) with the epoch making novel the *Sarasvatichandra* (in four parts) to his credit, stands out as the most prominent figure of his period. He attempted in this work to present a picture of the fusion of the old Aryan civilization and the new Western influences in the Indian Society of his time. It was a landmark of the new literary renaissance and inspired Gujarat for over quarter of a century. He presided over the first session of *Gujarati Sahitya Parishad* in 1905 at Ahmadabad. Some of the

other noteworthy figures from Nadiad were Zaverilal Umiashankar Yagnik (1836-97) who translated *Manusmriti*, *Shakuntal*, etc., Shivilal Dhaneshwar Kavi (1850-99) wrote *Kavyakalap*, *Lakshmanavirha*, Manilal Nabhubhai Dwivedi (1858-98), the *Atmanimajjane*, *Siddhantasara*, etc., Chhaganlal Harilal Pandya (1859-1940), *Kadambari*, etc., Ambalal Bulakhiram Jani (1882-1942), *Akho and his poetry*, *Premchand's Dramas*, Chandrashankar Narmadashankar Pandya (1884-1937), *Kavya Kusuma*, Phulchand Zaverdas Shah (1879-1950), *Visvamohini*, *Chandrahara*, *Krishnachandrodaya-Chitra-katha*, etc., Kantilal Changanlal Pandya (1886-1948), *Govardhanram-nu-Jivancharitra*, etc., Dr. Mahadevprasad Bhogilal Kantharia (1886), *Vanaspathi-ahara-na-phayada*, *Kshayaroga*, *Tamaku-nu-durvyasana*, Mulshankar Maneklal Yagnik (1886), *Samyogita-syamvaran*, *Chhatrapati-samrajyama* and *Pratapa-vijaya* in Sanskrit and *Satyadharma-prakasha*, *Mewad Pratishtha*, etc., in Gujarati, Ratipatiram Udayaram Pandya (1893-1927), *Rainavali*, *Samkshipta-Mahabharata*, *Nanun*, etc.) and Maganbhai Prabhudas Desai (1899-1967, *Kenopanishad*, *Satyagriha-ni-mimasa*, *Hind-ni-Angrej Veparasahi* and 22 other works). Ambalal Sakarlal Desai (1844-1914) from Alina was the first graduate in Gujarat. He was the principal of the Gujarat college Institute, and presided over the third session of Gujarati Sahitya Parishad held at Rajkot in 1903. Ranchhodlal Udayaram Dave (1837-1923) *Lalita-dukha-darsaka*, *Jayakumari-vijaya*, *valdik-Chhanda-rachana*, etc.) and Jetham (Jethalal Lalaji Majmudar, 1861-1946, *Subodh-Sagar*, *Bhikha-Satak*, *Vatan-Vigraha*) from Mahudha, Gopaldas Maharaj (1868-1938, *Vichar Sagar*, *Tattvabodh*, *Subodh Sagar*) from Borsad and Nyayavijaji Manilal Hirilal Shah, 1892-1950, *Jain-tirtha-no-itihasa*, etc.) from Kheda were some of the other writers.

THE NEW GENERATION

During the rest of the twentieth century that has passed so far, Kapadvanj has comparatively come to the forefront. It has given Gujarat not only the writers and scholars of the calibre of Muni Shri Punyavijayaji (Manilal Dahyabhai Doshi, born 1895, *Bhartiya Jain-samana-sanskrit-ane-lekhana-paddhati*, etc., *Kumudi-mitrananda*, *Vasudeva-hindi*, etc.), Amritlal Nanakeshvar Bhatt (1899-*Puloma-ane-bijan-kavyo*, *Sita Rasapanchadhayaya* etc.), Mohanlal Dalsukhram Bhatt 'Mohinichandra' (1901-63), *Vartartha* etc.), Manjusha, *Swaraja-bolave*), Rajendra Shah (1913, *Dhavni*, *Srutl*, etc.) and Dhirajlal Pranjivandas Parikh, *Lagna-dil-nan-ke-deh-nan*? *Sevamurti*, *Haribhai*, *Gitadohan*). Hailing from Nadiad are Indulal Yagnik, the writer, journalist, and leader of eminence (1892-1972, *Kumar-nan-stri-ratno*, *Akkalno-dusman*, *Shyamji Krishna Varna*, etc.), Dhanshankar Hirashankar Tripathi (1889, *Varta-vriksha*, etc.), Shantilal Someshvar Thakar (1904, *Sphullinga*, *Nadiad-no-itihasa*), Upendra Chhaganlal Pandya (1905, *Sambharnu*, *Sarasvatichandra-no-sankshepa*, *Kadambari-katha*), Keshavlal Bhavanishankar Pandya (1907, *Bhakta-Charitra*, *Ratna-divada*, *Samhita*, etc.)

who has founded the Shakti Sevak Mandal, Nanubhai Kahanji Barot (1911, *Adhunik-Hindi-Kavita*, etc.), Bhanushankar Babarbhaji Vyas "Badarayana" (1905, *Kedi*, etc.), and in the college campus Dharmendra Master "Madhuram" (1924, *Zarmar*, *Bapuvandana*, *Maran-priya-ekankis*). From Umreth, we have the veteran scholar, teacher and literary critic Vishnuprasad Trivedi (1899, *Vivechana*, *Parisilana*, *Arvachin-Chitanatmaka-gadya*), who, presided over the 21st session of Gujarati Sahitya Parishad at Calcutta in 1962, the poet and educationist Karim Muhammad Master (1884, *Karim Muhammad-na-kavyo-ane-lekho*, *Gujarat-na-Musalmano*) and the judge Nanubhai Gaurishankar Shelat (1908, *Shahjehan*, *Apani-rangabhumi*). The eminent scholar Manjulal Ranchhodlal Majmudar (1897, *Sudama-charitra*, and *Nalakhyan*, *Art and Culture of Gujarat*, *Dase-angalievedh*, etc.), who is also well-known for his writings on the Gujarati Painting belongs to Mahudha and Shivakant Shambhulal Dave 1911, the poet, Historian (Professor of History at Vallabh Vidyanagar) and social worker, belongs to Petlad. He was awarded the State prize for the best poem in 1963 (Duyangana).

The well-known Gandhian and scholar Naraharibhai Dvarkadas Parikh (1891, *Yamtrani-maryada*, *Samyavad-ane-Sarvodaya*, *Manav-arthasastra*, *Mahadevbhai-ni-diary* etc.) and his elder brother Shankarlal Dvarkadas Parikh (1886, *Kheda-ni-ladat*, *Bapu-sathena-prasango*, *Giriraj Abu*, etc.) hail from Kathalal. Mohanlal Dipchand Chokshi, (1894, *Khambhat-chaityappari-pati*, *Samajik-bhadka*, *Sthulibhadra-ni-samsara-nauka*), the eminent Jain scholar and the poet Jamiat Pandya "Jigar" (1908, *Varadan*, *Kamnasin-nu-kismat*, etc.) are the literary figures from Khambhat. Haldharwas has given us Ambalal Narsinghlal Shah (1898, Kavi, *Manikant-nu-jivan charitra*, *Meghani-nu-jivan charitra*, *Sahitya-darsana*) and the noted scholar vishnudev Sankleshvar Pandit (1915, *Mahaprabhu*, *Bhakta-katha*, *veda-ke-darsaniksutra*, etc.).

Desaibhai Nathabhai Patel (1895, *Deha-mandir*, *Sant Vinoba*, *Premavatara Ishu*, *Manavi-nu-arogya*) from Ode, Govindlal Hargovind Bhatt (1901-60, *Jagat-na-vidyaman-Dharmo*, etc. Vallabharay's *Brahmasutra-Anubhashya*, etc.) from Davol, Ramaniklal Jaychandbhai Dalal (1901, *Parimal*, *Sohini*, *Jai-sundari*, *Naganand*, *Jangizkhan*) from Khadal, Rasulbhai Vora (1902, *Gamdu-jagyu-tyare*, *Jivan-saurabh*, *Kismat*) from Changa, Narsinghbhai Iswarbhai Patel (1902-1954, *Iswar-no-inkar*, *Lagna-prapancha*, etc.) from Sojitra, Prahaladbhai Damodardas Brahmabhatt (1908, *Adhura-phera*, *Koni-ayada*? *Netaji*, *Rajalakshmi*, *Rekha*, *Netaji-na-sathidaro*, etc.) from Tarapur, Chaturbhai Shankarbhai Patel (1901, *Maharghya*, *Asvadan*, etc.) from Vagasi, Babalbhai Pranjivandas Mehta (1910, *Marun-gamadu*, *Russianu-ghadar*, *Ravishankar Maharaj*, *Maharaja-thata-pahela*), the noted social worker at Thamna, Chhotubhai Suthar (1911, *Akash-na-tara*, *Visvadarsan*, etc.) from Chaklasi and Kantilal P. Patel (1931, *Mukti-mandir-no-silpi*, *Kashmir-ni-lokkathao*, *Hindi-Sahitya-darshan*) "Swadeshi" from Bandhani are some

of the prominent figures in the literary work. Ishwar Petlikar (1916, *Janamatipa*, *Lakhya-lekh*, *Dharati-no-avatar*, *Kaliyuga*, *Kashi-nu-karvat*, *Kajal-Kothri*, etc.) from Petli ranks among the foremost story-writers and novelists.

From the reputed family of Chhotam and Vrijlal Shashtri of Malataj, we have the grand sons of the latter, Shankarlal Gangashankar Shastri (1902-46, *Sahitya-ne-ovarethi*, *Sahitya-drishtane*) who was professor of Gujarati and Sanskrit at Bahauddin College, Junagadh and the noted Indologist and epigraphist Hariprasad Gangashankar Shastri (1919, *Maitraka-Kalin-Gujarat*, *Mohenjo Dero-ane-Harappa*, *Indonesia-man-vistarati*, *Bharatiya-sanskriti*, *Gujarat-no-prachin-itihas*, *Ashoka-ane-ena-Abhilekho*, *Bharatiya Abhilekh-Vidya*, etc.), now Director of B. J. Institute of Learning and Research, Gujarat Vidya Sabha, Ahmadabad, where his grandfather was Assistant Secretary a century ago. He has planned and undertaken to edit a comprehensive history of Gujarat and has brought to light and deciphered a number of new inscriptions.

The contribution of Anand, the growing educational and industrial town, which has a number of colleges and a university in its suburb of Vallabh Vidyanagar, is noteworthy. Here Lallubhai Bakorbhai Patel (1889, *Saubhagya-suryodaya*, *Surva-dharma-sandesa*, etc.) is a noted writer. Traymbaklal M. Shukla (1901, *Chaitanya Mahaprabhu*, *Sant Tukaram*) is a well-known poet. Umiashankar Jivanlal Thakar (1905, *Mangal-geet*, *Kirti-Kathao*, etc.) is both a poet and an artist of repute. At the campus of agricultural institutions, Dahyabhai P. Patel is well-known for his both scientific and popular works on the agriculture of Gujarat and its development (*Gujarat-Rajya-na-pako-ni-mahiti*, etc.). At Vallabh Vidyanagar, Hiralal M. Desai (1897-1968) gave us the *Charotar-ni-kheti* and other works. Amrit V. Pandya, the geologist and archaeologist (1918, *Gujarat-na-khanijo*, *Prehistoric Cultures on the Narmada*, *Formation of Maha-Gujarat*, *Abu and Gujarat*, *New Dynasties of mediaeval Gujarat*, *Lost Sarasvati*, *A New Socio-Economic History of Early India*, *Aryo-ka-Bharat*, *Agamana*, etc.), is well-known for his contributions. He first discovered the oilfields of Ankleshwar (1947) and Khambhat (1953) in the field of geology and conducted a survey of the Narmada valley for its morphology (1944-47). He first brought to light the chalcolithic Peninsular Protohistoric civilization (2300-1000 B. C.) of the early Aryans in India by his first discovery and excavations at Maheshwar, Nagda, Prakasha and Hastinapur. His addition of six new dynasties to the history of Gujarat is regarded as the major contribution in this field after Bhagwanlal Indraji. He has built up a museum at Vallabh Vidyanagar (now under the University), which serves as a Government recognised museum for the Kheda district. He founded in December 1957 the Gujarat Itihas Parishad held its first session at Vallabh Vidyanagar and was its first Secretary. Prof. R. K. Amin (1923),

M. P., is an eminent Indian economist, author and a leader (*Bhabhukti-Jvala*, 1942-*ni-Kranti-Kathao*, Industrial potential of Kheda district, *Socio-Economic Survey of Mogari*, *Economic conditions of Valasan*, *Hundiyanan-ni-samasyao*, etc.), Bipinchandra H. Kapadia, (1920, *Soma in Legends*, *Danastuti of Rigveda*, *Life and Doctrine of Buddha*, etc.) is reputed Orientalist and Sanskrit scholar. Rameshwar Lal Khandelwal "Tarun" (1919, *Prathama-Kiran*, *Dhupdeep*, *Himanchala*, *Adhunik-Hindi-Kavita-men-Prem-aur-Saundarya*, Jayshankar "Prasad" *Vastu-aur-Kala*), is a leading poet and writer in Hindi, who has received a number of prizes for his contributions.

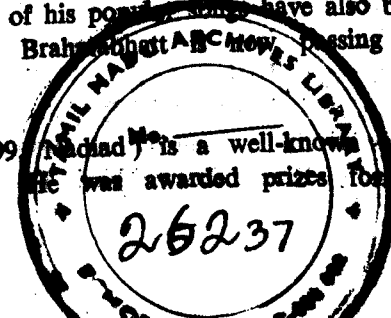
DRAMA AND DANCE

Turning to dramatic we have already noticed that dramas at Khambhat were staged during the governorship of Vastupal. Links are missing for the subsequent history of the stage in this district till we come down to the present century. *Bhavai* or the folk-drama is popular everywhere but Kapadvanj is the chief centre. Shri Harishchandra Jalivala is the chief organiser. Shankarlal Kachhia, Natvarlal Bhojak and Mohanlal are the leading actors. A fair to stage the *Bhavai* is held annually at Kapadvanj during the month of Bhadrapada from 12th to 14th days its bright half. It draws the people from about fifty villages roundabout to witness a number of performances, out of which the *Zanda-no-khel*, *Bhakti-no-khel*, etc., are more popular.

We have already taken the note of the plays of Ranchhodlal Udayaram (1837-1927) and Phulchand Zaverdas Shah (1879-1950). The latter remained busy with writing plays between the years 1908 and 1916. A number of them were staged at Nadiad, out of which the *Raj-ramata* and *Visvadharmo* proved more popular and brought much credit to him.

Raghunath Tribhovandas Brahmabhatt (1892) of Nadiad known popularly as "Rasakavi" all over the Gujarat came in the lime light as a playwright with his first drama the *Buddhadeva* at the age of twenty-one when he was a compounder in the hospital at Nadiad. The work paved the way to his joining the Morvi Subodh Natak Mandali in Bombay where in course of time he achieved great reputation, having been encouraged by Ranchhodlal Udayaram, and Thakkar Narayanji Visanji. His other famous plays were the *Jayadratha-vadha*, *Suryakumari*, *Prithviraja* and *Chhatravijaya*. He has written in all fifteen dramas and has provided songs to about fifty works by other playwrights. A number of his popular songs have also been recorded on gramophone discs. Shri Brahmabhatt is now passing his retired life at Nadiad.

Narharlal Bhagvanlal Mehta (1899, Nadiad) is a well-known actor belonging to the old Gujarati stage. He was awarded prizes for his



commendable work in 1925 in the play the *Chalu Jamana*. He is also passing his retired life at Nadiad.

Yogindra Desai (1920, Vaso) the son of Darbar Gopaldas Desai, is a gifted dancer (Yogendra Sundar) of an international repute, and a writer (Yogendra Priyadarshi) of note. Having received his training in the *Bharat Natyam*, *Kathakali*, *Manipuri* and *Kathak* dances at the cultural centres of South India and Bengal, Shri Desai organised a party at Calcutta and staged his dances all over India, Nepal and Sikkim several times and abroad in Europe and America, winning everywhere high appreciation for his art. He represented India at a Youth Conference in the U. S. S. R.

Nadiad Kala Mandir established as early as 1939 is the premier dramatic organisation of amateur artists in the district. Its aims and objectives cover practically all the aspects of dramatic art. Its artists have staged a number of performances all over Gujarat and are still active with the same enthusiasm and vigour. Some of its plays such as the *Achhut Kona* ? *Jaya-Hind*, *Bhai-ne-mate*, etc., written by the present President and the chief organiser of the institution. Shri Govindram Vyas (1917, Ode) has won much popular esteem. The *Bardoli-ne-panthe*, *Sacho Rah*, *Sainik* and the *Rakheval* by the same author have received high praise and are available in the print. Shri Vyas, now the leading playwright, actor and director in the district has trained a number of actors.

Devdas Someshwar Pandya (1903, Nadiad), has been active in the field of dramatics since 1924 as an actor, composer and stage director with a brilliant record to his credit. He once held the office of the President of the Nadiad Kala Mandir. Gordhandas Chhaganlal Sukhadia (1907, Nadiad), Dr. Ambalal S. Patel (1912, Nadiad), Punamchand Mohanlal Shah (1913, Haldharvas), Kavi Balkrishna Mohanlal Vyas (1915, Bhalej, actor and playwright), Badrishankar Mohanlal Vyas "Balram" (1921, Ode), Madhusudan Mohanlal Joshi (1922, Mahamadabad, famous for his commendable acting in the *Guru Govindsingh* drama in 1933), Rana Narsinghbhai Mohanlal (1927, Nadiad), Arvind Jashbhai Patel (1927, Nadiad), Hasmukhbhai M. Thakor (1927, Nadiad), Ambalal Aratsingh Brahmbhatt "Sumanraj" (1928, Vina, he was awarded certificate of merit for acting in the *Sainik* staged during the Bombay State Drama Festival, also well-known for comic roles), Jitendra Pandya (1930, Nadiad), Sushilaben Goswami (1930, Changa), Amritlal Lakshmandas Mahant (1923, Nadiad, *Karhak* dancer), Amu Patel (1932, *Bandhani*, organised *Bandhani Kala Sanskar Kendra*), Rana Natvarlal Phulchanddas (1932, Nadiad), Harish Ghanshyam Thakar (1933, Nadiad), Champaklal Punjalal Shah (1933, Napa), Indiraben Mafatlal Patel (1933, Matar), who was awarded certificates for acting in a number of plays), Nirmalaben Manubhai Dave (1934, Nadiad), Rana Dashrathbhai Damodardas (1934, Nadiad), Mukundlal

Chhaganlal Joshi (1934, Dakor), Ramanlal Chhotalal Shah (1938, Karamsad), Jashbhai M. Patel (1938, Nadiad), actor, stage director and musician), Suleman Ramjibhai (1938, Nadiad, actor and musician), Kokilaben A. Shah (1943, Anand), Ashvinkumar B. Shah (1946, Nadiad), Mahendrakumar B. Vyas (1948, Nadiad), Kalapana P. Thakar (1948, Borsad), Manharbhai Dahyabhai Patel (1948, Palana), Nandini F. Parmar (1950, Nadiad), Mahesh A. Goswami (1953, Nadiad), and Amritlal Chhaganlal Shah (1957, Nadiad) are noteworthy stage-artists in the district, many of them having been trained by Govindram Vyas.

The Rang Mandal was founded at Borsad in 1948. It stages dramas at this place on particular occasions and provides a channel to the local amateur actors. Bandhani Kala Sanskar Kendra, too, is well-known in the district.

Gujarati Sahitya and Kala Kendra were founded by Balubhai Chandarana and Ramaben Chandarana in 1955 at Nenpur with a view to bringing about an awakening among the backward classes of the Vatrak Valley by means of staging dramas, holding musical concerts and lectures as well as imparting education. Its activities are now being conducted with creditable results by the Chandarana from Mahamadabad. The institution has a trust for its management.

MUSIC

While turning to the field of music, we are immediately reminded of Pandit Omkarnath Gaurishanker Thakur (1897-1968) Jahaj, T. Khambhat), the great apostle of the Indian music of his time. A Parsi gentleman of Bharuch recognised his genius and sent him to Bombay at the age of fifteen to receive training under Vishnu Digambar Paluskar. He came out as a promising figure in the Indian classical music, both vocal and instrumental. He soon won laurels. Pandit Madan Mohan Malaviya gave him the title of sangita-prabhakar. He carried abroad the mission of the Indian music with great success. Signor Mussolini of Italy, too, became one of his admirers and honoured him. He taught the Indian music for a number of years as the Head of the College of Music, Banaras Hindu University. He was awarded the *Padmashri*.

Shri Phulchand Zaverdas Shah's genius is shone in the field of music also. He was awarded by the Banaras Sanskrit Vidyapeeth the title of '*Sangit Kala Bhushan*'. He invented an instrument known as the '*Kashta Tarang*'.

Chinubhai Hargovinddas Shah (1920, Kapadvanj), a vocalist and violinist of repute studied with Narayanrao M. Khare and Shankarrao G. Vyas,

Bansilal Ratilal Pandya (1932, Anand) is a well-known vocalist in the *Khyal* of Gwalior Gharana. Krishnalal Hiralal Parikh (1941, Khambhat) is reputed for the *Khyal* of Rampur Gharana. Mahendra Kantilal Shah (1945, Khambhat), is also a prominent vocalist.

PAINTING AND SCULPTURE

Among the noteworthy painters of the district Somalal Shah and Ratilal H. Soni, hail from Kapadvanj. The versatile Phulchand Zaverchand Shah, who was a student at Sir J. J. School of Art, Bombay, was a well-known painter as a drawing teacher, and his 108 illustrations of the *Bal-Ramayana*, bear witness to his skill in this art. He was popularly known as the "Kavi-Chitrakar Phulchandbhai". In the domain of sculpture, the name of Kantilal Baldevbhai Patel (1928, Sojitra) is well-known. He received training in sculpture under Pandhe Guruji at the Tilak Rashtriya Vidyalaya, Khamgaon. The obelisk at Adas commemorating the martyrdom of five students in 1942, the gigantic statue of Sardar Vallabhbhai Patel at Vallabh Vidyanagar, are some of his creations that have won credit for him.

JOURNALISM

Though Bombay is the cradle of Gujarati journalism (*Mumbai-Samachar*, 1820 and *Jame-Jamshed*, 1832, still publishing,) the Kheda district can well boast of having the oldest surviving newspaper in Gujarat State. It is the weekly *Kheda-Vartaman* started at Kheda by Panachand Phulchand Shah on 1st January, 1860. At present Shri Babubhai Manilal Sheth is its editor and proprietor. It has about 7,000 subscribers. Even before this the *Svadesh Bandhu* and *Khambhat Gazette* (weekly), and the *Vaishnava* (monthly) from Mahudha in 1855, and the *Kheda Niti Prakash* from Kheda in 1856 were published. They could not sustain long. These newspapers and periodicals of the last century, including the *Kheda-Vartaman*, were printed by lithography in the beginning. In 1904, Mahudha added to its credit the *Kheda Times* (weekly). In 1906-07, Shri Gangashankar Vrajilal Shastri edited and published the monthly "Shree Chhotam *Gnanoday*" from Nadiad. The great genius of Phulchandbhai Shah did not spare even the journalism. He, with the co-operation of Chandulal Desai, published in 1906 the "Gujarat" from Nadiad. Its publication was later banned by the British Government. Again these indefatigable national warriors came forward in 1918 with the *Janmabhumi* (weekly). In 1919, the leading educationist and father of the literary movement Motibhai Amin started the *Gnan-prachar* (monthly) in 1919 from Anand for dissemination of general knowledge. Subsequently were published from the same place the two monthlies the *Balmitra* and the *Patidar* under the editorship of Motibhai Patel and Narasingbhai Ishwarbhai Patel (present editor Iswar Petlikar) respectively. Out of the said periodicals, only the *Balmitra* has

survived. In 1926, Maneklal H. Shah published the "Gujarat Times" (Gujarati weekly) from Nadiad, which has at present about 8,000 subscribers. The *Prajapati Patrika* started published in 1930 from Nadiad is the first community organ in the district. The next year Motibhai Amin started the *Charotar* (monthly) from Anand which ceased in 1943. The *Sanskar* (monthly) from Khambhat in 1935 also could not continue long. The Mai Mandal in 1936 published its organ the *Shakti*, which is still going strong. The *Karmahumi* (weekly) from Kheda lived for eight years (1937-45) only. In 1946 the Gujarat Kshatriya Sabha began in 1946 the publication of its fortnightly mouthpiece the *Kshatriya-Bandhu*. The *Gram Swaraj*, the monthly, which the Gujarat State Co-operative Union started from Nadiad in 1947 was shifted after a decade to Ahmadabad. The *Navsanskar* weekly published in 1947 from Khambhat by the veteran journalist Ambalal Harilal Pandit has proved a great success. Another great contribution in the field of the journalism in the district is the weekly *Lokmat* which is being published from the Independence Day in 1947 by the noted journalist Chandrakant Phulchand Shah who was later joined by a worthy colleague Chhotubhai Muljibhai Patel.

In 1939 the College of Agriculture and Animal Husbandry was established at Anand. It started the publication of a monthly the *Krushvi Govidya* in 1948. The year 1950 witnessed the bringing out of the monthly *Maha Gujarat* from Petlad and the fortnightly *Tankar* from Khambhat. During the sixth decade of this century the weekly *Loksatta* was first to make appearance from Nadiad in 1951. It was followed the next year by the two community papers. The *Vishvasi* (Christians) from Nadiad and the *Siddiqi* (Muslims) from Kheda and the monthly organ of the Labour Union the *Navi Duniya* (Nadiad) and another monthly devoted to social service is the *Janta* from Khambhat. The Christian community added one periodical the *Nava-Sarjan* in 1956 also from Nadiad.

Meanwhile Vallabh Vidyanagar was growing fast as an academic and industrial suburb of Anand since 1945 in the wake of the institutions of Agriculture and Animal Husbandry. From here appeared its first periodical in 1955 he *Anekant*, a religious monthly devoted to a sect of Jainism with Jamnadas Ravani is its editor. A more community monthly the *Prajapati* was also published from the same year. The further additions in this year were the fortnightly *Janaseva* from Kapadvanj and the *Vaso Masik Patrika*, a monthly devoted to the service of the inhabitants of Vaso. During 1957 began to appear the six-monthly *Vallabh Vidyanagar Research Bulletin* in three languages (English, Gujarati and Hindi) under the editorship of Amrit V. Pandya from Vallabh Vidyanagar. In 1958, the Textile Labour Union, Nadiad, started its monthly organ the *Shramik*, and a fortnightly the *Janaseva* began its publication from Kapadvanj.

In 1962 a monthly for the youth named *Shishu-kalyan* made its appearance from Nadiad. From 1965 began to be published the six-monthly *Artha-Vikas* under the editorship of Prof. R. K. Amin from Vallabh Vidyanagar and the *Kuldharma* in 1965, the bi-monthly of the Gujarat Rajya Madhyamik Shala Sanchalak Mahamandal from Vaso. In the same year Jayant Soni and Aruna Parekh published a weekly *Janardan* under their editorship from Kapadvanj. It was brought out some useful special numbers like the 'Kheda-Darshan' and 'Vepar-Udyog' issues.

Library Movement in the District

The importance and significance of libraries were duly recognised by the centres of learning in the ancient times. There were good collections of books and manuscripts at Nalanda and Taxashila Universities. Besides these Universities, there were personal collections of manuscripts and other materials by recognised learned people of the time. Thereafter also during mediaeval period there were movements for collections of manuscripts by scholars. Jain Bhandars possessed valuable collection of manuscripts. These libraries or collections were either owned by wealthy persons or were in the possession of some religious sects. The modern system of public library on western pattern began during the first half of 19th century particularly by the efforts of the East India Company's officers like Mr. A. K. Forbes and Mr. Haddow.

The oldest library in this district the Haddow Institute was established in the year 1863. It was started from the public funds and aid given by the Kheda Municipality. In the year 1877-78, the library had a collection of 1,552 books. Over above this library, there were 12 reading rooms with some books at Kapadvanj, Kathalal, Thasra, Dakor, Napad, Nadiad, Mahelav, Mahudha, Mahemadabad, Anand, Umreth and Virsadi. The Native Library, second in the district, was established at Nadiad in the year 1879, by the efforts of Dolatram Kriparam, a noted Gujarati poet. Thereafter in the year 1880, Vidyarthi Samaj Pustakalaya was established at Vaso by Shri Motibhai Amin, the father of library movement in Gujarat, with the co-operation of some youngmen of Vaso. Thereafter in 1898, the Dahilaxmi library was established at Nadiad by Shri Mansukhram Suryaram Tripathi, a known writer in memory of his wife Dahilaxmi. In the year 1932, there were 10,747 books and 335 manuscripts in this library. Subsequently, a number of libraries were established the district called Mitramandal libraries opened by Shri Motibhai Amin in the year 1906. During the year 1908-09, about 150 libraries were started by Shri Motibhai Amin with the co-operation of the people. In this field, the contribution of former Baroda State was unique. The development of free public libraries are the most notable achievement of His Highness the late Sayajirao III of Baroda State. In 1907, 100 circulating libraries were opened in the State. Second important

step in this direction was the opening of separate library department with Mr. Borden as its head of department and Mr. Motibhai Amin as his assistant. The Petlad and Sojitra regions of this district were, therefore, fortunate enough to get library facilities as they were the parts of Baroda State. Vidyarthi Samaj Library at Petlad was started by Shri Motibhai Amin. In the year 1972-73, there were 466 libraries in Kheda district of which 48 were City Libraries, 10 Mahila Libraries, 8 Bal Libraries and 400 were Village Libraries. The details of some of the leading libraries are given below :

STATEMENT XV-7

Leading Libraries in the Kheda District

Sl. No.	Location	Taluka	Name of the Library	Year of establishment	Whether housed in its own building	Classification of books in different languages							Total No. of books in 1971-72	Managing Committee
						Gujarati	Hindi	English	Sanskrit	Others	1971-72			
1	2	3	4	5	6	7	8	9	10	11	12	13		
1	Bhadran	Borsad	Shri Maganbhai Kashibhai Sarvajani Pustakalaya	1871	Own	6,865	385	1,345	81	143 (Marathi)	8,819 (1973-74)	Co-operative		
2	Petlad	Petlad	Parikh Chandulal Koshavilal Sarvajani Pustakalaya	1873	"	9,491	776	3,733	600	1,054 (Urdu)	15,659	"		
3	Sojitra	"	Sarvajani Pustakalaya and Jivabhai Hirabhai Sarvajani Vachanalsaya	1878	"	8,681	278	2,379	"	433 (Marathi) 126 (Others)	11,896	"		
4	Vaso	Nadiad	Shri M. N. Amin Free Public Library	1880	"	7,774	274	1,717	231	167 (Marathi)	10,163	"		
5	Atarumba	Kapedvanj	Sheth Manilal Ranchhodas Sarvajani Pustakalaya	1894	"	5,101	271	230	24	270	5,896	Atarumba Kelavani Mandal		
6	Nadiad	Nadiad	A.S. Dahilaxmi Pustakalaya	1892	"	14,416	2,280	9,876	4,046	159	30,677	Managing Committee		
7	Dharmaj	Petlad	Shri Motibhai Dahyabhai Sarvajani Pustakalaya	1898	"	5,287	177	1,988	160	87	7,698	Dharmaj Kelavani Mandal		
8	Borsad	Borsad	Shri Manekbhai Free Library	1904	Rented	7,028	511	331	"	"	7,870	Board of the Trustees		

DISTRICT GAZETTEER : KHEDA

CHAPTER XV—EDUCATION AND CULTURE

9	Umreth	Anand	Reo Sahab Myaram Joytaram Thaker Sarvajani Pustakalaya	1908	Own	8,180	269	1,191	"	"	9,640	Managing Committee	"	"
10	Dakor	Thasra	Shri Dakor Library	1914	Rented	8,000	"	"	"	"	8,000	Managing Committee	"	"
11	Nar	Petlad	Sarvajani Pustakalaya	1914	"	"	"	"	N.A.	"	"	Managing Committee	"	"
12	Vadasinor	Vadasinor	Hitechhu Mandal Library	1915	Own	"	"	"	"	"	6,422	Managing Committee	"	"
13	Khambhat	Khambhat	Sheth J. J. Library	1917	"	4,206	714	8,209	100	20	13,248	Cambay Education Society, Khambhat	"	"
14	Navagam	Matar	Shri U. N. Sarvajani Pustakalaya and Sarvajani Bal Pustakalaya	1918	Bal Library	5,942	478	363	"	(Ref. books) 419	6,783 2,348	Sarvajani Navagam Kelavani Mandal	"	"
15	Kapedvanj	Kapedvanj	Parikh Purohottandas Hargovindas Mahajan Library, Mahila Pustakalaya and Bal Library	1918	Own (Bal Library) 2,893 (Mahila Sarvajani Library)	12,949 228 442	638 228 02	2,139 17 24	187	120 (Marathi)	16,032 3,133 1,468	Managing Committee	"	"
16	Petlad	Petlad	Late Taralaxmi Sarvajani Mahila Pustakalaya	1921	Own	4,506	"	"	44	60 (Marathi)	4,604	Managing Committee	"	"
17	Uttarsanda	Nadiad	Lallubhai Bhaktibhai Patel Sarvajani Pustakalaya	1928	"	3,187	163	109	"	"	3,459	Board of Trustee	"	"
18	Bhadran	Borsad	R. B. Maganlal Dalpatram Khakhthar Bal Pustakalaya	1929	"	5,559	32	"	"	"	5,591	Managing Committee	"	"
19	Sojitra	Petlad	Shree Funihe Sarvajani Mahila Pustakalaya	1930	Rented	2,761	"	"	"	"	2,761	Managing Committee	"	"

Sl. No.	Location	Taluka	Name of the Library	Year of establishment	Whether housed in its own building or in a rented building		Classification of books in different languages						Total No. of books in 1971-72	Management of Libraries
					own	rented	Guja.	Hindi	English	Sanskrit	Others			
1	2	3	4	5	6	7	8	9	10	11	12	13		
20	Dharmaj	Pethad	Shri Jhaverba Sarvajani Mahila Pustakalaya	1931	own	2,651	..	..	..	..	..	2,651	Dharmaj Kelava ni Mandal	
21	Anand	Anand	Sarvajani Pustakalaya	1935	rented	9,220	665	918	12	15	..	9,250	Managing Committee	
22	Kheda	Mahamadad	Kheda street Mandal Pustakalaya	1940	rentfree	1,472	..	..	..	..	..	1,472	Kheda Street Mandal	
23	Matar	Matar	Shah Madhavlal Bhai Lal Sarvajani Pustakalaya	1950	own	6,002	40	11	..	1	..	6,054	Shri M. B. Shah Savarajnik Pustakalaya Trust	
24	Vasad	Anand	Vasad Gram Panchayat Sarvajani Pustakalaya	1951	own	1,201	10	143	..	..	..	1,354	Vasad Gram Panchayat	
25	Sarsa	Anand	Sarsa Sarvajani Gram Panchayat Pustakalaya	1952	own	1,450	13	6	..	..	..	1,469	Sarsa Gram Panchayat, Sarsa	
26	Pethad	Pethad	Late Taralaxmi Bal Pustakalaya	1958	..	2,611	43	..	..	..	..	2,654	Sya. Taralaxmi Sarvajani Mahila Pustakalaya	
27	Mahamadad	Mahamadad	Nagar Padchayat General Library	1956	..	4,110	289	92	..	123	..	4,614	Nagar Panchayat (Urda) Mahamadabad	
28	Dharmaj	Pethad	Shri Balwadi Bal Pustakalaya	1959	rented	1,999	..	..	..	..	..	1,999	Dharmaj Kelava ni Mandal	

MUSEUM

Shrimati Dhirajben Bal Sangrahalaya, Kapadvanj

This museum was established in the year 1961. It is second of its kind in the State. The museum is housed in the premises of Sheth M. P. Municipal High School, Kapadvanj. There are number of sections in the museum. At the entrance, a pictorial map of Kapadvanj town showing position of the streets, important places, etc., is displaced. In another section, attempt is made to familiarise the children, visitors with the local history of the area, which contains Antiques, Coins, Copper Plates, Terracots, etc. In the Arts section, some articles prepared by children such as Kutub Minar from match sticks and land scape made from strows are displaced. Besides these, there are sections, such as, Philatelic Section, Story Section, Scientists Gallery Section, Planetorium Section. The museum is also organising cultural and educational activities for the children. This museum has great educative value.

FOLK SONGS

Folk-songs are important as a social phenomenon and as a means of expression by social groups of its attitudes and cultural life. In the communal life of Gujarat the music has played a very important part. It is interwoven with the very life of the people. For religious purposes, as well as for social functions for the rich as well as for the poor, music is considered indispensable. A marriage function or an entertainment of any kind without music is practically incoveivable here. From the simplest folk song to the wonderfully complex composition, there runs through all the various grades and kinds of music a stream of fervent devotion and selfless adoration of the Divine. The folk-songs reflect the aims and aspirations of the people in various walks of life. The folk-songs are generally associated with the weaker sections of the society, who, though poor and indigent, live a free and natural life. They are not still much affected by the sophisticated ways of the modern life. As a result, they have been able to preserve their folk-songs. A few significant representative songs are dealt with below.

Marriages are enjoyed with gay entertainment, singing and so often with dancing. There are several songs relating to marriage ceremony. Singing is always predominant at every stage of marriage preparations, such as erection of marriage booths. (*Mandaps*), preparation of articles of food such as *papad*, *vadi*, etc., marriage processions and farewell to the marriage party from bride's home.

This song is sung at the time of erection of *Mandap*, the framework of *Mandap* is made of cane. It is covered with jasmine flowers and decorated with trunks and branches of Banana trees.

મારો માંડવો મોગરે છાયો ને નેતરે ઓછાડિયો રે
મારે માંડવે કેળાનાં સ્થંભ ભર્યા રૂંધે માંડવો રે.
મારે માંડવે કોણ કોણ આવ્યું ને કોણ કોણ આવશે રે,
મારે માંડવે બાજુભાઈ આવ્યા, જયવદન આવશે રે.
હું તો જોઉં મારા રતિલાલની
વાટ, તેણે આવ્યે રંગ રહેશે રે.
મારે માંડવે ભાનુમતિવલુ આવ્યાં, શારદાવલુ આવશે રે,
હું તો જોઉં મારા દેવલક્ષ્મીવલુની
વાટ, એણે આવ્યે રંગ રહેશે રે.
મારે માંડવે સીમાબહેન આવ્યાં, શાન્તાગૌરી આવશે રે,
હું તો જોઉં મારી નર્મદાબહેનની
વાટ, તેણે આવ્યે રંગ રહેશે રે.
મારો માંડવો મોગરે છાયો ને નેતરે ઓછાડિયો રે.
મારે માંડવે કેળાનાં સ્થંભ ભર્યા રૂંધે માંડવો રે.

Application of *Pithi* (Yellow fragrant turmeric paste) to beautify the bride or bridegroom is very interesting part of marriage ceremony. Women folk used to sing this song when the *pithi* is applied to bridegroom (here *Manubhai*). For him, the best of the articles are used, while the secondary articles of *Pithi* and oil of low quality would be used for the bride thereafter.

પીઠી પીઠી ચોળો રે મારા મનુભાઈને,
પહેલી પીઠી ચઢશે રે મારા કિયા ભાઈને,
પહેલી પીઠી ચઢશે રે મારા મનુભાઈને,
ઉતરતી તે ચઢશે રે પેલી છોરીને !
કાચા તેલ, પાકા તેલ, ચઢશે મારા મનુભાઈને,
ઉતરતા તે ચઢશે રે પેલી છોરીને !
ગળતી કેરી ખાશે રે મારા મનુભાઈ,
ગોટલો છોડિયું ચૂસશે રે પેલી છોરી રે !
(ઠાળ બદલીને ગાવાનું)
અડદી મજુરામાં મોઢી વેચાણ રે,
લાડકાને અડદી ચઢે !
અડદી અડધાની અચ્છેર, લાડકાને અડદી ચઢે !
પીઠી પચવાની પાશેર, લાડકાને અડદી ચઢે !^૧

૧. ચરોતર સર્વસંગ્રહ, વિભાગ પહેલો, પાન-૭૩૯.

This song is recited when the bridegroom is about to mount on his horse for the marriage procession. When the bridegroom is mounting, his enemies are afraid. The *Goras* of the curds is sour, and so the hearts of enemies of bridegroom are broken. The *Goras* of milk is sweet and dear relatives of the bridegrooms are pleased and happy.

કુંવર હેલો દઈ ઘોડે ચઢિયા,
એના વેરીને ધ્રાસકા પડિયા.
કુંવર દહીંના ગોરસ ખાટાં,
તારા વેરીનાં હેયાં ફટયાં !
કુંવર દૂધના ગોરસ ગળિયાં
તારા વહાલાનાં હેડાં ઠરિયાં !
કુંવર અંબોડે જવ થોડાધ
તારા સસરા આપે છે ઘોડાધ^૧

This song is recited at the time of departure of the marriage party with the bride from the bride's home. Women of bride side sing this song. Here bride is requested not to leave the place of his father and go with the foreigner.

પરદેશી પોપટડો મેનાબહેન
એમની સંગાથે શીદ જાઓ છો રે.
આવા રૂડા દાદાજીના દેશ રે મેનાબહેન
તેમને છોડી શીદ જાઓ છો રે.
(કન્યા પક્ષવાળા આ ગાય છે.)

This song is very popular in villages of *Khambhat* taluka particularly in *Bariya* community. *Bariya* are small cultivator or agricultural labourers.

Here a young girl is offended, she is being appeased by *Baniya*, the king, a *Brahman* and lastly by the farmer. She did not reconcile herself with the request of *Baniya*, as he is always engaged in cheating people, nor did she respond to the persuasion of the king as she believed that the king is exploiting his people. In the same way, she did not like to return on the request of a *Brahman*, as *Brahman* is poor and live on alms. At last on the request of the farmer she reconciled because she respects him and he is her beloved. The song can be interpreted in other way also. A cloud is

૧. ચરોતર સર્વસંગ્રહ, વિભાગ પહેલો, પાન-૭૩૯.

offended and going away without raining. She is appeased by a Baniya, a king, a Brahman and a farmer. She tells that she will not stop and rain on the request of Bania, king and Brahman, but she will respond immediately if requested by the farmer because he is her loved one. The song suggests the love of labour among the weaker section of the society.

રંગવાદળી

વાદળી ચલી છે રંગ રસભે રે,
કોમ મનાવા જય રંગ વાદળી,

વાણિયો મનાવા જય રંગ વાદળી,
વાણિયાની વાળી હું તો નઈ રે વળું રે,
વાણિયો તો ધૂતી ધૂતી ખાય રંગ વાદળી !

રાજા મનાવા જય રંગ વાદળી,
રાજાનીવાળી હું તો નઈ વળું રે,
રાજા તો લૂટી લૂટી ખાય રંગ વાદળી !

બામણો^૧ મનાવા જય રંગ વાદળી,
બામણાની વાળી હું તો નઈ^૨ વળું રે,
બામણો તો ચપટી લાઈ^૩ ખાય રંગવાદળી !

ખેડૂ^૪ મનાવા જય રંગ વાદળી,
ખેડૂની વાળી હું તો ઝટ વળું રે,
ખેડૂ મારા હેયા કેરો હાર રંગ વાદળી !

૧. બ્રાહ્મણ ૨. નહીં ૩. લાવી ૪. ખેડૂત

ગુજરાતી લોક સાહિત્ય માળા, ગુજરાતી લોક સાહિત્ય સમિતિ, અમદાવાદ,
મણકો-૧૧, પાન ૨૮૪-૮૫.

CHAPTER XVI

MEDICAL AND PUBLIC HEALTH SERVICES

INTRODUCTORY

Epidemics and diseases have affected man since the beginning of civilization. As he could find no remedy to these diseases the primitive man resorted to magic for their cure. The witch doctor was the primitive society's remedy for all illness. This continued for long, and the real causes of diseases remained uninvestigated.

Gradually, the Ayurvedic system of medicine became a popular mode of treatment with the masses. But even then many in the lower strata continued to depend much upon deities whose intervention they sought in each and every matter affecting their well-being. With the spread of education, western or allopathic system of medicine has been gradually and successfully introduced. However, the Ayurvedic system is still popular in villages, because of its cheapness.

Medical Facilities before Independence

In the beginning of the 19th century, Kheda was considered to be one of the healthiest places in Gujarat and partly for this reason a large body of European troops was stationed there. Medical facilities were fairly adequate in the district. According to the available records as many as 6 dispensaries were established in the year 1866 at Dakor, Kapadvanj, Nadiad and other places. The Borsad dispensary was opened in 1869 and the dispensary at Mahemadabad was opened in 1871. The Kheda Civil Hospital with a building of its own was established in 1873 from the municipal and local funds at a cost of about Rs. 29,000. Thus, in the year 1877, there were in the district 6 dispensaries besides the Civil and Police hospitals. In the year 1895, Shri Sayaji Hospital was established at Petlad. In the beginning of the present century three big hospitals were established at Anand and Nadiad. In the year 1903-04, the Emery Hospital was opened at Anand with the help of donation given by one Miss Elizabeth Julia Emery of Canada. During the same year, the I. P. Mission Hospital was established at Anand. The third big hospital known as Methodist Hospital was established at Nadiad in the year 1908. In the year 1934, J. B. Mehta General Hospital was established at Kapadvanj. All these hospitals and dispensaries established before Independence are still in existence and provide medical services in the district.

Medical Facilities after Independence

After Independence and particularly after the introduction of the Five-year Plans, the work of providing medical relief has been greatly accelerated. The number of hospitals and dispensaries have increased. They are now equipped with up-to-date medical equipments and are manned with qualified physicians and surgeons. In the year 1973, there were 23 hospitals, 95 dispensaries and 17 primary health centres in the district. Besides, there were two nursing schools, one at Khambhat and the other at Petlad.

Details about medical facilities available townwise are given in the following statement :

STATEMENT XVI-1
Medical Facilities (Townwise)

Sl. No. 1	Name of town 2	Number of beds in medical institutions 3	Number of beds per 1000 population 4
1	Anand	300	5.07
2	Vadasinor	8	0.44
3	Borsad	138	4.49
4	Khambhat	110	1.77
5	Dakor	75	4.66
6	Kapadvanj	110	3.56
7	Kheda	75	4.89
8	Mahemadabad	50	2.84
9	Nadiad	370	3.43
10	Pali	10	1.01
11	Petlad	86	2.18
12	Sojitra	8	0.63
13	Thasra	10	1.03
14	Umreth	79	3.26
15	Vallabh Vidyanagar	14	0.90
16	Vasad	7	0.97
17	Vaso	8	0.74
	Total	1,458	2.98

Sources :

District Census Handbook 1971, Kheda, p. 12.

The total number of beds in the medical institutions situated in the urban areas of the district number 1,458. There is no town in the district without one or the other type of medical facility. Hospital facilities are available in 13 towns. In 8 towns, facilities for dispensaries only are available. The town of Nadiad has the highest number of beds, namely 370, followed by Anand (300) while Vasad has the least—only 7.

EPIDEMICS

Many severe epidemics have visited this district. In 1876, there was a serious outbreak of cholera. In the town of Nadiad alone 905 persons were affected. From Nadiad the epidemic gradually spread over almost the whole district affecting about 5,000 persons. The disease continued through out the hot season and gradually disappeared after the first fall of rain. Of the persons affected, about one-third died.

In 1918-19 there was a severe epidemic of influenza which took a toll of 2,139 persons. This disease has now lost its severity, though it has made its appearance several times since then.

The plague visited the district almost regularly since 1896 till 1920, though it has appeared in a sporadic form on a few occasions only. In 1896-97, 14 persons died of plague in the district. The number increased to 57 in 1897-98 and as high as 1,530 in 1898-99, when it affected Umreth very severely, and subsequently spread to a number of villages of Anand and Thasra talukas. The plague appeared regularly thereafter. In 1901-02, it affected 5,316 persons. In 1902-03 as many as 18,567 persons died of plague. The victims numbered 17,425 in 1903-04, 14,854 in 1906-07 and 17,172 in 1917-18. However, Kheda was considered one of the healthiest place in Gujarat, and partly for this reason a large body of European troops was stationed there. The total mortality from plague between 1901-02 and 1901-11 was 72,245 or 10 per cent of the population of the district.

The Malaria Eradication Programme

Malaria generally makes its appearance soon after the beginning of the rains. In the past, Matar, Mahemadabad, Kapadvanj, and Thasra talukas were several times affected by this disease.

The National Malaria Control Scheme was introduced in the district in 1949 and was intensified during the Second Plan period. A six-year phased programme from 1958-59 to 1963-64 was drawn up to intensify spraying of D. D. T., in all epidemic areas and to conduct surveillance operations. As a result, malaria was gradually brought under control. The

1. *Gazetteer of the Bombay Presidency, Vol. III-B, Kaira and Panch Mahals, 1926, p. 4.*

number of malaria cases detected in this district during the last five years is shown in the following statement.

Year 1	No. of Malaria cases reported 2
1968	847
1969	2,216
1970	3,570
1971	30,386
1972	29,611

Source : Director of Health Services, Gujarat State, Ahmadabad.

None of these cases proved fatal. However, the statement indicates the steep increase in the spread of malaria during the over-all period, from 847 in 1968 to as many as 29,611 in 1972.

The Smallpox Eradication Programme

At the time when the old Gazetteer was prepared (1879), the average death due to smallpox was about 49 a year in the district. Vaccination of smallpox was started in the year 1869-70 on a mass scale, to bring the disease under effective control. This had had its effects in bringing down the mortality. Though smallpox has not disappeared, the severity of its attack has been greatly minimised. There were only five cases of smallpox in 1971. In 1972 not a single case was recorded. The National smallpox Eradication Programme introduced in the year 1962, has been intensified gradually and there has been a steady increase in the vaccination staff.

The following statement shows the smallpox attacks and deaths and the primary vaccinations and re-vaccination between 1968 and 1972 in the district :

Year 1	Smallpox	
	Attacks 2	Deaths 3
1968	40	6
1969	121	24
1970	153	15
1971	5	Nil
1972	Nil	Nil

Year 1	Primary Vaccinations 2	Re-Vaccinations 3
1968	99,047	28,842
1969	91,856	4,63,327
1970	97,457	45,857
1971	1,10,911	1,77,316
1972	1,09,372	1,63,387

Source : Director of Health Services, Gujarat State, Ahmadabad.

Tuberculosis

Tuberculosis is communicable disease and the Government has instituted a district T. B. Control Programme which makes it possible to detect and treat T. B. patients and carry out preventive measures in the form of B. C. G. Vaccination. There is an Assistant Director of Public Health at the state headquarters in charge of B. C. G. Vaccination and T. B. Control Scheme. The B. C. G. Vaccination programme was introduced in the district in the year 1956.

According to the 1971 Census, the number of persons who were provided B. C. G. vaccination in the Kheda district during the year 1970 totalled 85,925. These were as follows :

Taluka 1	Number of persons vaccinated 2
1. Anand	13,780
2. Borsad	26,168
3. Petlad	8,274
4. Kapadvanj	1,971
5. Nadiad	35,732
Total	85,925

Source : District Census Handbook 1971 Kheda, part X.C-1, p. 27

VITAL STATISTICS

As compared to the past, medical facilities have increased on a large scale. As a result, the epidemics which used to take a heavy toll of life in

the past are now under control. As regards the birth rate, it was about 34.68 per thousand at the beginning of this century. It gradually increased further to 43.93 per thousand in the year 1911 as shown in the following statement :

Year 1	Birth Rate (Per 1,000) 2	Death Rate (Per 1,000) 3
1902	34.68	58.29
1903	32.75	57.25
1904	40.18	60.22
1905	39.03	37.05
1906	37.41	39.90
1907	39.22	47.22
1908	40.21	31.81
1909	42.79	31.51
1910	42.02	34.21
1911	43.93	28.99

Source : CAMPBELL J. M., *Gazetteer of the Bombay Presidency*, Vol. III-B, *Kaira and Panch Mahals*, (1914), p. 31.

After Independence, the birth rate came down to 2.784 in the year 1950. Thereafter it increased to 30.1 in 1960. However, due to the effective implementation of the family planning programme, the birth rate has since fallen down gradually. It came down to about 25.9 per thousand in 1971.

As regards death rate, it was as high as 58.29 as per thousand in the year 1902. After Independence, it came down to 15.87 in 1950. This came down to 15.4 in 1960 and 9.4 in 1970 due to the availability of medical facilities and health education after the introduction of the Five Year Plans. The gradual fall both in the death rate and the birth rate during the last five years is evident from the following statement.

Year 1	Birth Rate 2	Death Rate 3
1967	27.8	10.5
1968	30.0	10.7
1969	26.4	11.4
1970	26.3	10.0
1971	25.9	9.4

Source : Director of Health Services, Gujarat State, Ahmedabad.

COMMON DISEASES

Diseases of respiratory system, dysentery, diarrhoea and smallpox are the commonly prevalent diseases in the district, besides fevers. The hook-worm disease is prevalent among children.

The number of deaths due to various diseases during the period of five years from 1967 to 1971 has come down from 23,295 to 22,204 inspite of an increase in population. This is evident from the following statement.

STATEMENT XVI-2

Death from Common Diseases

Sl. No. 1	Cause of Death 2	1967 3	1968 4	1969 5	1970 6	1971 7
1	Cholera	1	23	33	4	11
2	Smallpox	200	42	81	27	39
3	Fevers	5,152	4,821	5,320	4,232	3,805
3	Dysentery & Diarrhoea	524	462	475	387	280
4	Respiratory System	3,430	1,813	1,403	1,045	974
5	All other causes	13,988	16,768	18,808	17,552	17,095
	Total	23,295	23,929	26,120	23,247	22,204

Source : The Director of Health Services, Gujarat State Ahmedabad.

PUBLIC HOSPITALS

The important hospitals in the district are described below briefly.

Darbar Shri Gopaldas Desai Anti T. B. Clinic, Anand—A gradual increase in the number of tuberculosis patients in the district attracted attention of the Anand Medical Association to the need of opening a T. B. Clinic at Anand. For this purpose, a plot of land opposite the Railway Station was obtained free of charge from the District Local Board. The trust created for the purpose received donations of Rs. 12,500 for building from Shri Ambalal Jorabhai Patel and Shri Purshottamdas Patel and Rs. 30,000 for equipment from the Anand Dairy. The clinic meant

for outdoor patients was inaugurated in 1954, and was rightly named after the leader of the district, Darbar Shri Gopaldas Desai. In the initial stages, medical practitioners of the town rendered free services. A full-time working staff was appointed in 1957 when on an average 500 outdoor patients per day were treated at the clinic. This necessitated additional accommodation which was provided by constructing a building at a cost of Rs. 25,000 by the Kheda District Panchayat. The clinic was then fully equipped, at a cost of Rs. 1,70,000. The number of beds in the indoor department at present is 68. The hospital incurred an expenditure of Rs. 5,88,606 during the year 1972-73. The hospital has total medical staff of 12 including 4 nurses and 4 technicians.

The following statement shows the number of patients treated at the hospital during the last five years :

Year 1	Indoor patients 2	Outdoor patients 3
1968-69	261	28,068
1969-70	242	22,082
1970-71	276	23,640
1971-72	279	23,224
1972-73	286	25,832

The clinic supplies medicines to people residing in Anand, Borsad, Vadasinor, Petlad and Thasra talukas of the district where 52 centres have been opened for the purpose. The medicines are supplied free of charge to the patients who are examined at the T. B. Clinic every four months. The people in rural areas are thus able to get treatment at their door steps.

The Emery Army Hospital, Anand—In the year 1900, a severe famine swept over Gujarat and in its wake spread epidemics of cholera and plague. Adjutant Harry Andrews started a small dispensary for the suffering population in the year 1903 with the help of donation given by one Miss Elizabeth Julia Emery of Canada. It was expanded into hospital in the year 1904. In the initial stages, there were only 24 beds. In 1912, a general ward with 50 beds and a maternity ward with 40 beds were opened. In 1941, a tuberculosis ward was added with 40 beds. A family planning department has been opened recently. The total number of beds at present is 255. The hospital has total medical staff of 43 including 30 nurses and 7 technicians.

The following statement shows the indoor and outdoor patients treated between 1968 and 1972 :

Year 1	Indoor patients 2	Outdoor patients 3
1968	3,929	19,441
1969	3,788	20,662
1970	4,800	22,000
1971	4,102	19,500
1972	2,703	14,600

The Municipal Hospital, Anand—The hospital which is run by the Anand Municipality was established in the year 1924 as a small dispensary with facilities for outdoor patients only. The cost of construction was about Rs. 6 lakhs. Gradually, it started extending more facilities to the public and made provision for indoor beds. A maternity home was started in the year 1935. It was shifted to a spacious building in 1964. A better equipped surgical ward was also added. The hospital has a total number of 125 beds at present. It has an X-ray machine and a laboratory. All types of common diseases are treated in the hospital which has total medical staff of 21 including 14 nurses, and 3 technicians.

The number of indoor and outdoor patients treated in the hospital during the last five years is shown below :

Year 1	Indoor patients 2	Outdoor patients 3
1968-69	1,136	3,940
1969-70	1,810	40,016
1970-71	1,510	42,982
1971-72	1,857	42,958
1972-73	2,355	47,853

The hospital incurred an expenditure of Rs. 4,92,347 during the year 1972-73.

The K. M. General Hospital, Vadasinor—The K. M. General Hospital at Vadasinor is a full fledged hospital established with the purpose of providing medical facilities to the people living in backward areas. It was started as a dispensary in 1942. Thereafter a regular hospital was established

in 1955, and was named after Shri Kacheria Mojilal Gordhandas, the principal donor. In the initial stages there were 40 beds; the number has now increased to 80. The hospital has a separate maternity ward and a total medical staff of 10, including 3 nurses and 4 technicians. The following statement shows the number of indoor and outdoor patients treated at the hospital during the last five years.

Year 1	Indoor patients 2	Outdoor patients 3
1968-69	27,001	95,418
1969-70	18,275	49,079
1970-71	16,332	32,482
1971-72	17,338	28,624
1972-73	18,111	27,104

The hospital which is managed by the Vadasinor Seva Samaj incurred an expenditure of Rs. 2,79,642 during the year 1972-73.

The Municipal Hospital, Borsad—The Borsad municipality had a small dispensary since 1936 with accommodation of 4 beds. In 1948, it was expanded and made a full-fledged hospital. With 54 beds at present, the hospital is equipped with an X-ray machine, operation theatre, laboratory, maternity ward, etc. The hospital has total medical staff of 27 including 9 nurses and 16 technicians.

The following statement shows the number of indoor and outdoor patients treated at the hospital during the period 1967-68 to 1971-72.

Year 1	Indoor patients 2	Outdoor patients 3
1967-68	1,630	11,342
1968-69	2,414	16,026
1969-70	2,315	13,211
1970-71	1,680	11,194
1971-72	2,266	10,959

The hospital incurred an expenditure of Rs. 1,33,866 during the year 1971-72.

The Dakor Referral Hospital, Dakor—In 1948, the Government of Bombay selected Dakor for starting a Cottage Hospital in the district. It was planned to accommodate 18 beds in the initial stages. In 1952, Shri Navinchandra Mafatlal gave donations to build a maternity ward in the hospital which was named after his mother as "Smt. Jivkorbai Maternity Home." The cottage hospital thus started functioning in 1952. In 1964, the Government of Gujarat upgraded it to Referral Hospital with 45 beds.

The hospital at present has medical, surgical, maternity and children wards, with special departments like Radiology and Pathology. The hospital treats about 2,000 new patients every year in its indoor department and about 25,000 in its outdoor department. It has total medical staff of 17 including 10 nurses and 4 technicians. The hospital incurred an expenditure of Rs. 1,62,503 during the year 1972-73.

The C. J. Fijiwala Arogya Bhavan, Dharmaj, (Petlad Taluka)—The hospital was established in the year 1965, with a handsome donation from Shri Chhotabhai Jivabhai Patel. The cost of construction worked out to Rs. 3 lakhs. This institution provides treatment for the T. B. patients only and has 24 beds for males and 8 beds for females.

The following statement shows the number of indoor and outdoor patients treated at the hospital during the years 1970 to 1972.

Year 1	Indoor patients 2	Outdoor patients 3
1970	198	282
1971	196	264
1972	213	341

The hospital incurred an expenditure of Rs. 25,797 during the year 1971-72.

Sheth J. B. Mehta General Hospital, Kapadvanj—The Sheth J. B. Mehta General Hospital was established in 1954 and was named after its donor, Shri Jabirbhai Badroodien Mehta. It was started with an initial capacity of 42 beds, which has increased to 50. The hospital has separate departments of X-ray, pathological laboratory and surgery. It has total medical staff of 12,

including 8 nurses, and 2 technicians. The number of indoor and outdoor patients treated at the hospital during the period 1968 to 1972 is given below :

Year 1	Indoor patients 2	Outdoor patients 3
1968	1,083	24,714
1969	1,771	20,240
1970	1,700	20,395
1971	1,782	19,488
1972	1,755	20,892

The hospital incurred an expenditure of Rs. 1,46,640 during the year 1972.

The Kennedy and Zanana Hospital, Khambhat—The hospital was established during the princely State regime, by the Nawab of Khambhat and was handed over to the Government of Bombay at the time of the merger of the State in the Indian Union. There has been no expansion in the hospital since then as the number of beds in its indoor department still remains at 20 only. The hospital has total medical staff of 10 including 5 nurses and 2 technicians.

The following statement shows the number of indoor and outdoor patients treated at the hospital during the last five years.

Year 1	Indoor patients 2	Outdoor patients 3
1968	1,231	20,501
1969	1,361	19,879
1970	1,319	19,739
1971	1,355	20,631
1972	1,489	17,961

The hospital incurred an expenditure of Rs. 1,37,631 during the year 1972-73.

The Cambay General Hospital, Khambhat—The Cambay General Hospital is an expansion of a small maternity home known as 'The Cambay Maternity Home'. It was started in 1943, in a small rented premises. A new building was erected in 1956, when the hospital was established at a cost of Rs. 2.87 lakhs. Additional buildings were constructed at a

cost of Rs. 8.67 lakhs in the year 1972. The donor and founder of the hospital was Shri Mulchandbhai Girdharbhai Patel.

In the initial stages it had a capacity of only 10 to 12 beds which increased to 60 in 1956 and 100 thereafter.

The hospital has a surgical department, X-ray department, pathological department, ophthalmic department, dental department, and ear, nose and throat department. The hospital has total medical staff of 15 including 6 nurses and 2 technicians. The following statement shows the number of indoor and outdoor patients treated at the hospital during the last five years.

Year 1	Indoor patients 2	Outdoor patients 3
1968	2,811	16,623
1969	3,577	23,624
1970	3,461	27,835
1971	3,517	26,460
1972	3,081	24,382

The hospital incurred an expenditure Rs. 4,13,653 during the year 1972.

The Civil Hospital, Kheda—The Civil Hospital is the oldest existing hospital in the Kheda district. It was established as early as 1873 with a capacity of 48 beds. The number has now increased to 68. It is a fully equipped hospital, having a laboratory, dental department, X-ray facilities, etc. The hospital has total medical staff of 31 including 18 nurses and 3 technicians. The following figures show the indoor and outdoor patients treated at the hospital during the period 1967 to 1971.

Year 1	Indoor patients 2	Outdoor patients 3
1967	2,640	19,746
1968	2,554	18,331
1969	2,031	19,668
1970	2,342	20,556
1971	2,548	24,388

The hospital incurred an expenditure of Rs. 2,32,486 during the year 1971.

The N. P. General Hospital, Mahemadabad—As early as the year 1870, a dispensary was started at Mahemadabad with donations from Baheramji Jijibhai. In 1942, a maternity home was added to the dispensary. Till 1956, it was under Government management. The Mahemadabad Nagar Panchayat took over its management in 1956 and in the following year it was converted into a general hospital with 16 beds. In 1960, a new building was built for the hospital to accommodate 28 beds. The hospital has total medical staff of 5, including 4 nurses.

The following statement shows the number of indoor and outdoor patients treated at the hospital during the last five years.

Year 1	Indoor patients 2	Outdoor patients 3
1968	1,808	29,077
1969	1,774	27,082
1970	1,969	30,435
1971	1,968	30,001
1972	2,157	30,011

The hospital incurred an expenditure of Rs. 1,02,347 during the year 1972.

Shri Haridas Hospital, Nadiad—In the year 1916-17, a dispensary was opened at Nadiad and was named after Shri Haridas V. Desai, the donor. A maternity ward was added to the dispensary in the year 1929. The hospital with 49 beds at present has total medical staff of 15 including 2 nurses and 2 technicians. The following statement shows the number of indoor and outdoor patients treated at the hospital during the last five years.

Year 1	Indoor patients 2	Outdoor patients 3
1968	2,519	35,499
1969	2,388	31,967
1970	2,330	34,353
1971	2,310	35,979
1972	2,504	40,723

The hospital incurred an expenditure of Rs. 2,15,878 during the year 1972-73.

Sheth H. J. Maha-Gujarat Hospital, Nadiad—The hospital was established in the year 1950 at a cost of Rs. 3.72 lakhs. It gets its name from Sheth Hargovandas Jivandas, the main donor. The hospital has an X-ray machine, a laboratory, a physio-therapy department, etc., with 125 beds as present. The hospital runs a training school for nurses. It has total medical staff of 46 including 24 nurses and 6 technicians. The number of indoor and outdoor patients treated at the hospital during the period 1968-69 to 1972-73 is shown below :

Year 1	Indoor patients 2	Outdoor patients 3
1968-69	2,020	11,372
1969-70	2,775	25,192
1970-71	3,044	32,774
1971-72	2,646	29,680
1972-73	3,164	29,113

The hospital incurred an expenditure of Rs. 298,864 during the year 1972-73.

The Methodist Hospital, Nadiad—The Methodist Hospital was established in the year 1908 by Dr. Alexander Corpron, a medical missionary from America. It was started with 20 beds in a residential bungalow, and in 1930 was housed in a new building. The hospital has an X-ray department, a clinical laboratory, a maternity ward and a separate family planning department. It is known for its surgical facilities. The hospital has total medical staff of 40 including 23 nurses and 5 technicians. The following statement shows the number of indoor and outdoor patients treated at the hospital during the last five years.

Year 1	Indoor patients 2	Outdoor patients 3
1968	30,289	13,362
1969	35,274	15,938
1970	34,339	16,804
1971	31,891	18,108
1972	30,250	18,524

The hospital incurred an expenditure of Rs. 2,06,985 during the year 1972.

The Samjulaaxmi Maternity Home, Nadiad The Samjulaaxmi Maternity Home was started in the year 1932 with the main donation from Shrimati Samjulaaxmi. Initially there were only 6 beds which have now increased to 25. In the year 1957, a new building was constructed for the hospital. The hospital receives grant-in-aid from the State Government. It has total medical staff of 7 including 3 nurses.

The following are the figures of the indoor and outdoor patients treated at the hospital during the last five years :

Year 1	Indoor patients 2	Outdoor patients 3
1968	290	1,833
1969	313	2,432
1970	314	2,303
1971	356	3,012
1972	342	4,006

The hospital incurred an expenditure of Rs. 33,678 during the year 1972.

Shri Basudiwala Tuberculosis Sanitorium and Hospital, Palana (Nadiad Taluka)—Due to an abnormal increase in the number of tuberculosis patients in the Kheda district, the need to meet the challenge of the disease was felt after Independence. Efforts were made by Dr. C. S. Patel to obtain grant and donations from Government and private agencies. As a result, the hospital was established in 1962 at a cost of Rs. 3 lakhs and was named after Shri Basudiwala, the principal donor. The total number of beds at present is 112. The hospital has total medical staff of 7 including 4 nurses and 2 technicians.

There is no outdoor department. On an average about 500 patients are treated in the indoor department every year. The hospital incurred an expenditure of Rs. 1,70,158 during the year 1972-73.

Shri Sayaji Hospital, Petlad—Shri Sayaji Hospital of Petlad is one of the oldest hospitals in the district, established in the year 1895. Initially, it had 74 beds ; the number has now increased to 102. The hospital has total medical staff of 26 including 17 nurses and 2 technicians.

It has separate departments of T. B., family planning, pathology, etc. An anti-rabic centre is attached to the hospital.

The following statement shows the number of indoor and outdoor patients treated at the hospital between 1968 and 1972.

Year 1	Indoor patients 2	Outdoor patients 3
1968	4,131	28,369
1969	4,535	29,432
1970	5,085	30,343
1971	5,185	31,454
1972	5,272	32,346

The hospital incurred an expenditure of Rs. 3,23,011 during the year 1972.

The Kasturba Trust Hospital and Maternity Home, Ras, (Borsad Taluka)—During the national movement of non-co-operation, Kasturba Gandhi was arrested at Ras in the year 1932. After her death in 1944, the local leaders of Ras decided to commemorate this event by constructing a hospital for the benefit of the rural population. The Kasturba Trust Hospital and Maternity Home was thus started at Ras in the year 1953, with the efforts of the Kasturba Gandhi Memorial Trust. From 1953 to 1967 the institution was run by that trust.

The trust authorities decided to close the institution after 1967 as enough funds were not available. Thereupon, the Ras Trust created by the local workers decided to run the hospital from the year 1968. The local District Panchayat dispensary was merged in the Kasturba Trust Hospital and Maternity Home in 1969. The hospital buildings were thereafter constructed at a cost of Rs. 2 lakhs. The hospital runs with the help of the grants received from the State Government and the District Panchayat and the amount received from public and private donations.

The hospital with 42 beds serves, the village Ras and about 35 other villages nearby. It has total medical staff of 6 including 2 nurses. The

following statement shows the number of indoor and outdoor patients treated at the hospital during the last five years :

Year 1	Indoor patients 2	Outdoor patients 3
1968	396	5,063
1969	350	7,030
1970	382	10,384
1971	292	15,748
1972	497	15,307

The hospital incurred an expenditure of Rs. 92,414 during the year 1972.

The B. D. Patel General Hospital, Umreth—The B. D. Patel General Hospital was established in the year 1962, with a donation from Shri Bhailalbhai Dwarkadas Patel after whom the hospital has been named. At present it has 48 beds. The hospital is equipped with an X-ray machine, operation theatre, etc.

The following statement shows the indoor and outdoor patients treated at the hospital between 1969 and 1973 :

Year 1	Indoor patients 2	Outdoor patients 3
1969	510	1,663
1970	632	2,398
1971	655	2,662
1972	545	2,223
1973	539	2,707

The hospital incurred an expenditure of Rs. 78,104 during the year 1973.

The K. K. Parekh Nagarpalika Dispensary and Diwalibai Maternity Home, Umreth (Anand Taluka)—The dispensary was established in the

year 1902. The donor was Kahandas Kalidas Parekh. In the initial stages, there were eight beds, four for male patients and four for female patients. At present, it has 16 beds. The Diwalibai Maternity Home was started in 1946 with 13 beds. The hospital has a total medical staff of three. The following statement shows the number of indoor and outdoor patients treated at the hospital from the year 1968 to 1972 :

Year 1	Indoor patients 2	Outdoor patients 3
1968	904	10,295
1969	871	10,400
1970	870	11,203
1971	802	13,184
1972	732	17,145

The hospital incurred an yearly expenditure of Rs. 60,000.

Shri Chaturbhai Gangadas General Hospital, Uttarsanda (Nadiad Taluka)—The hospital was established in 1945, and was named after Shri Chaturbhai Gangadas Patel, the principal donor. It got a new spacious building of its own in 1954. Thereafter the hospital was equipped with modern facilities including a pathological laboratory, X-ray unit, an air-conditioned operation theatre, etc. In the initial stages there were 60 beds, which have now increased to 100. The hospital has total medical staff of five. The following statement shows the number of indoor and outdoor patients treated during the last five years.

Year 1	Indoor patients 2	Outdoor patients 3
1968-69	1,550	4,480
1969-70	2,065	6,038
1970-71	2,680	7,771
1971-72	3,160	8,695
1972-73	2,104	5,059

AYURVED

The Ayurved system of medicines flourished in the past. However, its popularity and importance gradually declined with the advent of the British rule due to several reasons such as encouragement to allopathy by the British, the absence of scientific research in the Ayurved, and want of *Vaids* well-versed in this science. In the year 1928, the princely State of Khambhat had established an Ayurvedic dispensary at village Gudel. After Independence, the national Government realised the importance of the Ayurved and devoted attention to its revival by research and development. As a result, several Ayurvedic dispensaries were opened in every part of the country. At present there are 8 Government Ayurvedic dispensaries in the district and 4 hospitals one each at Kapadvanj, Ankla, Khambholaj and Vanakbori. The Ayurved Officer (class II) posted at Nadiad looks after the Ayurvedic hospitals and dispensaries in the district.

NUMBER OF DOCTORS

According to the 1971 Census, there were 456 physicians and surgeons and 30 dental surgeons in the urban areas of the district. Figures for the rural areas are not available.

FAMILY PLANNING

The family planning programme now forms a very important part of the district health programme. It is implemented through the rural family planning welfare centres in the rural areas and the urban family planning welfare centres in the urban areas. The rural family planning welfare Centres are attached to the primary health centres. Moreover, sub-centres are set up at the rate of one for every 10,000 population. Routine services like supply of contraceptive devices, etc., are provided at all urban and rural family planning welfare centres and other medical institutions. In addition, beds are reserved in public and private hospitals for free female sterilization operations.

The District Family Planning Officer with his headquarters at Nadiad is responsible for implementing the family planning programme in the district. He is assisted by a male and a female Assistant Surgeon, District Health Educator and others. The District Family Planning Bureau which was previously under the State Government is now placed under the District Panchayat. Its activities are conducted mainly through primary health centres and sub-centres.

There are 9 family planning centres in the urban areas—two in Khambhat and one each in Anand, Nadiad, Kapadvanj, Mahamadabad, Petlad, Kheda

1. Provisional figures.

and Dakor. The rural family planning centres are distributed in the following villages :—

Rural Centres 1					Taluka 2
1.	Mahudha	..	..	..	.. Nadiad
2.	Alindra	..	..	..	.. Nadiad
3.	Ankiao	..	..	..	.. Borsad
4.	Kathana	..	..	..	.. Borsad
5.	Davol	..	..	..	.. Borsad
6.	Atarumba	..	..	..	.. Kapadvanj
7.	Lasundra	..	..	..	.. Kapadvanj
8.	Virpur	..	..	..	.. Vadasinor
9.	Dabhau	..	..	..	.. Petlad
10.	Samadra	..	..	..	.. Petlad
11.	Vadadala	..	..	..	.. Mahamadabad
12.	Kanij	..	..	..	.. Mahamadabad
13.	Limbari	..	..	..	.. Matar
14.	Ajarpura	..	..	..	.. Anand
15.	Sarasa	..	..	..	.. Anand
16.	Navli	..	..	..	.. Anand
17.	Undel	..	..	..	.. Khambhat
18.	Sevalia	..	..	..	.. Thasra
19.	Nes	..	..	..	.. Thasra

Maternal and Child Health.—Prior to Independence, as public health sector was not properly organised, provision for the health centres did not exist. The health of women was many a time impaired during their pregnancy and delivery. Trained nurses and midwives were not available and the work was performed by untrained *ayahs* and indigenous *dais* with the result that death rate of both pregnant women and infants was high. After the implementation of the Five Year Plans, Government made necessary provision for training nurses and established number of maternity and child welfare centres. In 1971, the number of such centres was 33 in the district.

PRIMARY HEALTH CENTRES

Primary health centres and sub-centres provide basic health services as well as maternity and child health services in an integrated manner and also perform preventive and curative functions. They carry out multipurpose functions such as environmental sanitation, control of communicable diseases, control of trachoma, leprosy, etc. There are 19 primary health centres in the district as mentioned earlier. Besides, there are 64 sub-centres.

Organisational set up

The Director of Health Services, Gujarat State, Ahmadabad is the head of all medical and health institutions in the State and is responsible for all efficient working of such institutions in the State. The Directorate is divided into two sections, Medical and Health. On Health side, there is a Deputy Director of Public Health (Inspection) at the headquarters to look after the activities of Public Health Department except Family Planning and Malaria-Filaria Programmes. He is assisted by the functional Assistant Directors of Public Health in charge of different health programmes. These programmes are implemented by the Public Health Department through the District Health Officers who are in charge of all public health activities in the district. There is also a Joint-Director of Public Health Services at the headquarters who is in charge of all activities connected with the family planning and maternity and child health services in the State. At district level, the District Family Planning Medical Officers implement this programme. There is also a full-time Joint Director (Statistics) at the headquarters who is in charge of statistics relating to Health Section. There is also a full time Deputy Director of Public Health (Malaria and Filaria) who is in charge of National Malaria Eradication Programme and National Filaria Control Programme. He functions through the Regional Malaria Officers and Unit Officers in charge National Malaria Eradication Programme at regional and district levels so far as National Malaria Eradication Programme is concerned. The National Filaria Control Programme is implemented through the Unit officers in charge National Filaria Control Programme at district level.

In Kheda district, the District Health Organisation Scheme and Family Planning Programme were transferred to the District Panchayat on 1st April, 1963 and 1st April, 1969 respectively. All primary health centres and dispensaries, etc., are under the control of Chief Medical Officer of Health, Nadiad. Intensive family planning programme was initiated in the Kheda district with the assistance of the Ford Foundation. Under the scheme, the district headquarters staff was augmented and 6 more primary health centres were established in the intensive block of Anand. There is one Referral Hospital at Dakor which is directly under the control of this Directorate. Besides this, there is a District T. B. centre, which is under the control of District T. B.

Officer at district level and under this Directorate at State level. There are also two National Malaria Eradication Programme Units functioning at Nadiad and Anand.

Activities of the Sanitary Department

The activities of Sanitary department in the district include the following : (1) medical aid through primary health centres and Panchayat dispensaries, (2) control of communicable diseases like, cholera, typhoid, etc., (3) immunization programme for infants by triple vaccination, polio vaccination, etc., (4) control of smallpox by primary vaccination, (5) deliveries through midwives and trained dais, (6) nutrition assessment and survey, (7) school health programme, (8) environmental sanitation programme by constructing latrines and sewage pits, etc., (9) execution of National Trachoma Control Programme, (10) treatment of leprosy cases, (11) implementation of Family Planning Programme, etc.

WATER SUPPLY

Provision for drinking water is the most essential human need. It has, therefore, always received the topmost priority. Even before Independence, Kheda district had the distinction of having the maximum number of water works in the whole Bombay State. The sources of drinking water in this region are open shallow wells situated on the banks of river or village ponds. But the water is brackish. Thus the problem of salinity is most common in this area.

Urban Water Supply

All towns have protected water supply. Tap water facility is provided at nine towns, viz., (1) Dakor (2) Nadiad (3) Petlad (4) Thasra (5) Vallabh Vidyanagar (6) Vasad (7) Umreth (8) Khambhat and (9) Kheda. The rest of the towns have different sources of water supply like tube-well, tank, river and ordinary surface well. The first water works were started in Bhadran in 1912, Sojitra in 1914, Khambhat in 1916, and Kapadvanj in 1926. Most of the other towns got water works after Independence. Important water works in this district at present are described below :

The Anand Water Works, Anand

The Anand water works were established in the year 1964. Nearly 22 lakh gallons of water is supplied through 5,000 domestic connections every day. To meet the requirements of the increasing population, the Municipality plans to construct another water works in the Lotiya Bhagol area of the town.

The Borsad Water Works, Borsad

The Borsad water works were constructed in the year 1934 by a private party, at a cost of Rs. 5 lakhs. The Borsad Municipality purchased them in 1945. The water is supplied from two tube-wells, which have a total capacity to supply 8 lakh gallons of water every day. At present, about 4 to 5 lakh gallons of protected water is supplied to the local population, through 1700 water connections.

The Kapadvanj Water Works, Kapadvanj

The water works at Kapadvanj were established in the year 1926-27 at a cost of Rs. 3.50 lakhs. In the year 1961, the project was handed over to the town Municipality. The project was expanded and improved in 1965 at a cost of Rs. 8 lakhs. In the year 1971, the project was further expanded. The total capacity of the water works is to supply 12 lakh gallons of protected water per day. The number of domestic connections at present is 2,500.

The Khambhat Water Works, Khambhat

The Khambhat town is served with piped water supply since 1916 when the water works were constructed by the Khambhat State. In 1910, 4 borings were made. However, regular water works were constructed in 1916 at a cost of Rs. 3.50 lakhs. The total quantity of water supplied everyday is estimated at 15,80,000 gallons. The number of domestic connections at present is 6,265.

The Mahemadabad Water Works, Mahemadabad

The Mahemadabad water works were set up in the year 1936 by a private company. In the year 1951, these water works were purchased by the local Municipality at Rs. 81,000. The water is drawn from bore-wells which supply 40,000 gallons of water everyday through 1,800 water connections. In order to augment the water supply, a new scheme has been prepared which will entail an expenditure of Rs. 8 lakhs. In this scheme, a new reservoir with a capacity of 2 lakh gallons of water will be set up. It is technically approved by the Government of Gujarat and is now under execution.

The Nadiad Water Works, Nadiad

The water works at Nadiad were constructed in the year 1950, at a cost of Rs. 24 lakhs. The source of the water supply is the Shedhi river

from where 52 lakh gallons of water is supplied every day. The water connections numbered over 9,000 in the year 1973. A scheme of augmenting and improving the existing water supply is in progress. It is estimated to cost about Rs. 30 lakhs.

The Petlad Water Works, Petlad

The Petlad water works were constructed in the year 1968 at a cost of Rs. 8.43 lakhs. The water is supplied from two bore-wells with a total capacity to supply 4.55 lakh gallons of water per day. At present, the domestic connections number 4,345. A chlorination plant is under construction. After completion of the second stage, the project will be capable of supplying 30 gallons of water per head per day for a population upto 50,000.

The Thasra Water Works, Thasra

The Thasra water works were set up in the year 1968 at a cost of Rs. 2 lakhs. The water is supplied by electric pumps directly from wells. The number of water connections is about 900 at present.

The Umreth Water Works, Umreth

The water works at Umreth constructed at a cost of Rs. 9 lakhs started functioning in the year 1955-56. The number of domestic connections was 2,771 in the year 1973. The water works have the capacity to supply two lakh gallons of water per day.

The Vasad Water Works, Vasad

The Vasad water works were constructed in the year 1954 at a cost of Rs. 1,42,000. The source of water supply is the tube-well with a total capacity to supply 1,50,000 gallons of water every day. At present, the domestic connections number 600.

The Vaso Water Works, Vaso

The Vaso water works were constructed in the year 1950 at a cost of Rs. 2,51,900. The main source of water supply consists of well and a tube-well, which have a total capacity to supply 50,000 gallons of water per day. There are 25 water connections at present.

Besides these, there are water works in the urban areas of Dakor, Vadasinor, Chikhodara and Matar which were constructed after the introduction of the Five Year Plans.

Rural Water Supply

As regards rural water works, there were, according to the 1971 Census 304 villages served with tap-water. Their taluka-wise distribution is given below :

Sl. No.	Taluka	Number of villages
1	2	3
1	Mahamadabad	18
2	Nadiad	44
3	Anand	46
4	Potlad	72
5	Borsad	68
6	Khambhat	25
7	Matar	23
8	Kapadvanj	2
9	Vadasinor	2
10	Thasra	4
	Total	304

Source : Kheda District Census Handbook, 1971, pp. 36 to 108.

DRAINAGE

In a large number of towns, drainage facilities are inadequate. Only three towns, namely Anand, Kapadvanj and Nadiad have underground sewerage facilities. Four towns have open surface drainage and the rest of the towns have soak-pits.

The town of Kapadvanj was the first to have an underground drainage system, which was introduced in the year 1928 at a cost of Rs. 13 lakhs. The entire area within the fortwall admeasuring 6.68 sq. miles has been covered under the scheme. Nadiad got the drainage system in the year 1955 and Anand in 1968.

CHAPTER XVII

OTHER SOCIAL SERVICES

INTRODUCTORY

This chapter deals with social services other than medical, education, etc., which are dealt with in earlier chapters. The subjects dealt with in this chapter include labour welfare, prohibition, welfare of the Backward Classes and public and charitable trusts and endowments. These welfare services form a new phase of public activities which have assumed greater importance after Independence and especially after the introduction of the Five Year Plans.

The changes brought about by industrialisation and urbanisation created a need for social amenities which provide measures for the welfare of the workers and the Backward Classes. After Independence, the Government has undertaken various measures for the amelioration of conditions of the backward strata of society which was hitherto neglected. A number of facilities and concessions have been provided to these classes so as to bring them on par with other classes of society, thus, removing the inequalities in their status as citizens of India. Similarly, for the welfare of the working classes a number of labour welfare measures have been undertaken. These have gone far enough in removing the exploiting conditions in which they worked in the past. As a measure of social reform, especially to help improve the living conditions of poorer strata of society, prohibition of liquor and other intoxicating drugs has been introduced and strictly enforced. These welfare measures are dealt with in the following paragraphs.

LABOUR LEGISLATION

The status and conditions of industrial workers have now changed much as compared to the past. A worker is now only an ordinary earner producing a small part of the whole product. He is no longer a self-dependant and self-employed artisan of the past, who worked in his own house and manufactured a complete product. The industrialisation and urbanisation have also created problems of sanitation, over crowding and unsafe conditions of working life which involve risk to life and limb.

The labour laws at present in force in the district include the following :

1. The Indian Boilers Act, 1923.
2. The Workmen's Compensation Act, 1923.
3. The Cotton Ginning and Pressing Factories Act, 1925.
4. The Trade Unions Act, 1926.

5. The Payment of Wages Act, 1936.
6. The Employment of Children Act, 1938.
7. The Bombay Industrial Relations Act, 1946.
8. The Industrial Employment (Standing Orders) Act, 1946.
9. The Industrial Disputes Act, 1947.
10. The Bombay Shops and Establishments Act, 1948.
11. The Employees State Insurance Act, 1948.
12. The Factories Act, 1948.
13. The Minimum Wages Act, 1948.
14. The Employees Provident Fund Act, 1952.
15. The Working Journalists (Conditions of Services and Miscellaneous Provisions) Act, 1955.
16. The Working Journalists (Fixation of Rates of Wages) Act, 1958.
17. The Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959.
18. The Gujarat Labour Welfare Fund Act, 1961.
19. The Maternity Benefit Act, 1961.
20. The Motor Transport Workers Act, 1961.
21. The Apprentice Act, 1961.
22. The Gujarat Smoke Nuisance Act, 1963.
23. The Payment of Bonus Act, 1965.
24. The Beedi and Cigar Workers (Conditions of Employment) Act, 1966.
25. The Contract Labour (Regulation and Abolition) Act, 1970 and
26. The Payment of Gratuity Act, 1972.

The important labour laws which have introduced far reaching changes in the welfare of working conditions of labour are : (1) the Maternity Benefit Act which regulates the employment of women before and after child-birth and provides maternity benefits on a prescribed basis, (2) the Shops and Establishments Act which limits the hours of work in shops and commercial establishments and provides for a paid weekly holiday, (3) the Factories Act which provides for the minimum requirements regarding health, safety and general welfare of workers and fixes their working hours, (4) the Workmen's Compensation Act which provides for compensation to be paid to a worker who meets with an accident while on duty and (5) the Provident Funds Act which provides for the contributory provident fund for the future economic stability of the worker, etc. The Provident Funds Scheme covered 216 establishments employing 20,326 persons of whom 16,334 contributed to the Provident Fund in the year 1973.

The following statement gives industry-wise distribution of establishments, employees and subscribers.

STATEMENT XVII-1

Provident Fund Scheme

Sl. No. 1	Category of Industry 2	No. of Establishments 3	No. of employees 4	No. of subscribers 5
1	Electrical, Mechanical & General Engineering	46	4,739	3,981
2	Bank	2	315	314
3	Tobacco	65	1,676	1,078
4	Textiles	27	8,808	7,802
5	Edible		12	..
6	R. M. T.	3	52	40
7	Newspapers	1	12	..
8	Automobiles	6	147	119
9	Cinema	4	42	37
10	Leather & Leather Product	3	70	38
11	Hotels	2	10	10
12	Paper	1	32	25
13	Trading & Commercial estbs.	6	160	132
14	M. & P. Service	2	45	27
15	Iron & Steel	1	..	..
16	Laundry & Laundry Service	2	8	8
17	Agarbattee	2	20	18
18	Fruits & Vegetables	1	32	20
19	P. & T.	5	1,743	1,472
20	Tiles	4	37	35
21	H. & F.	5	299	237
22	Plastic Products	1	[Under Section (4)]	
23	Milk & Milk Products	3	5	5
24	Paper Products	1	55	35
25	Cotton Ginning	6	188	155

STATEMENT XVII-1—concl'd.

Sl. No.	Category of Industry	No. of Establishments	No. of employees	No. of subscribers
1	2	3	4	5
26	Petroleum or Natural Gas	1	440	300
27	Non-Scheduled	1	90	70
28	Rice Milling	1	..	..
29	Restaurants	3	65	80
30	Salt Industries	1	10	8
31	Canteen	1	5	5
32	Printing	4	94	..
33	Dal Milling	1	15	15
34	Rubber Products	1	51	51
35	Paint and Varnish	1	240	240
36	Glass	1	775	..
Total ..		216	20,326	16,384

Source : Regional Provident Fund Commissioner, Gujarat State, Ahmadabad.

LABOUR WELFARE

The labour welfare activities were started in the year 1937 when the popular Congress Ministry was formed in the former Bombay State. The labour welfare centres were established in the labour localities with a view to provide healthy recreation to the workers in their leisure hours. That time only 6 towns of the present Gujarat State i. e. Ahmadabad, Vadodara, Surat, Bharuch, Nadiad and Viramgam were covered by labour welfare activities. These activities were conducted by the State Government.

In the year 1953, the former Government of Bombay, passed the Bombay Labour Welfare Fund Act which was brought into force with effect from 24th June, 1953.

The purpose of the Act is to provide for a constitution of a fund for financing activities to promote welfare of labour in the State and for conducting such welfare activities as will raise the standard of the working class. The fund consists of the following : (a) all fines realised from employees, (b) all unpaid accumulations, (c) voluntary donations, (d) Labour Welfare Fund of individual establishments transferred to the Board, (e) Public borrowings.

The Gujarat Labour Welfare Board constituted under the Bombay Welfare Fund Act of 1953 conducts labour welfare activities in the State. Certain amendments were made in this Act after the formation of the Gujarat State and the amended Act was brought into force in the year 1962. The Labour Welfare Board works as trustees of the labour welfare fund which is created to promote the welfare of labourers and their dependents. The main activities of the board include establishment of community and social education centres, including reading rooms and libraries, community centres, holiday homes, excursions, entertainments and other recreation. These activities are mainly conducted through the labour welfare centres established at different places. There are three labour welfare centres in this district, one each at Khambhat, Nadiad and Petlad. The centre at Khambhat was started in the year 1964-65 while those at Nadiad and Petlad were started in 1966-67 and 1967-68 respectively.

The Board encourages the labour unions to conduct labour welfare activities and gives grant-in-aid upto 75 per cent of the expenditure on approved activities. The Textile Labour Unions at Khambhat and Nadiad are in receipt of such grants.

PROHIBITION

As early as 1922, the Government of Bombay had constituted a committee to investigate into the problem of prohibition. This committee recommended the policy of total prohibition and as a result in 1925 the Government of Bombay declared its intention to introduce and implement total prohibition.

Gandhiji had advocated prohibition in his 10-point constructive programme. Despite opposition from the vested interests, this programme was vigorously followed during non-cooperation movement of 1930. Gandhiji spearheaded the movement for prohibition and organised picketing of wine and toddy shops and entrusted this work to Kasturba Gandhi and Mithuben Pitit who started a women's organisation named as "Stree Swarajya Sangh" with a band of about 1200 women workers in Gujarat. Thus, Gujarat took a lead for the cause of prohibition.

When the first popular ministry was formed in the State of Bombay in the year 1938, it first introduced prohibition in the industrial areas of Ahmadabad, Surat and Bharuch districts. It was, however, not extended to the areas comprising this district. In the year 1947, a phased programme of prohibition was undertaken by the National Government. Under this programme, the sale of intoxicant was controlled progressively by a cut of 25 per cent. This policy of gradual prohibition culminated in total prohibition in April, 1950. Thus, total prohibition was introduced in this and other parts of Gujarat from April, 1950. At present, the State of Gujarat is the only State which has implemented the policy of total prohibition.

The prohibition law is brought into force primarily with a view to eliminating the vice of drinking and rehabilitating the domestic life of the addicts, thereby raising the standard of living of the people. The following Central and State Acts are at present in force in the Gujarat State :

(1) *State Acts*

- (i) The Bombay Prohibition Act, 1949.
- (ii) The Bombay Opium Smoking Act, 1936.
- (iii) The Bombay Drugs (Control) Act, 1959.

(2) *Central Acts*

- (i) The Medicinal and Toilet Preparations (Excise Duties) Act, 1955.
- (ii) The Spirituous Preparations (Inter-State Trade and Commerce) Control Act, 1955.
- (iii) The Dangerous Drugs Act, 1930.

These Acts prohibit the import, export, transport, purchase, possession, use, consumption and manufacture of intoxicants in the State except under a licence or a permit.

Prohibition has brought about a healthy change in the domestic, social and economic life of the peasants, labourers and the Backward Classes in particular. The Dhebar Commission for Scheduled Castes and Scheduled Tribes has taken a special note in its report about the working of prohibition in the tribal areas of Gujarat and has observed that tribals have taken to peaceful life, their purchasing power has increased and their standard of living has improved as a result of prohibition. The Social Welfare Department of the erstwhile Bombay State carried out a survey of the socio-economic conditions of the Backward Classes during the year 1958. It examined more than 100 villages of several districts including the Kheda district. The survey indicated that there was an overall improvement in social, economic and health conditions of the Backward Classes as a result of prohibition. They were able to save money which was utilised for their better life. The amount of income which was formerly spent on liquor was used for productive purposes.

The Prohibition Inquiry Report for Bombay State submitted by Shri M. D. Bhansali, I. C. S., in 1952 made a special mention of the Kheda District. It found that in 1952, i. e., barely after two years of the introduction of total prohibition, the quantity of liquor consumed in the district was negligible. Illicit liquor was distilled only to a small extent in the villages adjoining Mahisagar river-bed of Borsad, Anand and Thasra talukas. A few offences were detected in urban areas like Nadiad, Anand, Khambhat and Petlad. A few Patidars were found drinking liquor which was manufactured by the former criminal tribes of Vagharies and Thakardas. However, it was

found that liquor drinking was only about 5 per cent of the consumption in 1945-46. This was through illicit channels. The report noted that the lower middle classes consisting of Baraiyas, Dharalas, Mochis, Darajis, Garasias and artisans were more benefitted by prohibition. Their improved economic condition was reflected in better clothes, food and utensils.

The position has much improved since then and prohibition has been made more effective. The illicit distillation is under check and offences of drunkenness, etc., are on the whole, declining. Most of the addicts have redeemed their old debts. The number of crimes which were committed under the influence of drinks have also appreciably declined. The woman folk of the former addicts are happier as they are now free from the harassment from their drunken husbands. A greater number of their children now go to schools. Prohibition has thus reduced family tensions and brought about better relations at home, greater and proper care of children, and almost complete absence of quarrelsome and ugly atmosphere both in homes and in the neighbourhood.

The prohibition offences recorded in the district during the last decade are given in the following statement.

STATEMENT XVII-2

Prohibition Offences

Year 1	Offences of distillation 2	Total number of prohibition offences 3
1960-61	1,106	2,811
1961-62	470	2,797
1962-63	607	3,532
1963-64	543	3,414
1964-65	530	3,879
1965-66	697	4,745
1966-67	656	5,000
1967-68	825	4,644
1968-69	684	4,628
1969-70	776	5,311
1970-71	763	6,283

Source :

Gujarat the Torchbearer of Prohibition, 1971, Government of Gujarat, p. 25-26.

During the overall period the offences of distillation have gone down from 1106 in 1960-61 to 763 in 1970-71 but the total prohibition offences have increased from 2811 to 6283. This is not due to the increased anti-prohibition activities but due to the effective measures taken by the Government in detecting the offences.

Set-up of the Department and its Functions

The Director of Prohibition and Excise is the head of the Department. He has his office at Ahmadabad. He is assisted by one Deputy Director of Prohibition and Excise (Class II) and one Legal Assistant (Class II). The district is placed in charge of a gazetted officer, namely Superintendent of Prohibition and Excise. He has under him Inspectors and Sub-Inspectors of Prohibition and Excise to assist him in his work. They are posted at (1) Nadiad (2) Anand (3) Palaj and (4) Kanjari. The Superintendent of Prohibition and Excise is also the Secretary of the Kheda District Prohibition Committee constituted by Government to advise the administration in the matter of grant of licences under Bombay Prohibition Act of 1949.

The functions of the Prohibition and Excise Department are confined to grant licences and permits for excisable articles, inspection of these licences and permits, and to recover excise duties and fees on foreign liquor and other intoxicants and on medicinal and toilet preparations containing alcohol, opium, hemp, narcotic drugs and other narcotics. Besides these, the Prohibition and Excise Department carries on propaganda in favour of prohibition and educates the masses against the evil of drinking. The work relating to prohibition propaganda in the Panchayat areas is entrusted to the Panchayats.

Though under the Prohibition Act, the Director of Prohibition and Excise, being the head of the Prohibition and Excise Department is responsible for the overall supervision and administration of the law and for carrying out effectively the policy of prohibition as envisaged by the Bombay Prohibition Act, 1949, the Police Department is primarily responsible so far as the enforcement aspect of the prohibition law is concerned as the work of prevention and detection of prohibition offences is entrusted to the Police Department. However, the Prohibition and Excise Officer is also invested with necessary powers of search, seizure and arrest. He thus assists the Police Department in detecting prohibition cases by passing on information of such offences which he comes to know during the course of his duties.

BACKWARD CLASSES

The Backward Classes may broadly be classified into two classes : the Scheduled Castes and the Scheduled Tribes. The predominant Scheduled Castes in the district are : (1) Mahyavanshi, (2) Dhed, (3) Vankar or Maru Vankar,

(4) Shenva, (5) Chenva, (6) Sedma or Rawat, and (7) Garoda or Garo. The total population of the Scheduled Castes in the district according to the Census of 1971 is 1,48,198 which forms 6.05 per cent of the district population. The literate and educated among the Scheduled Castes in the district according to the Census of 1971 is 55,842 which forms 37.68 per cent of their population. The extent of literacy among males and females is 51.92 per cent and 21.88 per cent respectively. These compare very favourably with the State figures which are 39.89 per cent for males and 14.95 for females.

The main Scheduled Tribes in the district are of Bhil including Bhil Garasia, Dholi Bhil, Dungri Bhil, Dungri Garasia, Mewasi Bhil, Rawal Bhil, Tadvil Bhil, Bhangalia, Bhilala, Pawra, Vasava, Vasave, Naikada or Nayaka including Cholivala Nayaka, Kapadia Nayaka, Mota Nayaka and Nana Nayaka, Petelia and Bavacha or Bamcha. The total Scheduled Tribes claim only 25,275 i. e. 1.03 per cent of the total population of the district. The literate and educated among them number 3,422 or 13.54 per cent of their total population. The Scheduled Tribes are mainly concentrated in talukas of Thasra (5,316), Anand (4,534), Mahemadabad (3,174), Matar (3,129) and Nadiad (2,744).

Besides, there are nomadic tribes such as Bajaniya, Vansfoda, Turi, Wadi, Bawa-Vairagi, etc.

Advancement of Backward Classes

Before Independence, activities for the welfare of the Backward Classes in the district were limited to a few social workers. But no special efforts were made by the Government or the public at large for the amelioration of the condition and prospects of the Backward Classes. When Mahatma Gandhi awakened the social conscience of this country by stressing the need and urgency of promoting the well-being of these under-privileged classes several efforts for the welfare of the Backward Classes came to be initiated.

Since Independence, the conditions of the Harijans and the Adivasis have improved considerably both economically and socially as a result of intensive work done by social workers and of various socio-economic legislative measures undertaken by Government to ameliorate their conditions. In addition to these enactments, which are in force in Gujarat, activities designed to bring home to the general public the evils of untouchability are also undertaken by celebration of the Harijan week, award of prizes to villages doing outstanding work for the removal of untouchability, grant-in-aid to voluntary agencies working for the eradication of untouchability, etc. The general attitude of the people towards the Harijans has also changed for the better, more so in towns than in villages. They are treated on par with other members of society in public functions or places of entertainment. Their children are now admitted, without discrimination, to schools and colleges. They are now eligible for the highest position in the State and public bodies. In sum, they are being gradually accepted in society on the

basis of social equality and the former serious handicaps from which they suffered are slowly but surely being removed.

Their housing conditions have appreciably improved as a result of various housing schemes sponsored by the Government and local bodies. As will be seen later, their economic condition has also improved due to various concessions given by the State to overcome the disabilities from which they suffered, in the past.

The Government of Gujarat has taken up several schemes for raising social, educational and economic standards of the Scheduled Castes and the Scheduled Tribes. Their representatives are associated in the State Advisory Board for Harijan Welfare, the Tribal Advisory Council, the Tribal Development Block Advisory Committee, etc.

Welfare Schemes for Backward Classes

The existing schemes for the welfare of the Backward Classes can be broadly classified into schemes for : (i) educational uplift, (ii) economic uplift, and (iii) health, housing and other schemes.

Educational Uplift Under the schemes for educational uplift, tuition fees and examination fees are granted to the Backward Class students without considering income factor. To encourage bright students, scholarships are awarded every year. The Backward Class students are given merit scholarships to enable them to purchase books, stationery, etc. Free boarding and lodging arrangements have also been provided through recognised hostels. The Government of India scholarships are awarded by the Director of Social Welfare, Gujarat State to students prosecuting studies in post-S. S. C. courses subject to certain conditions. During the year 1972-73, about 11,000 students were benefited under the various schemes sponsored by the Government. Provision is also made for liberal grants for construction of hostels for the Backward Class students. In 1973, the number of such hostels was twenty in the district. Details about these hostels are given earlier in chapter on Education and Culture.

There are two Sanskar Kendras in the district, one at Matar and another at Dharmaj (Petlad taluka). Both are for the Scheduled Castes. There are two Ashram Shalas also, one at Dethali (Matar taluka) and the other at Salol (Borsad taluka) for the Denotified tribes each with a strength of 89 students.

Economic Uplift—Most of the Backward Classes in this district are either agriculturists or landless labourers or artisans. Their condition can be improved only through schemes which have a direct bearing on their economic activity. Keeping this in view, the programme for their economic uplift includes the following schemes (a) Agricultural schemes, (b) Financial assistance to cottage industries and professions, and (c) Financial assistance to co-operative societies.

Under the agricultural schemes, financial assistance is provided to cultivators for digging wells, purchasing oil-pumps, engines, agricultural implements, bullocks, bullock-carts, etc., as well as for minor irrigation purposes. Under the scheme for grant of subsidy for purchase of oil engines, subsidy is granted to a member of the Backward Class whose annual income does not exceed Rs. 3600, to the extent of Rs. 1500 or 50 per cent of the actual cost of the engine, accessories, etc., whichever is less. Under the scheme for grant of financial assistance for improvement of lands, the amount of subsidy is given at the rate of Rs. 100 per acre subject to the maximum limit of Rs. 500. In distribution of Government's waste land, priority is given to Harijans. Under another scheme, loans and subsidies to the extent of Rs. 1,000 per individual are granted to the Backward Class members (whose annual income does not exceed Rs. 3,600) for starting cottage industries or developing professions such as tailoring, carpentry, etc. The ratio of loan and subsidy is 50 : 50. Similar assistance is given for cottage industries and co-operative societies started by the Backward Classes.

Health, Housing and Other Schemes—Under the head 'Health, Housing and Other Schemes' there are five schemes meant for the Scheduled Castes viz., the construction of drinking water wells, medical aid, eradication of the practice of carrying night-soil as headload, provision of house-sites, and housing subsidy for sweepers and scavengers. The special schemes for the Scheduled Tribes include construction of roads, bridges and culverts and establishment of subsidiary health units. Free legal assistance is provided to the Scheduled Castes and the Scheduled Tribes in civil and criminal cases.

During the First Plan period a scheme was introduced under which financial assistance was granted to co-operative housing societies of the Backward Classes in the form of subsidy and interest-free loan. The scheme was discontinued in April 1961 but was reintroduced on a slightly different pattern from 1972-73. At present, the Backward Classes are given financial assistance in the form of subsidy to the extent of Rs. 900 or 75 per cent of the expenditure incurred for construction of the houses. *Gharthal* land is also given to Harijans or to their Co-operative Societies free of charge or at a nominal price. A scheme for grant of financial assistance to the Backward Classes for medical treatment in genuine cases is in existence. Under the scheme, patients suffering from T. B., cancer, etc., are given assistance at the rate of Rs. 50 p. m. for 12 months. In ordinary cases, a lumpsum of Rs. 25 and in cases of accident, etc., Rs. 100 is given as assistance. During 1972-73, an expenditure of Rs. 2,500 was incurred on 25 applicants of T. B., cancer and other major diseases.

Although the general policy of the Government is that there should not be separate wells for Harijans, some relaxation in the matter has been made since 1971-72 for construction of new wells for Harijans in hard cases. The

full cost for the construction of the well to the extent of Rs. 3,000 is borne by the Government.

The details about the expenditure incurred separately for the Backward Classes from 1961-62 to 1972-73 are given below :

STATEMENT XVII-3

Expenditure incurred under the Plan and Centrally Sponsored Schemes for the Welfare of the Backward Classes in Kheda District

1	Third Five Year Plan		Fourth Five Year Plan	
	Year 1961-62 to 1965-66	Year 1966-67 to 1968-69	Upto March 1973	Total (from 1961-62 to 1972-73)
2	3	4	5	
EDUCATION				
Scheduled Castes ..	6.25	8.59	3.71	18.55
Scheduled Tribes ..	0.43	0.54	0.32	1.29
Nomadic Tribes ..	0.86	1.14	1.62	3.62
Denotified Tribes ..	0.67	0.79	1.06	3.12
Total ..	8.21	11.06	7.31	26.58
ECONOMIC UPLIFT				
Scheduled Castes ..	0.52	0.25	0.85	1.62
Scheduled Tribes ..	0.20	0.04	0.11	0.35
Nomadic Tribes ..	0.09	0.00	0.06	0.15
Denotified Tribes ..	0.12	0.04	0.05	0.21
Total ..	0.93	0.33	1.07	2.33
HEALTH, HOUSING AND OTHERS				
Scheduled Castes ..	0.93	1.28	1.11	3.32
Scheduled Tribes ..	0.01	..	0.02	0.03
Nomadic Tribes ..	0.05	..	0.17	0.22
Denotified Tribes ..	0.29	0.13	0.34	0.76
Total ..	1.28	1.41	1.64	4.33
TOTAL				
Scheduled Castes ..	7.70	10.12	5.67	23.49
Scheduled Tribes ..	0.64	0.58	0.45	1.67
Nomadic Tribes ..	1.00	1.14	1.85	3.99
Denotified Tribes ..	1.08	0.96	2.05	4.09
Grand Total ..	10.42	12.80	10.02	33.24

Source :

Director of Social Welfare, Gujarat State, Ahmedabad.

Reservation of Seats for the Backward Classes

After Independence, the Government offered certain concessions to the Backward Classes in order to enable them to get employment in public services. Before the formation of the Gujarat State, when the district formed part of the erstwhile Bombay State, the Government of Bombay had fixed the following minimum percentages for reservation of seats in Government service for the Backward Classes in accordance with the provisions made under Article 335 of the Constitution of India.

Sl. No. 1	Category of service 2	Percentage of vacancies to be reserved in recruitment 3
1	All Class I and II services and posts thereunder ..	12½
2	Class III services	
(i)	Scheduled Castes ..	6
(ii)	Scheduled Tribes ..	7
(iii)	Other Backward Classes ..	9
3	Class IV service	
(i)	Scheduled Castes ..	7
(ii)	Scheduled Tribes ..	9
(iii)	Other Backward Classes ..	11

After the bifurcation of the Bombay State in 1960, the Government of Gujarat continued these reservation percentages till 1969, when the Government introduced certain changes which are in force at present. In the case of the State level posts, the Government has fixed the reservation percentages for the Scheduled Castes and the Scheduled Tribes for the whole State as under :

Sl. No. 1	Category 2	Classification of Services and percentage of reservation		
		Class I & II 3	Class III 4	Class IV 5
1	Scheduled Castes ..	5	7	7
2	Scheduled Tribes ..	10	14	14

* As the statement indicates, the reservation percentages are reduced in the case of Class I and Class II posts. In the case of the Scheduled Castes, there is no material change in reservation percentages for Class III

1. Government of Gujarat-General Administration Department Resolution No. BAC. 1064-3373-CH, dated 20th September, 1969.

and Class IV services. But the reservation percentages in the case of the Scheduled Tribes have been doubled in the case of Class III services and raised from 9 to 14 in the case of Class IV for them. Thus the percentages have been changed, having regard to the population of the Scheduled Castes and Scheduled Tribes.

In the case of the district level posts, the percentages of reservation of seats are 7 per cent for the Scheduled Castes and 14 per cent for the Scheduled Tribes for Class III and Class IV services.

Other Concessions¹

For the General Elections to Legislative Assembly, one special constituency (Matar) is reserved exclusively for the Scheduled Castes candidates in the district. In the elections to the Gram Panchayat, Taluka Panchayat and District Panchayat also seats for the Scheduled Castes and Scheduled Tribes are reserved according to their population.

For admission to the educational institutions also seats are reserved for the Scheduled Castes and Backward Class students on the following pattern.

Sl. No.	Faculty	Percentage of reservation	
		Scheduled Castes	Other B. C. Class
1	2	3	4
1	Arts, Commerce, Science and Engineering, Polytechnic, Medical. ..	7	13
2	Government Agriculture College ..	7	13
3	Government Agriculture Schools ..	10	10
4	Industrial Training Institutes ..	12½	5

Moreover, the Scheduled Castes and the Scheduled Tribes students are given concession in the requirements of the minimum percentage of marks required for admission to the following educational faculties.

1	Primary Teachers Training College ..	..	5 % less
2	Graduate Basic Training College ..	..	5 % less
3	Agriculture College ..	..	7 % less
4	Agriculture School ..	..	Backward Class students whose parents or guardians do not own land are also admitted.
5	Medical College ..	..	50 % of the total marks

1. Harijan Kalyan Karyakram, Adivasi Kalyan Karyakram, 1972, Director of Information, Government of Gujarat, pp. 9 and 9 respectively.

Administrative Set-up

Before the Panchayati Raj was introduced in Gujarat in April 1963, activities for the welfare of the Backward Classes were conducted by the Social Welfare Department. The departmental head was designated as the Director of Social Welfare, who had under him in his office one Deputy Director, one Personal Assistant, one Officer incharge of Backward Classes and Tribal Welfare and two Social Welfare Officers, in addition to the District Social Welfare Officers at the district headquarters.

This position was radically changed on account of the introduction of the Panchayati Raj with effect from 1st April, 1963, when almost all the welfare schemes of non-technical nature were transferred to the District Panchayats with the necessary staff. At present, every District Panchayat in the State is allotted the post of a Social Welfare Officer to implement various welfare schemes in the Panchayat areas.

As the work of implementation of welfare schemes for the Backward Classes in municipal areas was not transferred to the District Panchayats, a separate machinery was created for the purpose and six posts of the Welfare Officers (State) as distinguished from those under the Panchayats were set up in the Municipal areas of the State. Their headquarters were fixed at Ahmadabad, Mahesana, Surat, Vadodara, Amreli and Rajkot. The Kheda district falls under the jurisdiction of the Social Welfare Officer (State), Ahmadabad.

Before 1965, welfare activities for the Backward Classes were conducted by the Directorate of Social Welfare which had under it two wings : (1) the Backward Class Welfare Wing and (2) the Correctional Administration Wing. In 1965, the Backward Class Welfare Wing was separated and made an independent directorate known as the Directorate of Backward Class Welfare. In 1968, the separate Directorate of Backward Class Welfare was abolished and the work was transferred to the newly formed directorate named as the Directorate of Social Welfare. In 1969, this directorate was once again bifurcated and a new directorate for the Backward Classes was formed named as the Directorate of Harijan and Adivasi Welfare. In 1970, this directorate was re-designated as the Directorate of Social Welfare. It looks after the welfare activities of the Backward Classes. The officer at the district level working under this directorate is designated as Social Welfare Officer.

PUBLIC TRUSTS AND CHARITABLE ENDOWMENTS

Before Independence, there was no centralised supervision over all the public trusts in the State. The Central enactments which were applicable to all the public trusts in the State were the Charitable and Religious Trusts Act, 1920, and the provisions of sections 92 and 93 of Civil Procedure Code.

In 1935-36, during the former Bombay State, the following Central and State laws were in force for the control and supervision over the management of the public trusts : (1) the Bombay Public Trusts Registration Act, 1935, applicable to the public trusts existing for the benefit of the Hindu community ; (2) the Musalman Wakf (Bombay Amendment) Act, 1935 applicable to the Muslim Wakfs, and (3) the Parsi Public Trusts Registration Act, 1936 applicable to the public trusts existing for the benefit of the Parsi Community. Thus before Independence, the machinery for exercising supervision and control over the public trusts varied according to the communities for whose benefit these trusts were created. As such, there was no centralised supervision over all the public trusts.

The Bombay Public Trusts Act, 1950 was enacted with a view to covering all trusts irrespective of caste, creed or community and to introduce uniformity in their supervision and control. It has certain new features. Unlike the previous enactment on the subject, it applies to all the communities, in keeping with the principles laid down in the Constitution of India about the uniformity of civil laws and provides for a uniform machinery for exercising supervision and control by the State over the management of the public trusts. The definition of a 'public trust' has been widened so as to include the societies registered under the Societies Registration Act, 1860. The Act provides for the establishment of special machinery for dealing with all matters concerning the administration and management of public trusts and working under the administrative control of the Legal Department. It provides for compulsory registration of all public trusts, and for the appointment of a Charity Commissioner for regions and sub-regions into which the State is divided for administrative convenience. The Kheda district, which forms part of the Vadodara region, is under the jurisdiction of Deputy Charity Commissioner, Vadodara.

In 1973, the total number of trusts registered in the Kheda district was 5,243. Out of them, 2,249 were the Hindu trusts, 601 Muslim trusts and the remaining were the cosmopolitan trusts, and trusts registered under Societies Registration Act. Some of the important among them are listed below :

1. Samadhisthan of Shri Santram Maharaj, Nadiad
2. Shri Mota Naran Dev Maharaj Trust, Nadiad
3. Dakor Kanjari Sansthan Trust, Dakor
4. Shri Ranchhodraiji Maharaj Mandir Trust, Dakor (Thasra Taluka)
5. Shri Bhabharam Maharaj Mandir, Runaj, (Petlad Taluka)
6. Shri Ashapuri Mata and Dharmashala, Piplav, (Petlad Taluka)
7. Shri Hanumanji Mandir Estate Trust, Lambhvel, (Anand Taluka)
8. Temples of Shri Laxminarayandev of Vadtal and Temples Subordinate thereto, (Nadiad Taluka)

9. Bochasanvasi Akshar Purshottamni Sanstha, Bochasan (Borsad Taluka)
10. Islahul Musalmin (Branch) Jamiyate Ulma Suba Gujarat, Anand
11. Saumata Sevashram, Alina, (Nadiad Taluka)
12. Maha-Gujarat Medical Society, Nadiad
13. Shri Ajitnathji Adishvarnathji and Shri Shantinathji, Shri Vimalnath Bhagwan-Derasar, Devchakla, Nadiad
14. Tiladwara Gadi Mangaldasji Akhada (Mangalpith and Daudji Mandir), Dakor
15. Shri Ramnam Annakshetra, Dakor
16. Sanskrit Pathshala, Dakor
17. Jameah Arabian Talimul Islam, Anand
18. Shri Jain Shwetamber Shri Shambhavnath Derasar, Umata, (Borsad Taluka)
19. Catholic Church, Anand
20. Shri Murlidhar Maharaj Mandir, Anklav, (Borsad Taluka)
21. Shri Gokulnathji Mandir, Vadasinor
22. Gnan Sampraday Guru Gadi Saraswati Trust, Sarsa, (Mahemadabad Taluka)
23. Shri Dakor Khoda Dhor Panjrapol, Dakor
24. Pari Ramanlal Keshavlal Dharmada Trust, Petlad
25. Charutar Vidya Mandal, Vallabh Vidyanagar
26. Hindu Anath-Ashram, Nadiad

PART VII

CHAPTER XVIII

PUBLIC LIFE AND VOLUNTARY SOCIAL SERVICE ORGANISATIONS

PUBLIC LIFE

The seeds of active and organised public life were sown in 1905 when Sarva Shri Motibhai Amin and Karunashankar Master established the Petlad Boarding which served later on as a centre of public activities associated with social and political movements in the district. The partition of Bengal in 1905 and the Home-Rule movement which started in 1916 created an atmosphere conducive to public participation in national problems. With the emergence of Sardar Vallabhbhai Patel, at the time of the Kheda Satyagraha this district came into a greater lime-light. In the year 1917, the district had an excessive rain resulting in loss of standing crops. Agriculturists were not able to pay the excessive levy of land revenue but the authorities insisted on payment. This aroused public feelings. Shri Mohanlal Pandya, Shri Shankerlal Parikh and others belonging to the village Kathlal of this district approached Mahatma Gandhi and Sardar Vallabhbhai Patel. On Gandhiji's advice Shri Vithalbhai Patel and Shri Gokuldas Parikh visited a few villages of this district and were convinced that the agricultural crop was so much damaged that it was not possible to pay the revenue and that the cultivators were right in asking for remission. But the Government did not budge. This resulted in the famous movement known as Kheda Satyagraha under the leadership of Sardar Vallabhbhai Patel. On 22nd of March, 1918 a conference of all cultivators of the district was held at Nadiad. The meeting was addressed by Mahatma Gandhi. More than 200 persons signed a pledge in the meeting itself to start a Satyagraha and to suffer any consequence which came out of it. The agitation continued for a long time and brought to lime-light leaders like Sardar Vallabhbhai Patel, Shri Indulal Yagnik, Shri Mohanlal Pandya, Shri Shankerlal Parikh, etc. Being the first struggle of the cultivators on the basis of non-payment of land revenue, it is also remembered as an important land-mark in people's movement for Independence.

In 1918, Shri Ravishanker Maharaj guided the people of Kapadvanj in organising relief measures and opening fair price shops for the people affected by the scarcity. He was also instrumental in the uplift of the Patanvadias. Darbar Gopaldas relinquished his estates and devoted his life to the people.

Another important movement which drew attention of the country was what is known as Borsad Satyagraha. On 25th September, 1923 a punitive

tax called *Haidia Vero* was imposed in 104 villages of Borsad taluka for allegedly helping an outlaw. The tax amounted to Rs. 2-40 lakhs which came to about two rupees and a half per every adult. The people of this district put a very strong fight against this obnoxious levy. Sardar Vallabhbhai Patel came to make an on-the-spot study of this situation and appointed a committee comprising Shri Mohanlal Pandya and Shri Ravishankar Maharaj to enquire into the problem. The committee found that the tax was totally unjustified and that the people were right in opposing it. Ultimately the tax was withdrawn.

The third milestone in the public movement was registered at village Ras where Sardar Patel addressed a public meeting against the prohibitive order of the Government and courted arrest. The local people organised a strong agitation against Government under the leadership of Darbar Gopaldas Desai.

In 1934, public life got more properly organised when Borsad taluka was affected by the regular occurrence of plague. Sardar Vallabhbhai Patel toured many parts of the taluka and impressed upon the local population the importance of maintaining minimum standards of hygiene in fighting against an epidemic. He also made the officers of the Government take greater interest in public matters especially at the time of such calamities.

Nadiad, Dakor, Karamsad and other centres of this district took a prominent part in the Quit-India movement of 1942. The district worked under the guidance of S/Shri Tribhuvandas Patel, Raojibhai Patel, Babubhai Jashbhai Patel, Utsavbhai Parikh, Madhavlal Shah and other local leaders.

After Independence, the public opinion became better organised and more vocal. The fundamental rights guaranteed by the Constitution encouraged people to express their views freely and fearlessly on matters political, economic and social. People began to realise gradually the importance and value of their views and opinions in the democratic set-up of the State. The popular elections in India whereunder people got right to appoint their own representatives in the State and Union Legislatures induced even the common man to take greater interest in the affairs and working of the Governmental organisation. The Maha-Gujarat movement for the creation of a separate State of Gujarat which was spearheaded by Indulal Yagnik received impetus in this district. The introduction of the Panchayati Raj in 1963 enabled even the village people to manage their own affairs and actually and actively participate in the implementation of the various developmental programmes under the Five Year Plans.

REPRESENTATION OF THE DISTRICT IN THE STATE AND THE UNION LEGISLATURE

In the General Elections of 1952 the district had two single-member Parliamentary constituencies called Kheda North and Kheda South. Since then, these constituencies have been renamed as Kheda and Anand.

As regards the State legislatures, the district had 12 single-member constituencies and one double-member constituency in the Bombay State Legislative Assembly at the time of the General Elections of 1952. Matar was double-member constituency where one seat was reserved for the Scheduled Castes. In the General Elections of 1957, the district had 11 single-member constituencies and one double-member constituency. This time Thasra was double-member constituency where one seat was reserved for the Scheduled Castes. After the formation of the Gujarat State in 1960, the double-member constituency was replaced by single-member constituencies. As a result, at the time of General Elections of 1962, the district had 15 single-member constituencies in the Gujarat State Legislative Assembly. One constituency, namely Vadasinor, was reserved for the Scheduled Castes. In the General Elections of 1967 and 1972 the district had 16 single-member constituencies in the Gujarat State Legislative Assembly. The Matar constituency was reserved for the Scheduled Castes. Thus at present the district has two representatives at the Centre in the Union Parliament and 16 representatives in the State Legislature.

The details of the present territorial extents or limits of the Parliamentary and Assembly Constituencies are given below.

Delimitation of Parliamentary and Assembly Constituencies

Sl. No.	Name of the Constituency	Extent in terms of Parliamentary/Assembly constituencies
1	2	3
PARLIAMENTARY CONSTITUENCIES		
1	Kheda ..	.. Vadasinor, Thasra, Kapadvanj, Kathlal, Mahemadabad, Mahudha and Nadiad.
2	Anand ..	.. Anand, Umreth, Sarsa, Sojitra, Petlad, Matar and Khambhat.
ASSEMBLY CONSTITUENCIES		
1	Vadasinor ..	.. Vadasinor taluka and 16 villages in Thasra circle in Thasra taluka.
2	Thasra ..	.. Thasra taluka (excluding 16 villages included in Vadasinor constituency).
3	Kapadvanj ..	.. Kapadvanj taluka (excluding Kathlal circle).
4	Kathlal ..	.. Kathlal circle in Kapadvanj taluka and the 10 villages in Ghodasar circle in Mahemadabad taluka.
5	Mahemadabad ..	.. Mahemadabad taluka (excluding 10 villages in Ghodasar circle included in Kathlal constituency).
6	Mahudha ..	.. Mahudha circle and Mohel circle (excluding 7 villages in Mohel circle included in Anand constituency) in Nadiad taluka.

Sl. No. 1	Name of the Constituency 2	Extent in terms of Parliamentary/Assembly constituencies 3
7	Nadiad ..	.. Nadiad circle (excluding 7 villages in Nadiad circle in Nadiad taluka included in Anand constituency) in Nadiad taluka.
8	Anand ..	.. The villages in Mohlel and Nadiad circles in Nadiad taluka and the villages in Anand circle in Anand taluka.
9	Umreth ..	.. Umreth circle in Anand taluka.
10	Sarsa ..	.. Anand circle (excluding the villages included in Anand constituency) in Anand taluka.
11	Borsad ..	.. Borsad circle and the villages in Bhadrans circle in Borsad taluka.
12	Bhadrans ..	.. Bhadrans circle (excluding the villages included in Borsad constituency) in Borsad taluka.
13	Sojitra ..	.. Sunav circle and the 11 villages in Petlad in Petlad taluka.
14	Petlad ..	.. Petlad circle (excluding the 11 villages in Petlad circle in Petlad taluka included in Sojitra constituency) in Petlad taluka and the villages in Tarapur circle in Khambhat taluka.
15	Matar (S.C.) ..	.. Matar taluka and Tarapur circle (excluding the 17 villages in Tarapur circle in Khambhat taluka included in Petlad constituency) in Khambhat taluka.
16	Khambhat ..	.. Khambhat circle.

Sources :

The Gujarat Government Gazette, Vol. VII, No. 13, Part IV-C, dated 31st March 1966, pp. 560, 571, 572.

POLITICAL PARTIES AND ORGANISATIONS

Prior to the General Elections of 1962, the main political party in the district was only the Indian National Congress which had dominated the field since the first General Elections. In the 1962 General Elections, the Swatantra Party contested the elections for the first time and won a landslide victory by capturing one Parliamentary seat and 10 out of the 15 Assembly seats. In the 1967 General Elections also the main contest was between the Congress and the Swatantra Party. But this time, the Congress strengthened its position by capturing one Parliamentary seat and 9 Assembly seats. After the General Elections of 1967, with the split in the Congress, the position has changed. The main rival parties now comprise the Congress and the Congress (Organisational). All the political parties contesting the elections in the district have their affiliation with the all India parties. There is no party of local origin in the district.

A study of the election results of 1952, 1957, 1962, 1967, 1971 and 1972 reveals the relative hold of the various political parties in the district.

The General Elections of 1952

In the first General Elections of 1952, there were five political parties viz., the Indian National Congress, the Krishak Majdoor Praja Parishad, the Socialist, the Scheduled Castes Federation and the Ram Rajya Parishad besides 15 independent candidates. The Congress contested two Parliamentary seats and 14 Assembly seats and won all of them. The K. M. P. P. contested one Parliamentary and 12 Assembly seats, while the Socialist, the Ram Rajya Parishad and Scheduled Castes Federation contested four, two and one respectively. All of them lost these seats. Thus the Congress established its hold over the political life of the district. The Congress polled 52.29 per cent, the K. M. P. P. 30.22 per cent, the Socialist 4.91 per cent, the Ram Rajya Parishad 2.50 per cent, the Scheduled Castes Federation 1.03 per cent and the independent candidates polled 9.05 per cent of the total votes polled. The percentage of valid voting was 60.97 per cent in the Parliamentary constituency and 60.93 per cent in the Assembly constituencies.

The following table shows the party affiliations of the contesting candidates and the number of valid votes polled by them in the General Elections of 1952.

STATEMENT XVIII-1
Election Results, 1952

Sl. No. 1	Name of the Constituency 2	Party affiliation of the contesting candidates 3	Total valid votes polled 4	Number of valid votes polled by each candidate 5	Percentage to total votes polled 6
THE HOUSE OF THE PEOPLE (LOK SABHA)					
1	Kheda North	1. Congress 2. K. M. P. P. 3. Independent	2,30,681	1,30,810 77,514 16,357	59.30 33.60 7.10
2	Kheda South	1. Congress 2. Independent	2,32,518	1,46,228 86,290	62.89 37.11
THE LEGISLATIVE ASSEMBLY					
1	Nadiad South	1. Congress 2. K. M. P. P. 3. Socialist	41,123	28,781 10,743 1,599	69.99 26.12 3.89
2	Nadiad North	1. Congress 2. K. M. P. P. 3. Independent 4. Independent 5. Independent	28,001	13,236 4,721 6,272 2,398 1,464	47.12 16.80 22.33 8.54 5.21

STATEMENT XVIII-1—concl'd.

Sl. No. 1	Name of the Constituency 2	Party affiliation of the contesting candidates 3	Total valid votes polled 4	Number of valid votes polled by each candidate. 5	Percentage to total votes polled 6
3	Matar-Khambhat (double-member, one reserved for (S.C.))	1. Congress 2. Congress 3. K. M. P. P. 4. K. M. P. P. 5. S. C. Federation 6. Ram Rajya Parishad	1,30,106	35,809 30,298 27,075 26,331 5,437 5,156	27.52 23.29 20.81 20.24 4.18 3.96
4	Mahamadabad	1. Congress 2. K. M. P. P.	34,375	17,889 16,486	52.04 47.96
5	Vadasinor-Kapadvanj.	1. Congress 2. Socialist	23,257	17,583 5,674	75.60 24.40
6	Kapadvanj	1. Congress 2. K. M. P. P. 3. Independent	34,807	17,055 14,440 3,312	49.00 41.49 9.51
7	Anand South	1. Congress 2. K. M. P. P.	39,649	23,436 16,213	59.11 40.89
8	Anand North	1. Congress 2. K. M. P. P. 3. Independent	34,336	20,813 8,640 4,883	60.62 25.16 14.22
9	Borsad No. 1	1. Congress 2. K. M. P. P. 3. Independent 4. Independent	32,142	15,001 5,415 10,528 1,198	46.67 16.85 32.75 3.73
10	Borsad No. 2	1. Congress 2. K. M. P. P. 3. Independent	32,799	14,617 8,545 9,637	44.56 26.06 29.38
11	Petlad North	1. Congress 2. Socialist 3. K. M. P. P.	33,732	14,158 10,039 9,535	41.97 29.76 28.27
12	Petlad South	1. Congress 2. K. M. P. P. 3. Socialist 4. Independent 5. Independent	34,234	11,203 10,621 8,505 3,637 268	32.73 31.02 24.85 10.62 0.78
13	Thasra	1. Congress 2. Ram Rajya Parishad 3. Independent 4. Independent 5. Independent 6. Independent 7. Independent	26,784	14,869 7,982 1,097 951 766 707 412	55.55 29.80 4.09 3.55 2.86 2.64 1.51

Source :

Report on the General Elections 1951-52, Election Commissioner, Government of India, Vol. II, pp. 28, 29, 268.

The General Elections of 1957

In the General Elections of 1957, there were no political parties except the Congress besides the independent candidates. The public agitation of Maha Gujarat played an important role in these elections. As a result, independent candidates who were supported by the Maha Gujarat Janata Parishad proved to be powerful opposition. The Congress contested the two Parliamentary and the 13 Assembly seats. The party won one Parliamentary seat, while the other went to the independent candidate. Of the Assembly seats, the Congress captured 8 seats while the independents won the remaining 5 seats. The Congress polled 50.03 per cent and the independent candidates polled 49.97 per cent of the total votes polled. The percentage of valid voting was 65.81 per cent in the Parliamentary constituency and 62.88 per cent in the Assembly constituencies.

The following table shows the party affiliations of the contesting candidates and the number of valid votes polled by them in the General Elections of 1957.

STATEMENT XVIII-2

Election Results, 1957

Sl. No. 1	Name of the Constituency 2	Party affiliation of the contesting candidates 3	Total valid votes polled 4	Number of valid votes polled by each candidate 5	Percentage to total votes polled 6
THE HOUSE OF THE PEOPLE (LOK SABHA)					
1	Kheda	1. Congress 2. Independent 3. Independent	2,45,504	1,07,135 1,27,646 10,723	43.64 51.99 4.37
2	Anand	1. Congress 2. Independent	2,83,003	1,60,216 1,22,787	56.61 43.39
THE LEGISLATIVE ASSEMBLY					
1	Khambhat	1. Congress 2. Independent 3. Independent	46,904	25,539 20,114 1,251	54.45 42.88 2.67
2	Borsad South	1. Congress 2. Independent	30,172	16,740 13,432	55.48 44.52
3	Borsad North	1. Congress 2. Independent	35,443	18,422 17,021	51.98 48.02
4	Anand South	1. Congress 2. Independent	52,397	30,533 21,864	58.27 42.73

STATEMENT XVIII-2- *concl'd.*

Sl. No. 1	Name of the Constituency 2	Party affiliation of the contesting candidates 3	Total valid votes polled 4	Number of valid votes polled by each candidate 5	Percentage to total votes polled 6
5	Anand North	.. 1. Congress 2. Independent	47,428	23,361 24,067	49.25 50.75
6	Petlad	.. 1. Congress 2. Independent	53,275	30,191 23,084	56.67 43.33
7	Matar	.. 1. Congress 2. Independent 3. Independent	49,547	29,441 13,213 6,893	59.42 26.67 13.91
8	Kheda	.. 1. Congress 2. Independent	40,048	14,310 26,332	35.22 64.78
9	Nadiad South	.. 1. Congress 2. Independent 3. Independent	46,830	20,302 24,043 2,485	43.35 51.34 5.31
10	Nadiad North	.. 1. Congress 2. Independent 3. Independent	44,385	21,722 20,074 2,589	48.94 45.22 5.84
11	Kapadvanj	.. 1. Congress 2. Independent	45,113	18,249 26,864	40.45 59.55
12	Thasra (Double-member) (S.C.)	.. 1. Congress 2. Congress 3. Independent 4. Independent 5. Independent	1,29,788	32,315 29,994 32,921 29,790 4,768	24.90 23.11 25.37 22.95 3.67

Source :

Report on the General Elections, 1957, Election Commissioner, Government of India, Vol. II, pp. 128, 130, 696.

The General Elections of 1962

In the General Elections of 1962, there were five political parties viz., the Congress, the newly formed Swatantra party which received its main strength from this district, the Nutan Gujarat Janata Parishad, the Jana Sangh and the Republicans. The keen contest, however, was between the Congress and the Swatantra. The Congress and the Swatantra parties both put up candidates for all the seats. Both the Parliamentary seats were won by the Swatantra. Of the 15 Assembly seats, 5 Assembly seats were won by the Congress while the Swatantra party captured 10 seats.

Thus the Congress lost its hold over the political life of the district. The Swatantra party got 50.26 per cent, the Congress 43.52 per cent, the

Nutan Gujarat Janata Parishad 1.76 per cent, the Jana Sangh 0.38 per cent the Republican 0.16 per cent and the independent candidates 3.92 per cent of the total valid votes polled. The percentage of valid voting was about 64.53 both in the Parliamentary and Assembly constituencies.

The following table shows the party affiliations of the contesting candidates and the number of valid votes polled by them in the General Elections of 1962.

STATEMENT XVIII-3

Election Results, 1962

Sl. No. 1	Name of the Constituency 2	Party affiliation of the contesting candidates 3	Total valid votes polled 4	Number of valid votes polled by each candidate 5	Percentage to total votes polled 6
THE HOUSE OF THE PEOPLE (LOK SABHA)					
1	Kheda	1. Swatantra 2. Congress 3. Independent	2,71,376	1,34,112 1,21,499 15,765	49.42 44.77 5.81
2	Anand	1. Swatantra 2. Congress	3,15,503	1,69,116 1,46,387	53.60 46.40
THE LEGISLATIVE ASSEMBLY					
1	Umreth	1. Swatantra 2. Congress 3. Independent	55,190	34,677 19,280 1,233	62.83 34.93 2.24
2	Anand	1. Swatantra 2. Congress	54,032	33,215 20,817	61.47 38.53
3	Sunav	1. Swatantra 2. Congress	34,641	18,336 16,305	52.93 47.07
4	Petlad	1. Swatantra 2. Congress	41,776	26,063 15,713	62.39 37.61
5	Borsad	1. Swatantra 2. Congress 3. Nutan Gujarat Janata Parishad 4. Jana Sangh	40,667	17,433 15,589 6,562 1,083	42.87 38.33 16.14 2.66
6	Bhadran	1. Congress 2. Swatantra 3. Nutan Gujarat Janata Parishad	36,085	18,631 13,071 4,383	51.63 36.22 12.15
7	Khambhat	1. Swatantra 2. Congress	47,327	26,013 21,314	54.96 45.04

STATEMENT XVIII-3 *concl'd.*

Sl. No.	Name of the Constituency	Party affiliation of the contesting candidates	Total valid votes polled	Number of valid votes polled by each candidate	Percentage to total votes polled
8	Matar	1. Congress 2. Swatantra 3. Independent	44,153	20,183 20,150 3,820	45.71 45.64 8.65
9	Mahamadabad	1. Swatantra 2. Congress 3. Republican	43,533	21,836 20,712 985	50.16 47.58 2.26
10	Uttarsanda	1. Swatantra 2. Congress 3. Independent	43,191	20,062 15,192 7,937	46.45 35.17 18.38
11	Nadiad	1. Swatantra 2. Congress 3. Jana Sangh	41,536	20,939 19,306 1,291	50.41 46.48 3.11
12	Kathlal	1. Congress 2. Swatantra 3. Independent	34,531	17,890 15,908 733	51.81 46.07 2.12
13	Kapadvanj	1. Congress 2. Swatantra 3. Independent 4. Independent	40,543	19,927 11,764 8,031 2,821	49.15 29.02 14.86 6.97
14	Vadasinor (S.C.)	1. Congress 2. Swatantra 3. Independent	26,169	13,841 11,413 915	52.89 43.61 3.50
15	Thasra	1. Swatantra 2. Congress 3. Independent	39,508	21,686 15,929 893	54.82 41.36 2.32

Source :

Report on the General Elections, 1962, Election Commissioner, Government of India, Vol. II, pp. 28, 189, 190, 191.

The General Elections of 1967

In the General Elections of 1967, there were three political parties viz., the Congress, the Swatantra and the Praja Socialist besides the independent candidates. The Congress and the Swatantra contested all the seats while the Praja Socialists contested two Assembly seats. The keen contest was between the Congress and the Swatantra party. The Congress won one Parliamentary and 9 out of the 16 Assembly seats. The Swatantra secured one Parliamentary and 7 Assembly seats. The Congress polled 50.75 per cent, the Swatantra 47.00 per cent, the Praja Socialist 0.32 per cent and the independent candidates 1.93 per cent of the total valid votes polled. The percentage of valid voting was 72.13 in the Parliamentary constituencies and 71.16 in the Assembly constituencies.

The following table shows the party affiliations of the contesting candidates and the number of valid votes polled by them in the General Elections of 1967.

STATEMENT XVIII-4
Election Results, 1967

Sl. No.	Name of the Constituency	Party affiliation of the contesting candidates	Total valid votes polled	Number of valid votes polled by each candidate	Percentage to total votes polled
THE HOUSE OF THE PEOPLE (LOK SABHA)					
1.	Kheda	1. Swatantra 2. Congress 3. Independent	3,12,044	1,63,997 1,36,257 11,790	52.55 43.67 3.78
2.	Anand	1. Congress 2. Swatantra	3,42,566	1,81,894 1,60,672	53.10 46.90
THE LEGISLATIVE ASSEMBLY					
1.	Vadasinor	1. Swatantra 2. Congress	41,706	22,997 18,709	55.14 44.86
2.	Thasra	1. Swatantra 2. Congress	42,099	25,786 16,313	61.25 38.75
3.	Kapadvanj	1. Swatantra 2. Congress 3. Independent	47,926	26,615 20,936 375	55.54 43.68 0.78
4.	Kathlal	1. Swatantra 2. Congress 3. Independent	37,550	17,443 14,253 5,854	46.45 37.96 15.59
5.	Mahamadabad	1. Congress 2. Swatantra	46,557	25,501 21,056	54.77 45.23
6.	Mahudha	1. Swatantra 2. Congress 3. Independent 4. Independent	38,371	19,427 15,311 2,390 1,243	50.63 39.90 6.23 3.24
7.	Nadiad	1. Congress 2. Swatantra	53,877	28,267 25,110	52.39 46.61
8.	Anand	1. Congress 2. Swatantra 3. Independent	58,435	30,936 25,969 1,530	52.94 44.44 2.62
9.	Umreth	1. Swatantra 2. Congress	42,267	25,324 16,943	59.91 40.09
10.	Sarsa	1. Swatantra 2. Congress	46,141	23,712 22,429	51.39 48.61
11.	Borsad	1. Congress 2. Swatantra 3. PSP	46,659	25,636 19,894 1,129	54.94 42.64 2.42

STATEMENT XVIII-4—concl'd.

Sl. No. 1	Name of the Constituency 2	Party affiliation of the contesting candidates 3	Total valid votes polled 4	Number of valid votes polled by each candidate 5	Percentage to total votes polled 6
12.	Bhadran	1. Congress 2. Swatantra	49,974	28,644 21,330	57.32 42.68
13.	Sojitra	1. Congress 2. Swatantra 3. PSP 4. Independent	46,039	27,418 17,159 712 750	59.55 37.27 1.55 1.63
14.	Petlad	1. Congress 2. Swatantra	47,776	23,981 23,795	50.19 49.81
15.	Matar (S.C.)	1. Congress 2. Swatantra 3. Independent	47,067	31,777 14,249 1,041	67.51 30.27 2.21
16	Khambhat	1. Congress 2. Swatantra 3. Independent 4. Independent	50,931	29,718 20,047 671 495	58.35 39.36 1.32 0.97

Source :

Report on the General Elections, 1967, Election Commissioner, Government of India, Vol. II, pp. 41, 245, 246, 247.

The Mid-term Parliamentary Elections of 1971

The Mid-term Parliamentary Elections held in 1971 brought a major political change due to the split in the Congress and formation of the two rival parties viz., the Congress (R) and the Congress (O). There was almost a straight fight between the two parties though there were independent candidates also in the fray. The Congress (O) won both the Parliamentary seats and polled 54.83 per cent as against 41.77 per cent polled by the Congress (R). The independent candidates secured 3.40 per cent of the total valid votes polled. The percentage of valid voting was 96.66 in the Parliamentary constituencies, perhaps the highest in the history of the Parliamentary elections.

The Assembly Elections of 1972

In the Elections to Legislative Assembly held in 1972, there were four political parties viz., the Congress, the Congress (O), the Jana Sangh and the Swatantra besides a few independent candidates. The Congress and the Congress (O) contested all the 16 Assembly seats while the Jana Sangh and the Swatantra party each contested 10 Assembly seats. The Congress captured 13 seats and the remaining three went to Congress (O). The Jana Sangh

and the Swatantra lost the battle completely. The Congress polled 50.87 per cent, the Congress (O) 34.30 per cent, the Jana Sangh 3.94 per cent, the Swatantra 3.49 per cent, and the independent candidates 7.40 per cent of the total votes polled. The percentage of valid voting was 96.27 the highest since the first elections.

The following table shows the party affiliations of the contesting candidates and the number of valid votes polled by them in the Elections to the Legislative Assembly in 1972.

STATEMENT XVIII-5

Election Results, 1972

Sl. No. 1	Name of the Constituency 2	Party affiliation of the contesting candidates 3	Total valid votes polled 4	Number of valid votes polled by each candidate 5	Percentage to total votes polled 6
THE LEGISLATIVE ASSEMBLY					
1	Vadasinor	1. Congress 2. Congress (O) 3. Swatantra 4. Independent 5. Independent 6. Independent	47,092	16,668 11,592 1,136 7,573 5,989 4,134	35.39 24.62 2.41 16.08 12.72 8.78
2	Thasara	1. Congress 2. Congress (O) 3. Swatantra 4. Independent 5. Independent 6. Independent 7. Independent 8. Independent	39,590	20,366 11,705 726 3,810 1,537 902 329 215	51.44 29.57 1.83 9.62 3.88 2.28 0.83 0.55
3.	Kapadvanj	1. Congress (O) 2. Congress 3. Swatantra 4. Independent	48,109	21,160 18,991 1,768 6,190	43.98 39.47 3.68 12.87
4	Kathlal	1. Congress 2. Congress (O) 3. Jana Sangh 4. Independent 5. Independent	39,788	23,101 14,744 723 741 419	58.06 37.06 1.82 1.86 1.20
5	Mahamadabad	1. Congress (O) 2. Congress 3. Swatantra 4. Jana Sangh	48,134	18,005 16,716 12,403 1,010	37.40 34.73 27.77 2.10
6	Mahudha	1. Congress (O) 2. Congress 3. Independent 4. Independent	45,079	15,943 13,804 13,601 1,731	35.37 30.62 30.17 3.84

STATEMENT XVIII-5—concl'd.

Sl. No.	Name of the Constituency	Party affiliation of the contesting candidates	Total valid votes polled	Number of valid votes polled by each candidate	Percentage to total votes polled
7	Nadiad	1. Congress 2. Congress (O) 3. Jana Sangh 4. Independent	57,825	29,424 22,107 5,679 615	50.88 38.24 9.82 1.06
8	Anand	1. Congress 2. Congress (O) 3. Jana Sangh 4. Swatantra 5. Independent	57,651	31,916 15,308 8,618 503 1,306	55.36 26.55 14.95 0.87 2.27
9	Umreth	1. Congress 2. Congress (O) 3. Jana Sangh 4. Swatantra 5. Independent 6. Independent	43,805	26,033 12,480 2,114 1,263 1,530 385	59.43 28.49 4.83 2.88 3.49 0.88
10	Sarsa	1. Congress 2. Congress (O) 3. Swatantra 4. Jana Sangh	48,298	28,164 14,424 3,388 2,322	58.31 29.86 7.02 4.81
11	Borsad	1. Congress 2. Congress (O) 3. Independent 4. Independent 5. Independent	48,318	30,069 16,247 860 611 531	62.23 33.63 1.78 1.26 1.10
12	Bhadran	1. Congress 2. Congress (O) 3. Swatantra	50,592	33,798 16,722 1,072	66.80 31.08 2.12
13	Sojitra	1. Congress 2. Congress (O) 3. Jana Sangh 4. Swatantra 5. Independent 6. Independent	46,672	22,726 18,193 2,542 1,420 977 814	48.69 38.98 5.45 3.04 2.09 1.74
14	Petlad	1. Congress 2. Congress (O) 3. Jana Sangh 4. Swatantra 5. Independent 6. Independent 7. Independent	48,472	21,864 17,793 4,360 3,148 628 521 158	45.11 36.71 8.99 6.49 1.30 1.07 0.33
15	Matar (S.C.)	1. Congress 2. Congress (O) 3. Jana Sangh	48,758	32,718 14,683 1,357	67.11 30.11 2.78
16	Khambhat	1. Congress 2. Congress (O) 3. Jana Sangh 4. Independent	50,731	24,791 23,612 1,616 712	48.87 46.54 3.19 1.40

Source :
Collector, Kheda District.

STATEMENT XVIII-6

Votes polled in the General Elections (1952 to 1972)

Election Year	Total No. of electors	Total votes polled	Percentage of Col. 3 to 2	Total valid votes polled	Percentage of Col. 5 to 2	Name of the parties	Votes polled by parties	Percentage to total valid votes polled
THE HOUSE OF THE PEOPLE (LOK SABHA)								
1952	7,59,689	..	..	4,63,199	60.97	1. Congress 2. K. M. P. P. 3. Independents	2,83,033 77,514 1,02,652	61.10 16.74 22.16
1957	8,03,085	..	..	5,28,507	65.81	1. Congress 2. Independents	2,67,351 2,61,156	50.59 49.41
1962	9,09,412	6,10,350	67.11	5,86,879	64.53	1. Swatantra 2. Congress 3. Independents	3,03,228 2,67,886 15,765	51.67 45.64 2.69
1967	9,07,485	6,80,818	75.02	6,54,610	72.13	1. Swatantra 2. Congress 3. Independents	3,24,669 3,18,151 11,790	49.60 48.60 1.80
1971	6,18,467	..	..	5,97,839	96.66	1. Congress (O) 2. Congress (R) 3. Independents	3,27,781 2,49,726 20,332	54.83 41.77 3.40
THE LEGISLATIVE ASSEMBLY (VIDHAN SABHA)								
1952	7,59,702 (Electors)	..	..	5,25,435	60.93	1. Congress 2. K. M. P. P. 3. Socialists 4. Ram Rajya Parishad 5. S. C. Federation 6. Independents	2,74,748 1,58,765 25,817 13,138 5,437 47,530	52.29 30.22 4.91 2.50 1.03 9.05
1957	8,63,424 (Electors) 9,89,140* (Votes)	..	..	6,21,930	62.88	1. Congress 2. Independents	3,11,125 3,10,805	50.03 49.97
1962	9,63,817	6,53,855	67.84	6,21,882	64.52	1. Swatantra 2. Congress 3. Nutan Gujarat Janata Parishad 4. Jana Sangh 5. Republican 6. Independents	3,12,566 2,70,629 10,945 2,374 985 24,383	50.26 43.52 1.76 0.38 0.16 3.92

STATEMENT XVIII-6—concl'd.

Election Year	Total No. of electors	Total votes polled	Percentage of votes Column 3 to 2	Total valid votes polled	Percentage of votes Column 5 to 2	Name of the Parties	Votes polled by parties	Percentage to total valid votes polled
1	2	3	4	5	6	7	8	9
1967	10,44,065	7,80,820	74.74	7,43,375	71.16	1. Congress 2. Swatantra 3. PSP 4. Independents	3,77,272 3,49,413 2,341 14,349	50.75 47.00 0.32 1.93
1972	7,98,087	..	..	7,68,914	96.27	1. Congress 2. Congress(0) 3. Jana Sangh 4. Swatantra 5. Independents	3,91,149 2,63,718 30,341 26,827 56,879	50.87 34.30 3.94 3.49 7.40

Source :

1. Reports on the General Elections, 1951-52, 1957, 1962 and 1967, Election Commission, Government of India.
2. 1971 and 1972 General Elections, Collector, Kheda District.

*In the General Elections of 1962 and 1957 the district had two double-member constituencies. The first figure shows the number of electors while the second one shows the number of votes cast by them. The percentages in column 6 are worked out in relation to total votes cast.

The above table reveals the increasing political awareness among the people of the district. The voting percentage has steadily increased since the first General Elections. In the 1952 General Elections the voting percentage was 60.93 in the Legislative Assembly which rose to 96.27 in the 1972 General Elections. This is perhaps the highest voting among all other districts of Gujarat.

NEWSPAPERS

No daily newspaper is published from the district. The number of Gujarati weeklies published from the district is 12. Of them the *Kheda Vartman*, is the oldest and most popular. It is the oldest weekly newspaper in Gujarat first published from Kheda on the 1st January, 1861 and is widely read throughout the district with a total circulation of 12,000 copies. The important weeklies include the *Gujarat Times* published since 1927, the *Lokmat* (1947) and the *Navsankar* (1948) all from Nadiad, and the *Age Kadam* from Petlad. Moreover, there are 17 monthlies of which one is a

Hindi monthly. The number of annual magazines is 15. The circulation of these periodicals is mainly confined within the district.

The Gujarati dailies published from Ahmadabad and Vadodara are widely read in the district. As regards the English newspapers, the *Times of India* and the *Indian Express* published from Ahmadabad are popular among the English knowing people.

VOLUNTARY SOCIAL SERVICE ORGANISATIONS

Origin, Growth and Direction

Kheda is one of those districts of Gujarat which have richly contributed to the development of voluntary social service organisations. Besides late Vithalbhai and Sardar Vallabhbhai Patel who earned international reputation as social and political leaders, the district can boast of such prominent social workers like late Shri Motibhai Amin, Bhailalbhai Patel, Indulal Yagnik and Shri Ravishanker Maharaj, etc., who have dominated the field of public life and earned nation-wide fame. Shri Motibhai Amin was the pioneer of the library movement and montessory education in Gujarat. He was the founder of the Charotar Yuvak Mandal, perhaps the first of its kind which later on organised activities all over the district for social reforms. Shri Bhailalbhai Patel will be remembered ever for his contribution in the field of education which culminated in the establishment of the Vallabh Vidyanagar. The contribution made by Shri Ravishanker Shivram Vyas, popular as Shri Ravishanker Maharaj, is well-known in Gujarat. Shri Indulal Yagnik made this district his field of activities and established an Ashram for the Backward Class students on the bank of the river Vatrak near village Nenpur. Darbar Gopaldas Desai and his wife Bhaktiba, though belonging to the ruling clan, devoted their life to public service. The name of Shri Tribhuvandas Patel will be remembered as a pioneer in co-operative dairy movement in Gujarat. Shri Babalbhai Pranjivandas Mehta, a known Bhoodan worker and educationist also belongs to this district.

As regards social service organisations Shri Hindu Anath Ashram at Nadiad is one of the very few of its type in Gujarat. The district can boast of the first and perhaps the only one Vyayam Mandir for girls in Gujarat. The contribution made by the Hari Om Ashram and Shri Mota for the development of social and educational life in Gujarat is well-known to all. In the field of women's welfare, the Kheda Stri Mandal established in 1940 has done a pioneer work. The Seva Sangh of Kapadvanj is serving the people ever since its establishment in the year 1927. The district thus rightly takes its place among the few enlightened districts of Gujarat. The following

paragraphs describe some of the important voluntary social service institutions working in the district.

YOUTH'S ORGANISATIONS

Shri Mahila Pragati Mandal, Mahisa (Nadiad Taluka)

The Mahila Pragati Mandal was established at village Mahisa in 1965. The aims and objects of this institution are to organise youth activities for the cultural, social and economic uplift of the younger generation. For this purpose, it conducts varied activities. For educational uplift it organises study-circles, elocution competitions, lectures and study tours. It runs a library called Vasant Rajab Pustakalaya and provides reading facilities for the village population. It helps in solving their difficulties regarding drinking water supply, communication, approach roads, etc. It supplies first-aid appliances and medicines to the needy patients. The Mandal arranges cultural and religious programmes and organises public functions to honour the degree holders and bright students of the village.

The Mitra Mandal, Navali (Anand Taluka)

The Mitra Mandal was established at village Navali in 1935. The aims and objects of the institution are to promote educational, cultural, social and economic welfare of the village people. It runs a secondary school, a Balmandir, a library and a dispensary.

The Pragati Mandal, Navagam (Matar Taluka)

The Pragati Mandal was established at Navagam village in 1967. It works for the welfare of the younger generation and organises eye and dental camps, game competitions, study tours, etc. It distributes text books and exercise books to students at concessional rates. The Mandal conducts relief measures at the time of natural calamities like flood, famine, etc., and collects funds, clothes and foodgrains for the relief of the affected population.

The Adarsh Yuvak Mandal, Thasra

The Adarsh Yuvak Mandal was established in 1968 for the welfare of the village people. The Mandal conducts relief measures at the time of national and natural calamities. It organises elocution competitions etc. to promote the interest of the younger generation in such activities.

The Yuvak Mandal, Ajarpura (Anand Taluka)

The Yuvak Mandal of Ajarpura is one of the few such organisations in the district. Established in 1966, the Mandal organises study tours, game

competitions, film-shows, drama competitions, etc. It runs a library, consumer's store, a book store, etc.

WOMEN'S ORGANISATIONS

Shri Bhagini Seva Samaj, Borsad

Shri Bhagini Seva Samaj, an important institution in the district was established in 1948. It runs two sewing classes and social welfare centres at a number of places in the Borsad taluka. The Samaj runs a Mahila Grih Udyog Co-operative Mandali which prepares *papad*, pickles, spices, etc., and provides first-aid appliances to the needy patients. It runs a small library. The Samaj organises educational tours and cultural programmes. It helps solve social problems of the women folk. The Samaj conducts relief measures at the time of natural calamities like floods, famines, etc., and helps poor women. The institution has recently constructed its own building.

Shri Bhagini Seva Samaj, Kapadvanj

Shri Bhagini Seva Samaj of Kapadvanj was established in 1948. It conducts varied activities including training classes in sewing, embroidery and music. It employs needy women in part-time jobs of preparing pickles, spices, etc., which are sold by the Samaj at reasonable rates. The institution is housed in its own building.

Shri Jashlaxmi Pranshankar Kantharia Sarvajanik Kanya Vyayam Mandir, Nadiad

The Sarvajanik Kanya Vyayam Mandir of Nadiad is the first and perhaps the only one of its kind in Gujarat. It was established in 1954 by Shri Vishnuprasad M. Desai. As its name indicates it imparts physical training to women of all ages. Besides, it organises cultural, social and educational programmes for the welfare of the women folk. About 200 women take benefit of this institution. It is named after Shrimati Jashlaxmi, wife of Shri Pranshankar Chhotalal Kantharia who donated Rs. 7,000 to the institution.

The institution runs sewing and embroidery classes, a music class, a library and a health centre. It arranges educational tours and *ras*, *garba*, *rangoli* and essay competitions also. The girl students of this institution have taken part in game competitions organised at district and State levels and have won prizes and shields. The institution is housed in its own building with a play-ground recently constructed. It is registered under the Public Trust Act.

Shri Kasturba Mahila Sahayak Gruh Udyog Sahakari Mandali, Vadasinor

The Kasturba Mahila Sahayak Gruh Udyog Sahakari Mandali is one of the most important co-operative institutions for women functioning in the district. It was established at Vadasinor in 1970. Its aims and objectives are to help needy women by providing them gainful employment in their spare time. It was started with a nominal fund of Rs. 228 which has now increased to about Rs. 20,000. The number of members has increased from 18 to 160. In the beginning, it prepared small bags used for protecting seeds of hybrid variety of cotton on the fields. In 1973, the Mandali started the Ambar Charkha unit. At present, the institution has initiated the work of Gobar Gas Plant in the Vadasinor, Kapadvanj and Thasra talukas of the district. The Mandali has installed about 30 gas plants in these talukas.

The Kheda Stree Mandal, Kheda

The Kheda Stree Mandal, one of the oldest and important women's organisations in the district was established in 1940. The institution works to fulfil its main objectives of promoting educational, cultural and economic uplift of the women. For this purpose, it runs a Balmandir, a library and a sewing and embroidery class.

The Mahila Samaj, Nadiad

The Mahila Samaj was established in 1948 for the educational, cultural and economic uplift of women. For this purpose, it runs a sewing and embroidery class, a Balmandir, a Chhatralaya and a library. It provides gainful employment to needy women in preparation of *papad*, pickles, spices, etc. Moreover, it arranges cultural programmes and *Ras-Garba* and game competitions.

The Navagam Mahila Mandal, Navagam (Matar Taluka)

The Navagam Mahila Mandal was established in 1963, for the uplift and welfare of women. Besides conducting a sewing and embroidery class, it provides training in cooking art, household work and animal husbandry.

Smt. Shardaben Chimanlal Chokshi Mahila Samaj, Atarsumba (Taluka Kapadvanj)

Smt. Shardaben Chimanlal Chokshi Mahila Samaj was established in 1955 for promoting welfare of the women. It runs a sewing class and embroidery class at Atarsumba.

The other important women's organisations include the Mahila Samaj of Anand, Shri Kasturba Kendra of Vadasinor, Shri Mahila Mandir, Nadiad, etc.

INSTITUTIONS OF GENERAL WELFARE

Dalal Vithaldas Somchand Sarvajnik Vyayam Mandir, Nadiad

This Vyayam Mandir was established in 1917 by Shri Ambalal Purani. It is one of the oldest gymnasia in the district and fairly well organised one. It has been doing a very useful service to the younger generation. Besides conducting physical training courses for the youth, it runs a library for children, organises festivals on important occasions and conducts educational tours. It organises game competitions and also participates in competitions organised at the State level.

The Gram Seva Samaj, Vadasinor

The Gram Seva Samaj is a well-known institution in the district working for the welfare of the people living in the rural areas of the Vadasinor taluka. It was established in the year 1946. In the initial period it started primary schools in several villages of the taluka. Thereafter it started night schools. It also started a monthly named "Gram Seva" from Vadasinor. At present, it runs a children's library and also helps the poor students by supplying them textbooks.

Shri Hindu Anath Ashram, Nadiad

Shri Hindu Anath Ashram of Nadiad is one of the most important and oldest institutions in the district. It was established in the year 1908. During the 65 years of its existence, it has done a very useful service to the society by providing food, shelter, clothing and education to about 4,000 orphans. The inmates are discharged from the Ashram only when they are grown up and provided proper education and training to earn their livelihood. The inmates are given training in printing and sewing. The girl inmates are trained in house keeping. At present, there are 172 inmates in the Ashram, including infants and boys and girls upto the age of about 20.

The Ashram premises are spread over about 5 acres of land in the centre of the city. The Ashram is open to all without any distinction of caste or creed. It has its own trust registered under the Bombay Public Trusts Act. The Ashram maintains a separate section for the younger children where they are provided motherly care by specially appointed nurses.

The Kheda District Probation and After Care Association, Nadiad

This association was established in 1955 with the main object of assisting in the work of supervising children who are placed on probation by the juvenile courts and to enable prisoners released from jails to live honest and respectable life. The association collects and administers funds to fulfil the

above objective. It has enabled several juveniles to lead a respectable life in society. It conducts a library for children and organises educational tours to bring the youngsters in touch with the outside world. It also runs a youth club and a child guidance centre where the children are taught principles of good social life. Children between the ages of 7 and 17 are admitted in this centre.

Shri Sarvajani Vyayam Mandir, Anand

Shri Sarvajani Vyayam Mandir of Anand was established in the year 1937 for the purpose of imparting physical training to the younger generation and to inculcate in them the ideal of simple habits and high thinking. The institution admits boys of all castes and creed and does not charge any fees. It has a vast play-ground of about 6 acres.

The Seva Sangh, Kapadvanj

The Seva Sangh was established in the year 1927 at Kapadvanj with the efforts of late Shri Shankerlal Desai, a well-known social worker. It conducts a Vyayam Shala and a Sanskar Kendra at Kapadvanj. The Sanskar Kendra imparts education to adult illiterates and runs a Khadi Gramodyoga Centre.

The Tilak Vyayam Mandal, Nadiad

The Tilak Vyayam Mandal of Nadiad is an important gymnasium in the district established in the year 1923 by late Shri Motibhai Amin. Its main objectives are to train children and inculcate good character in them, cultivate their interest for physical exercises and to make them aware of the basic rules of health and sanitation. It is named after Balgangadhar Tilak as it was established from the funds collected in his commemoration in 1923. At present it is managed by the Vaso Kelavani Mandal. Throughout its existence of over 50 years it has done important social service by helping the victims of floods, famines, etc. and conducting physical training classes for improving the health of the younger generation. It also organises educational tours, inter-district game competitions, inter-school game competitions, Shrama Yagna, swimming exercises, etc. Its members have taken part in the all India sports competitions and won prizes.

In addition to the institutions mentioned above which are working in the field of voluntary social service, there are a number of other institutions whose main activities are educational but which are doing activities of general social service also. These include the Vatrak Khedut Vidyalaya established by Shri Indulal Yagnik in the year 1943; the Nutan Gram Vidyalaya of Gambhira established by Shri Chhaganbhai M. Patel in the year 1930; Shri Seva Samaj of Bocharan established in 1959, etc., which are already described in the chapter on Education and Culture.

Besides these institutions there are two important and well-known institutions in Nadiad (1) Shri Santram Mandir and (2) Shri Hari Om Ashram of Shri Mota doing outstanding activities in the religious and social fields. The Gujarat Blind Relief and Health Association established by Shri Ravishanker Maharaj at Bocharan in 1952 is an important organisation which organises eye camps and other programmes of blind relief. The branches of the Rotary Club and the Lions Club are established at Nadiad, Petlad, Khambhat, Kapadvanj, Anand and Vallabh Vidyanagar. Their aims, objectives and programmes are too well-known to need any mention here. Besides there are over 300 Yuvak Mandals and 100 Mahila Mandals, spread all over the district and working in their limited sphere of activities.

CHAPTER XIX

PLACES OF INTEREST

INTRODUCTORY

The district abounds in places of archaeological, historical, political and religious importance. Bhadrān, Mahemadabad and Nagra are important places of archaeological importance. Bhadrān has a very ancient temple of Bhadrā Kali Mata from which the town has derived its name. Bricks of olden times were found here which suggest that the place must have been settled at least during the 12th century. Mahemadabad which was once the capital of Gujarat in the time of Mohamad Begada has a unique step-well known as Bhamario Kuvo built by him and having underground chambers. It is a monument of architectural importance. Besides there are other remains nearby belonging to the olden days. Nagra, said to have once been an ancient port has an old mound which is a site of archaeological interest. Old bricks belonging to the Maurya period are discovered from this place. The temple of Galteshwar in Thasra taluka is a protected monument belonging to the Chalukyan period.

From the historical point of view Mahemadabad, Khambhat (Cambay), Kapadvani, Anand, Borsad and Adas are of great interest. Adas is the site of a number of historical battles in the past. It is also a place associated with the Quit India Movement of 1942. Anand, said to have been established in the 9th century, can boast of the hoard of Kumar Gupta coins. Borsad was the centre of many battles including the freedom struggle in 1922-23. Many inhabitants of Borsad participated in the Salt Satyagraha in 1930-31. Cambay or Khambhat is one of the most ancient towns of Gujarat mentioned by the Arab writers as Kambaya. Kapadvanj is another ancient town which was formerly known as Kapatpura or Karpāt Vanijya. Lastly, Kheda, the district headquarters, is said to have existed even at the time of the *Maha Bharat*.

From the religious point of view Agas, Dakor and Vadtal are known in Gujarat as places of important religious centres. Agas is a place of Jain pilgrimage well-known for the Rajchandra Ashram. Dakor is one of the holiest places in India and perhaps the most frequented place of pilgrimage in Gujarat. Vadtal is famous for being the principal seat of the Vaishnava sect called Swaminarayan. The temples of Galteshwar and Utkantheswar are also important religious centres.

Abbreviations used : P=Population (1971), Mu=Municipality, N. P.=Nagar Panchayat, V. P.=Village Panchayat, G. P.=Group Panchayat, N=North Latitude, E=East Longitude.

As regards the freedom movement, Kathlal was in the forefront during the Kheda Satyagraha of 1917. Borsad and Bocharan took active part in the struggle for freedom in 1922-23. Borsad also participated in the Salt Satyagraha. Lastly, Karamsad, native place of Sardar Vallabhbhai Patel and his brother Vitthalbhai Patel will be always remembered as such.

Among the places which have developed after Independence, mention may be made of Anand for the dairy industry of Amul and the Agricultural College. The co-operative dairy at Anand is the most unique of its kind not only in Gujarat but in the whole country. Dhuvaran came into limelight because of the thermal power station and Vallabh Vidyanagar has grown up as an educational centre well-known for its residential university. Petlad is another educational centre while Nadiad has contributed richly to Gujarati literature as it gave birth to Govardhanram Tripathi, Manilal Nabhubhai Dwivedi, poet Balashankar, etc.

Listed below are the important places of interest, given talukawise.

1. Anand Taluka

1. Adas
2. Anand
3. Bakrol
4. Boriavi
5. Jitodiya
6. Karamsad
7. Napad
8. Ode
9. Samarkha
10. Sarsa
11. Shili
12. Sureli
13. Thamna
14. Umreth
15. Vallabh Vidyanagar
16. Vasad

2. Borsad Taluka

1. Bhadran
2. Bocharan
3. Borsad
4. Dahewan
5. Davol
6. Napa
7. Ras
8. Valvod

3. Kapadvanj Taluka

1. Attarsumba
2. Fagvel
3. Kapadvanj
4. Kathlal
5. Lasundra
6. Pithai
7. Rampura
8. Ravdavat
9. Telnar
10. Utkantheswar

4. Khambhat Taluka

1. Dhuvaran
2. Kanisa
3. Khambhat
4. Nagra

CHPTAER XIX—PLACES OF INTEREST

5. Mahemadabad Taluka

1. Haldharvas
2. Kheda
3. Mankava
4. Mahemadabad
5. Sinhuji

8. Petlad Taluka

1. Dharmaj
2. Kasor
3. Nar
4. Petlad
5. Piplav
6. Sojitra

6. Matar Taluka

1. Alindra
2. Limbasi
3. Matar
4. Navagam

9. Thasra Taluka

1. Dakor
2. Sarnal
3. Thasra

7. Nadiad Taluka

1. Alindra
2. Chaklasi
3. Dabhan
4. Degam
5. Mahisa
6. Mahudha
7. Nadiad
8. Pij
9. Uttarsanda
10. Vadtal
11. Vaso

10. Vadasinor Taluka

1. Vadasinor
2. Vanakbori
3. Virpur

The following paragraphs describe above mentioned places, alphabetically :

Adas—Anand Taluka (P. 8,330); V. P., 22° 29' N. 73° 2' E., Area in acres 4,367

Adas is a railway station on the Bombay-Ahmadabad broad gauge line of the Western Railway, 11 km., south of Anand and connected by bus services with Vasad and Umreth. It has been the site of historical battles in the past. In 1723 A. D., Rustam Ali, the Governor of Surat was defeated by Hamid Khan, the deputy of Nizam-ul-Mulk. In February 1775, Raghunathrao Peshwa was defeated by Fatehsingh Gaekwad who was in turn defeated (in May 1775) by the British detachment under the command of Col. Keating.¹ At the time of the 'Quit India' movement

¹ *Gazetteer of the Bombay Presidency*, Vol. III, *Katra and Panch Mahals*, (1879), p. 166.

in 1942, five students were shot dead by the police at Adas. A memorial column has been raised near the railway station in their memory. A charitable dispensary has also been named after the martyrs as "Shahid Smarak Davakhana." Adas is a centre of trade in tobacco and pulses. There are tobacco and *bidi* factories, a pulse mill and a saw-mill. Pottery and iron implements like sickles, knives and cobbler's tools are its well known handicrafts. Adas has two primary schools, a girls school and a secondary school. The village is electrified and has post, telegraph and telephone facilities and a water works. Besides there is a primary health centre and a maternity home. A branch of Dena Bank has been established here.

Alindra—Matar Taluka (P. 3,074); V. P., Area in acres 1,731

Alindra is 6 km., from Vaso, a railway station on the Nadiad-Petlad Bhadran narrow gauge railway line. The village was named after one Aja Rabari. The village is believed to have been founded about 1200 years ago. It is known for its hand-loom industry. Formerly there were about 40 handlooms in the village. The number has now come down to about 10. There are two tobacco processing factories. The village has a primary school, a secondary school, a library run by the local youth club, a public dispensary and a post office. It has a branch of Dena Bank.

Alindra—Nadiad Taluka (P. 2,386); V. P., Area in acres 1,533

Alindra is about 10 km., from Nadiad, the taluka headquarters, which is also the nearest railway station. It is connected by the State Transport buses running between Nadiad and Dakor. Alindra is an ancient place and has an old Dargah on the bank of a lake on the outskirts of the village. The village has a primary school, a secondary school, a primary health centre, a maternity home and a post office. It is equipped with electricity. There is a milk producers' co-operative society, a multi-purpose co-operative society and a water works.

Anand—(P. 59,155); Mu., 22° 33' N. 72° 58' E., Area in sq. km., 21.13

Anand is a taluka and sub-divisional headquarters and an important junction on the Bombay-Ahmadabad broad gauge line of the Western Railway. The railway lines to Godhra, Khambhat and Vadtal branch off from here. It is also well connected by bus services. It is said to have been established by a Gosaj named "Anandgar" during the ninth century. A hoard of Kumargupta coins was found recently at Anand. The town played an important role in the Satyagraha movement. In the Gandhi Chowk of the town, where public meetings took place, a column, called Ashok Stambh has been erected. In 1925, a branch of the Arya Samaj was started here.

Anand occupies a very prominent place in the dairy industry, not only of the State but also of the country. The Kheda District Co-operative Milk Producers' Union, the most unique of its kind, was established in 1946 and had, by May 1963, a membership of 274 milk co-operatives covering an area of 2,000 square miles and 59,000 families. The Amul Dairy project started in 1955, was the first in India to produce milk powder, condensed milk and baby food. It also produces butter, *ghee*, casein, cheese and baby foods. During 1970-71 its total turnover was Rs. 27.39 crores. The Union runs a lime juice factory and a fodder mixing plant and supplies quality cotton seeds to the members as fodder for the buffaloes and maintains free veterinary services with mobile dispensaries and artificial insemination centres. Besides training personnel for the industry, it also works as consultant to similar other schemes. The Union carries out various welfare activities like providing new schools, roads, electricity, water taps, hospitals, libraries, etc., to the villages covered by it. The Polson Model Dairy working since 1929 A. D. is another well-known dairy with an all India reputation for its butter. A dairy college for degree and diploma courses has also been established at Anand. There are also factories of medicines, soap, safes, pulses and ice. Being in the heart of a tobacco growing area, Anand is famous for its snuff manufactured on a large scale. The *papads* made in Anand are sent to many parts of Gujarat. The town is equipped with electricity, sewerage, drainage and fire fighting service. There are five cinema houses, a town hall, water works and a fine public garden.

As regards medical facilities, there are three important hospitals, viz., the Emery Hospital, the T. B. Sanitorium and Hospital, one Eye Hospital etc. besides a municipal nursing home, a homeopathic college and dispensaries. The Charotar Education Society founded in 1916 conducts many educational activities besides running the Dadabhai Navroji High School. There are three pre-primary schools, 24 primary schools, nine high schools and five colleges including a college of Education and two colleges for women. The well-known university town of Vallabh Vidyanagar is 5 km., away from Anand. The Krishigoviddya Bhavan or the Institute of Agriculture, three km., away from Anand town runs an agricultural school, a college of agriculture with facilities for post-graduate study, agricultural farms, tobacco research centre, etc. At Anand there is an extension centre for training farmers, a poultry farm, a veterinary college and office of the National Dairy Development Board. Regarding banking facilities, it has branches of (i) State Bank of India, (ii) Central Bank of India, (iii) Bank of India, (iv) Bank of Baroda, (v) Dena Bank, (vi) United Commercial Bank, (vii) Kheda District Central Co-operative Bank, (viii) Urban Co-operative Bank, and (ix) Mercantile Bank of Anand. The town has post, telegraph and telephone facilities. Being the taluka headquarters, all taluka level offices are situated here.

Attarsumba—Kapadvanj Taluka (P. 2,954) ; V. P., Area in acres 1,839

Bakrol—Anand Taluka (P. 8,426) ; V. P., Area in acres 4,583

Bhadran—Borsad taluka (P. 7,668) : V. P., Area in acres 3,175

Bhadran is 8 km., from Borsad. It is a station on the Bhadran-Petlad-Nadiad narrow gauge railway line and connected by the State Transport bus services with Borsad, Anand, Petlad, etc. It is an old village stated to have been settled in the 12th century. There is an ancient temple of Bhadra-Kali Mata from which the town is said to have derived its name. Some years back, bricks of Kshatrapa period were also found while carrying on,

Bochasan—Borsad taluka (P. 5,332); V. P., 22° 24' N. 72° 50' E., Area in acres 2,186

The Vallabh Vidyalyaya, the foundation of which was laid by Mahatma Gandhiji in 1931 and which is working as a branch of the Gujarat Vidyapith, Ahmadabad, is an important educational institution imparting basic education. A Swaminarayan temple has been built by the founder of Bochasan Swaminarayan sect, Shri Yajanapurushdasji or Shri Shastri Maharaj, who owing to some difference in the mode of worship, established his own sub-sect and separated from the main sect of Swaminarayan. The festival of Jaljhilani Ekadashi at this temple on Bhadrapad Sud 11 is attended by about 10,000 persons. There are three primary schools, two high schools, and post, telegraph and telephone facilities. Bochasan, has a co-operative poultry farm. The village is equipped with electricity also.

Boriavi—Anand taluka (P. 10,960); V. P. Area in acres 3,819

Boriavi is a station on the Bombay-Ahmadabad broad gauge railway line. Well connected by bus services, it is an old prosperous village situated on the Nadiad-Anand section of the National Highway No. 8. It is said to have derived its name from Bora Rabari who founded it. Its chief produce is tobacco, millets, etc. Among places of religious importance, there is a Shiv temple of Vaijnath Mahadev. Adjoining it, there is a shrine dedicated to Sati Jeetba (17th century) who became *Sati* here. Mahatma Gandhi had, during his tour of Gujarat, stayed here in a local *dharmashala*, for a short period. Boriavi has two primary schools, a high school, a health centre and a maternity home. Branches of Central Bank of India and Kheda District Central Co-operative Bank are established here. Boriavi has water works, electricity, post, telegraph and telephone facilities.

Borsad—(P. 30,738); Mu., 22° 25' N. 72° 56' E., Area in sq. km. 24.89

Borsad, the taluka headquarters is a railway station on the Vasad-Kathana broad gauge railway line. It is situated on Vasad-Tarapur section of the State Highway and connected by the State Transport bus services with Anand, Khambhat, Dhuvaran and other important places of the district.

Borsad is a historical place said to date back to the fourth century B. C.¹ It derives its name from a sage named Badarmuni, a disciple of Valmiki and was originally known as Badar-siddhi. The earliest reference to 'Badar-siddhi' is found in a *tamra patra* inscription dated Shak Samvat 735 (A. D. 813). Another *tamra patra* is dated Shak Samvat 757 (A. D. 835) and belongs to Rashtrakuta king Dhruvraj Dharavarsha who had donated village Kashdvad (Kasindra) to a brahmin named Yoga of the village Badar-siddhi. In 1457, A. D. Mahmud Begda invaded Borsad, and named it 'Fatehpur'. After Akbar conquered Gujarat, he appointed Mirza Aziz as his Suba for Borsad and Petlad. After the establishment of the Maratha power, Damajirao II appointed, in 1716 A. D., his general Rangoji, to look after the administration of Borsad. Rangoji, constructed a strong fort round the town in 1741 A. D. The fort of Borsad was constantly the scene of fighting till 1748 A. D., when after a siege of five months, Khanderao Gaekwad took the town and imprisoned Rangoji. In 1756 A. D., Momin Khan, who had established himself as the first independent Nawab of Khambhat, decided to take the fortified town of Borsad, but it was well defended by its Maratha garrison until the siege was raised on the arrival of Damaji's son from Vadodara.²

1. *Charotar Sarvasangraha*, Part II, (1954), p. 273.

2. COMMISSARIAT M. S., *History of Gujarat*, Vol. II, (1957), p. 327.

Borsad has made a substantial contribution to the struggle for freedom during various political movements like the non-payment of the tax known as *haidia vero* levied in 1922-23 on 90 villages of the Borsad taluka for allegedly assisting the outlaw Babar Deva. In 1930-31, it participated in the Salt *Satyagraha* when Gandhiji, en-route to Dandi delivered an inspiring speech about the *Satyagraha*. Borsad took a prominent part in the movement of 1942. To commemorate the association of the people of Borsad in the *Satyagraha* movement, a large building known as '*Satyagraha Chhavani*' was built here in the year 1947. The building now houses a students' hostel. During the *Satyagraha* movement, important national leaders including Vallabhbhai Patel, Vithalbhai Patel, Madanmohan Malaviyaji, Dr. Rajendra Prasad, Khan Abdul Gafar Khan, Pandit Jawaharlal Nehru and Subhash Chandra Bose, etc., visited this town. Sardar Patel had a very successful career as a pleader in Borsad during the first decade of the present century.

There is an old step-well inside the town constructed in 1532 A. D. An inscription in the step-well indicates that this place existed as a small village known as 'Prabhu Tirth' in the 4th century B. C.¹ On the side-walls, there are niches with artistic stone carvings. One of the niches is known as '*Vera Mata no Gokh*' where the newly weds go for worship. The step-well is a protected monument and is popular as '*Vanzara Vav*'.

The town is equipped with electricity and water supply. A presbyterian Christian Mission established in 1860 runs a hospital, a school, and a women teachers' training college. Besides there is a municipal hospital and 3 primary health centres. The Borsad Municipality was established as early as 1889. A Mahila Mandal runs a handicraft institution and diploma classes in sewing. Borsad has a number of tobacco processing and *bidi* making establishments. There are three pre-primary schools, 12 primary schools, three secondary schools, and colleges in all faculties i. e. Arts, Science, Commerce and Law besides Education. The Manekbai Free Reading Room and Library has a good collection of books. Regarding trade, industries and banking facilities, there are two pulse mills, two ice factories, three ginning presses, a soap factory, a plastic frame factory, a fertilizer factory and offices of (1) State Bank of India (2) Central Bank (3) Bank of Baroda (4) Dena Bank (5) Urban Co-operative Bank and (6) Kheda District Central Co-operative Bank. A large trading place called Gandhi Ganj with 56 spacious shops dealing in all articles of consumer goods is a unique attraction of the town. Borsad has two cinema houses. The town has post, telegraph and telephone facilities.

1. *Charotar Sarvasangraha*, Part I, (1954), p. 973.

Regarding ancient places of worship, there are the Panch Mukhi Mahadev, Rokadiya Hanuman, Narayan Dev, Omkareshwar Mahadev, Tornav Mata, Mahakaleshwar Mahadev, Koteswar Mahadev, Ramji Mandir, etc. The Koteswar temple was built during the time of Khanderao Gaekwad while the Ramji Mandir was built thereafter in 1800 A. D., during the time of Malharrao. There are four Jain temples besides Shrimad Raichandra Shala where religious discourses are held. The Jain temple of Adishwar Bhagvan has a Jain Granth Bhandar or a library with 4,000 important books including a manuscript of 'Shri Pal Rasa' written in the 15th century. Among places of worship for the Muslims, there are eight mosques and 12 *dargahs*.¹ There is one Christian church.

Chaklasi—Nadiad Taluka (P. 20,211); N. P., 22° 39' N. 72° 57' E., Area in acres 6,255

Chaklasi is 12 km., from Nadiad and 5 km., from Uttarsanda, a railway station. It is connected by the State Transport bus services with Anand and Nadiad. Believed to be an ancient place, it is associated in local legend with Mahabharat times, when it was known as Chakravati Nagari visited by the Pandavas.

It is well known for its tobacco and *bidis*. Other main products are potatoes and vegetables. There is a cold-storage plant for potatoes. Milk is another important product, marketed through co-operative societies. As early as 1834 A. D. a condensed milk factory was established here with a German dairy-expert as its manager. In 1924 A. D., it sent its first consignment to London consisting of six tons of casein. Chaklasi has a plastic foot-wear factory. There are several temples, a mosque and a church. The temple of Ganganath Mahadev is about 200 years old. Shankaracharya Shri Rajrajeshwar Maharaj established an *ashram* and *gaushala* about 50 years ago. A Mahadev temple has been erected on his *samadhi* here. A fair is held at the *ashram* on Bhadrapad Sud 14. Chaklasi has a pre-primary school, eleven primary schools, three secondary schools, a library and a public dispensary run by the Panchayat. The village is served with electricity, water works and post, telegraph and telephone facilities. There are branches of United Commercial Bank and Kheda District Central Co-operative Bank.

Dabhan—Nadiad Taluka (P. 5,467); V. P., Area in acres 2,148

Dabhan is 4 km., west of Nadiad, on the Nadiad-Ahmadabad section of National Highway No. 8, and connected by the State Transport buses with Nadiad, Kheda, Vaso, Matar, etc.

1. *Borsad-Ek-Adhyayan*, (1974), published by the Arts and Commerce College, Borsad

The village has derived its name either from its old name Darbhavati, or from Darbhavan. The main attraction of Dabhan is the temple dedicated to Sahajanand Swami of the Swaminarayan sect, who had stayed there in V. S. 1867. He is said to have performed a *yagna* and showed some miracles as a result of which Joban Pagi, a notorious bandit, accepted his religious tutelage. Dabhan has electricity, water works, two primary schools, a secondary school, a public library and post, telegraph and telephone facilities. There are four tobacco units in the village. Dabhan is inhabited by progressive cultivators.

Dahewan—Borsad Taluka (P. 6,148); Area in acres 3,542

Dahewan is 27 km., from Borsad, the taluka headquarters, and is situated on the bank of the river Mahi. It is connected with Borsad by the State Transport buses which ply during fair season. The adjoining village of Kankapura, it is believed, was once a part of this village. Near these two villages, there is an ancient temple of Dandeshwar or Dandpraneshwar. The *Shiv-ling* and the idol of Parvati inside the temple are believed to be fairly old. There is also a shrine dedicated to Bhathiji Khatri. Dahewan has a primary school, a secondary school and a post office. It is also equipped with electricity.

Dakor—Thasra Taluka (P. 16,092); N. P., Area in sq. km., 15.52

Dakor, one of the holiest places in India, is situated on the river Shedhi 38 km., from Nadiad and 30 km., from Anand. It is a station on the Anand-Godhra broad gauge railway line and linked with Nadiad and Godhra with a cement concrete road. Its railway platform is 1,470 feet in length and is considered one of the longest in India. The State Transport bus services connect Dakor with Nadiad, Ahmadabad, Kapadvanj, Sevalia, Godhra, etc.

Dakor is perhaps the most frequented place of pilgrimage in Gujarat. The town, famous for the well-known temple of Ranachhodiji (Shri Krishna), is visited every year by lakhs of devotees from all over Gujarat. It is said that Dank Rishi had his *ashram* here in the times of *Mahabharat*, when the surrounding area constituted the Hidimba Van. Khakhariya and Dankpur are the older names of Dakor. According to a legend which has been the subject of much folklore, the original idol of Ranachhodaraiji of Dwarka is now enshrined at Dakor. It is said that, taking pity on an aged devotee, Vajesinh Bodano, a Rajput of Dakor who came to Dwarka for *darshan* from such a great distance every year on full-moon day, the God in the form of the idol of Dwarkadhish went with him and reached Dakor on Kartik Sud 15, V. S. 1212 (1156 A. D.). The Gugli Pujaris at Dwarka chased Bodano

to recover the idol and killed him in Dakor. Gangabai, the widow of Bodano offered to give the equivalent of the idol's weight in gold where upon the Guglis agreed to withdraw. By a miracle the idol became as light as a golden nose-ring which was all that the widow had. The Guglis were disappointed, but the Lord mercifully directed that they would find an exact replica of the idol in a particular well at Dwarka. The impatient Guglis looked for the idol some time earlier than they were told to, and, as a result, found an idol which, though similar to the original one, was smaller. Pilgrims to Dakor still visit the places stated to have been associated with the legend, viz., where the branch of the neem tree under which the God rested turned sweet, where the idol was hidden in the Gomati tank, where the balance was set-up, the original temple where Bodano enshrined the idol, etc.

The present temple of Ranachhodji was built in 1772 A. D., at a cost of Rs. 1 lakh by a Maratha *sharaf* Gopalrao Jagannath Tambekar. Built with brick walls and stone pillars, it is raised on a high plinth 168 feet by 151 feet with twelve stone steps on each side and surrounded by a large courtyard enclosed by fortwalls. It has eight domes and 24 turrets, the highest of them being 90' making it the tallest temple in the district. Though not very rich in carving, the main cupola presents a peculiar style of architecture. Though it looks like a Muslim *tajia* in appearance, in fact it shows the influence of the Maharashtrian style of Hemadripanthi temples. The idol is of black touch-stone, 3½ feet tall, and has four hands. The temple was endowed with the rental of two villages, namely Dakor and Kanjari, by Madhavrao Peshva and Sayajirao Gaekwad respectively in the year 1769 A. D. The temples were managed on behalf of the shrine by the Tambekar family. Since 1888 A. D., the management of the temple rests in a Temple Committee in pursuance of a High Court decision. It consists of three nominees of the District Court and one representative each of the Tambekar family and the *pujari sevaks*. The *pujaris* are Khedaval, Shrigod and Tapodhan Brahmins. The temple has an annual income of about Rs. 18 lakhs. There are 600 cows in the temple Gaushala. It maintains an artificial insemination centre. Near the temple is the sacred Gomti tank, the biggest village tank in Kheda district with masonry walls and stone steps on three sides. Other important shrines include those of Lakshmiji, Bodano, Danknath Mahadev, Visvakarma, Kabir, Trikamaji, Satyabhama, Shesha Shayi Bhagwan, Swaminarayan, Mota Hanuman, Mahaprabhuji's bethak, etc. Near the Danknath Mahadev, there is an old and mutilated idol of Ganapati which seems to be of the Chalukyan period. Two private buildings and the balcony of the Satyabhama temple have fine wood carvings and paintings of ancient days. There is also a *math* of Jagatguru Shankaracharya. A temple dedicated to Saraswati was constructed here in 1970 in the shape of '*shree yantra*'. Thousands of people all over Gujarat visit Dakor on every Purnima day when special trains and buses

have to be run to clear the traffic. The municipality levies a pilgrim tax on these occasions. Being a place of pilgrimage Dakor has also become a centre of some trade. Apart from sweets offered to the God, and devotional articles like rosaries of Tulsi beads, and pictures of deities, household articles of iron, wood, etc., are important items of trade. *Patrala*, i. e., plates made from dried Khakhara leaves are exported in large quantities. There are two cotton ginning factories and one rubber factory. The chief fairs at Dakor are held on the Ashvin and the Kartika Purnimas when 50,000 to 1,00,000 people visit the shrine. On the New Year Day, i. e., Kartika Sud 1, *annakoota* the largest possible assortment of sweets and food preparations are offered to God. Other Vaishnava festivals like Holi, Janmashtmi and Rathayatra, etc., are also ceremonially celebrated at Dakor.

Dakor has the court of a Judicial Magistrate, a hospital, a maternity home, eight primary schools, two secondary schools, a library, two Sanskrit Pathshalas, a Ved Pathshala and colleges in Arts, Commerce and Science. It has branches of (1) Bank of India, (2) Dena Bank, (3) Urban Co-operative Bank, (4) People's Co-operative Bank and (5) Kheda District Central Co-operative Bank. There are 21 *dharmashalas* and two Government rest-houses. The town has electricity, water works, fire fighting service, a cinema house and post, telegraph and telephone facilities.

Davol—Borsad Taluka (P. 6,759); Area in acres 2,401

Davol is 4 km., from Borsad, the taluka headquarters. There are two ancient temples of Siddhanath Mahadev and Vajinath Mahadev with ancient idols of Ganesh, Mahishasur Mardini, Parvati, Hanumanji, etc. These idols and the old bricks found from here suggest that Davol must have been established during the Solanki period¹. The Vajinath temple has an artistic stone-panel depicting pictures of the Nav-Durga. Inside the temple, near the *Shiv ling* there are foot prints believed to be of a disciple of Shankaracharya. The Siddhanath temple has some shrines of Avadhoots. Besides, there are temples of Ramji and Sat Kaivalya both of which are not so old. There are foot-prints (*pagala*) of Shri Swaminarayan. Several old buildings in this village have beautiful wall-paintings.

Davol has a pre-primary school, two primary schools, a secondary school, a public library, a health centre, a family planning centre, and a post office. A branch of the Central Bank is opened here. Moghal coins were found from here while constructing the Bank building.

1. GAUDANI HARITAL R. (DR.), Article in the *Nootan Gujarat*, (Ahmadabad) dated 6th January, 1974.

Degam—Nadiad Taluka (P. 2,318); V. P., Area in acres 2,070

Degam is an ancient village about 11 km., from Nadiad with which it is connected by the State Transport buses during fair season. The name Degam is said to have been derived from 'Devagam' as there were several temples (Devasthan) in this village. These temples are now in dilapidated conditions. To the north of the village, on the bank of the river Shedhi, are two ancient temples. One of them, known as the Gopnath Mahadev, has a very huge *Shiv ling*. It is about 18 feet high, but about two-third of it is underground. The *Shiv ling* is believed to be of the Maitrak period.¹ Near the entrance door, there is an idol of the dancing Ganesh, very rarely found in Gujarat. According to Dr. Gaudani, it belongs to the Pre-Solanki period.² The other idols are of Brahma and the Matrukas. There is another shrine known as the Bhutnath Mahadev which also has a very huge *Shiv ling*. Near these two shrines there is an unusually large stone-idol of *Nandi* in ruined condition, pertaining to 11th Century A. D. It is about 10 feet long and 5 feet high. The shrines and the idols need to be preserved as ancient monuments.

The village has electricity, a primary school and a post office.

Dharmaj—Petlad Taluka (P. 9,208); V. P., Area in acres 3,614

Dharmaj is 9 km., from Petlad and 14 km., from Borsad. It is a station on the Petlad-Bhadran narrow gauge railway line and is connected by the State Transport bus services with Petlad. It is a very old town said to be in existence since the 12th century. The main population consists of the enterprising community of Patidars doing thriving business in various towns and cities of India and abroad including Java, Rangoon, Singapore, Aden, Kenya, Uganda, Rhodesia, etc. Like many other places in this area, this town took a prominent part in the struggle for freedom in 1930 and 1942. It has very fertile land and an enterprising population. There are 8 factories producing snuff for which it is well-known. Besides, there are two iron works, three lathe works, a nicotine factory and a plastic factory. There are three primary schools, two secondary schools, two public libraries, a Vyayamshala, water works, a T. B. Sanatorium, a public dispensary and a maternity home. Dharmaj has electricity and post, telegraph and telephone facilities. There is a public garden with several trees. Dharmaj has branches of Bank of Baroda, Dena Bank, Central Bank and Bank of India besides the Dharmaj People's Co-operative Bank.

1. GAUDANI HARILAL R. (DR.), Article in the *Lokmat* (weekly), dated 16th March, 1974.

2. *Ibid.*

There are temples dedicated to Shri Krishna, Shri Rama, Verai Mata and Shri Swaminarayan besides three Shiv temples, a Pranami temple, the Satini-Devdi and a Jain temple.

Dhuvaran—Khambhat Taluka (P. 6,836); V. P., 22° 14' N. 72° 46' E. Area in acres 3,162

Dhuvaran is situated on the river Mahi about 15 km., away from Khambhat, with which it is connected by the S. T. bus services, and about 9 km., from Kathana the terminus of the Vasad-Kathana broad gauge section of the Western Railway. It is well known due to the Thermal Power Station built at a cost of Rs. 30.78 crores in the year 1965. The idea for setting up a central thermal power station for the Gujarat region at Dhuvaran was first mooted in 1958 after surveying a number of possible sites. Its construction work was started in 1960 and the station was fully commissioned in March, 1965. It consists of four turbo-generator sets of 63.5 MW capacity each, giving a total installed capacity of 254 MW of power.¹ There is a primary school, a secondary school, and post, telegraph and telephone facilities. It is also equipped with electricity. There is a temple of Dhumeshtwar Mahadev. A bath in the river at this place is considered holy and as such it has become a popular place of pilgrimage.

Fagvel—Kapadvanj Taluka (P. 4,136); V. P., Area in acres 4,389

Fagvel situated on the bank of the river Shaidak is 15 km., from Thasra railway station and 45 km., from Kapadvanj. It is believed to have taken its name from Phalgun, the month in which it was settled. It has the shrine of Bhathiji, a local deity widely worshipped and held in great sanctity in these parts under the name of Bhathi Khatri, to whom people resort, especially for the cure of poisonous snake bites. It is said that about 150 years ago, Bhathiji, immediately returning from his own marriage gave his life fighting for the protection of cows that were being driven away by the Muslim outlaws. According to a legend his body went on fighting for some time even after his head was severed. A serpent who drank his blood was pleased with him and blessed him that those who worship him would be cured of poisonous bite. The fair held in his honour on Kartik Sud 1-2 is attended by over 10,000 persons. The village has two full-fledged primary schools, two second-grade schools, a high school, a public dispensary and a post office.

Haldharvas—Mahemadabad Taluka (P. 4,809); Area in acres 2,254

Haldharvas is situated on the Vatrak river, 22 km., from Mahemadabad, which is the nearest railway station. It is connected by the State Transport

1. G. E. B. News Vol. VI, No. 15, 2nd December, 1968, p. 2.

buses with Ahmadabad, Kathlal, Kapadvanj, etc. There are three legends connected with its present name Haldharvas. According to one, the village was donated to Brahmins by Mulraj Solanki and was called Bhamnol or Brahmapuri. The original site of this village is 2 km., north of the village on the bank of the river Vatrak. There is a fort along with a fortwall built of bricks and now in ruined condition. Near this fort there is an old well called *chha-koshio kuvo*. It is believed that a big town was situated here in the past. According to another legend, there was a big town called Bamnol or Bhamnol where a battle was fought. As a result, the people left the place and stayed in the fields where the present Haldharvas was thereafter established. The people lived *Uddhar* (in helpless condition) so the village is called Haldharvas. According to a third legend, the village was mainly populated by the "*Hal-Dhars*", i. e., farmers and was therefore called Haldharvas. The village was built by the Gohils.

The ancient temples of Parashar Mahadev on the right bank of the river and of the Chyavanrishi Mahadev and the Bhagirurishi Mahadev are on the opposite side of the village. The river Vatrak flows eastward here and makes this place holy. Besides other temples of Swaminarayan, Ambaji Mata, Bhimnath Mahadev and Hanumanji there is a seat (*bethak*) of the Pushti Sampradaya (Kankroli). Many pilgrims visit this place in the month of Shravan.

The village had played an important role in the freedom movement. A Vyayam Shala was established here in 1942-1943 to prepare the youth for the freedom movement. The well known poet Shri Manikant (Shankarlal Maganlal Pandya) who wrote "*Manikant Kavyamala*" belonged to this village. The Haldharvas is a trading centre of ghee and a centre of trade for the surrounding villages. The branches of Bank of India and Kheda District Co-operative Bank are situated here. The village has a service co-operative society, a milk producers' society, a veterinary dispensary, a panchayat dispensary, a maternity home and a Panjrapole. There are two Bal mandirs, a primary school, a secondary school, a public library, a Stree Udyogshala and a post office.

Jitodiya—Anand Taluka (P. 2,065); V. P., Area in acres 773

Jitodiya is about 4 km., from Anand and connected with Anand and Borsad by bus services. It has the well known temple of Vajinath Mahadev, said to have been built during the Solanki period. The *Shivling* is three feet tall and has about 25 holes in it. Numerous *devotees* visit the shrine in the month of Shravan. It is also a picnic spot, and the site of two

annual fairs on Mahashivratri (February) and Janamashtami (August) attended by 5,000 to 10,000 persons. Jitodiya has a water works, electricity, a primary school, a post office and telephone facilities.

Kanisa—Khambhat Taluka (P. 1,994); V. P., Area in acres 1,602

Kanisa is 3 km., from the Sayama station on the Anand-Khambhat broad gauge railway line. There is an ancient temple of Kamnath Mahadev, with a *kund* or a holy tank, a bath in which is believed to cure leucoderma and skin disease. Handloom textiles and cement pipes are its principal industries. The fair held at the Kamnath Mahadev temple in the month of Shravan is attended by 8,000 persons. There is a primary school, a secondary school and a post office.

Kapadvanj—(P. 30,748); Mu., 23° 01' N. 73° 04' E., Area in sq. km., 19.21

Situated on the river Mahor, it is the headquarters of taluka, and the terminus of the Nadiad-Kapadvanj narrow gauge railway line about 40 km., from Nadiad. It is connected by the State Transport bus services with Nadiad, Modasa and surrounding places. One of the oldest towns of Kheda district, it is said to date back to the 11th century. According to local history, its original name was *Kapatpura* or the town of deceit. According to other sources, the name is said to have been derived from Kabar Punch (the five tombs) or *Karpat Vanijya* (the town dealing in cloth).

There are, in the town, buildings which are five to eight centuries old. Three historical battles were fought at Kapadvanj. In 1454, Kutb-ud-din, the king of Gujarat, defeated king Mahmud Khilji of Malva after a hard battle. In 1725, the Marathas under Kantaji and Pilaji Gaekwad were defeated by the Mughal commander Khanahzad khan. In 1736, the Marathas and the Kolis recovered the town in a joint attack. The Marathas held it till 1816-17 when they exchanged it with the British for the territory of Vijapur.

Situated as it is on one of the main routes between Central India and the sea coast, Kapadvanj had been an important trade centre before the advent of the railways. It was known for the manufacture of soap, glass, leather, *ghee*, jars and more particularly for textiles which gave it the name of *Kapad-vanj* or the place famous for cloth weaving. Iron ore also used to be smelted there. Its goods were once exported to Panchmahals, Vadasinor and Central India, and glass and soap were exported even to North Africa, Arabia and Persia. Agate and moss pebbles used to be collected from the bed of the river Mazam about 24 km., from Kapadvanj and sent to Khambhat for processing. About 60 years ago Messrs. Killick Nixon and Co.,

of Bombay discovered manganese ore at Tanklani Deri about 2 km., away from Kapadvanj. The working of the mines and export of ore was very much facilitated by the Nadiad-Kapadvanj railway line constructed by the company in 1913 A. D. These mines are closed for the past 25 years. The bauxite mines are still working. Most of the handicrafts of Kapadvanj have now fallen into decay. Cotton and groundnut are its chief produce. There are five cotton ginning and pressing factories, three oil mills, two rice mills, three soap factories, three plastic goods factories and 11 *latis*. Among industrial crafts, the glass bangles of Kapadvanj are well-known. The Vohras of Kapadvanj have settled as businessmen in Bombay and various other cities of India and abroad.

Kapadvanj had actively participated in the national struggle for freedom. Gandhiji had visited Kapadvanj during the Kheda Satyagraha.

The town is surrounded by a fortwall with gateways on four sides which are gradually disappearing. A *toran* or victory arch in Chalukya style, a *kund* and the *Batris Kotha Vav*, a step-well with 32 apartments, built by Siddharaj Jaysinh, are fine specimens of architecture. It is said that Siddharaj had built the *kund* on hearing of the medicinal properties of the waters of a pool at that site. The *toran* and the *kund* are protected monuments. Beside the *kund*, there is an ancient temple of Mahalaxmi. To the south of the *kund* there is an underground temple of Nilkanth Mahadev. There are ruins of many mosques and tombs. A fine Jain temple built in the middle of the last century, on a plinth ten feet high, has richly ornamented interior with marble pillars and pavement. There are beautiful mosques in the Vohra locality and many old buildings rich in wood carving.

The town has two hospitals, piped water supply and underground drainage system. In fact, Kapadvanj was the first town in the district to have underground drainage system which was initiated in 1925 and completed in 1928. Kapadvanj had its municipality as early as 1863. There are 15 primary schools, 4 secondary schools and colleges of arts, science and commerce and four public libraries. The Municipal High School maintains a children's museum. A large fair attended by about 25,000 persons, is held at Moti Ratnakar Mataji on Bhadrpad Sud 12-15. A smaller congregation also assembles at Nani Ratnagar Mataji during these days.

Near Kapadvanj, Mr. Sunderaian discovered in 1958, two dikes of middle stone age, one of which was Mahadeviya in its upper reaches and the other at Mohmadpura on the Mahor river.

1. *Shatabdi Mahotsav*—a souvenir published by the Kapadvanj Municipality in 1962 to commemorate its centenary.

Branches of (i) State Bank of India (ii) Central Bank (iii) Bank of Baroda (iv) Punjab National Bank (v) District Central Co-operative Bank and (vi) Urban Co-operative Bank are established here. The town has post, telegraph and telephone facilities, fire fighting stations and a rest house.

Karamsad—Anand Taluka (P. 11,678); N. P., 22° 33' N. 72° 54' E., Area in acres 4,453

Karamsad is famous as the native place of Sardar Vallabhbhai Patel and his brother Vithalbhai Patel and is one of the important centres of the Patidar community. It is a station on the Anand-Khambhat broad gauge section of the Western Railway, 8 km., from Anand and connected with it by the State Transport bus services. The university township of Vallabh Vidyanagar for the establishment of which lands from Karamsad were donated, is at a distance of less than 3 km., from the village. Karamsad has electricity and water works, a dispensary, a public health centre with an attached maternity home, a public library and post, telegraph and telephone facilities. There are two primary schools for boys and girls and two secondary schools for boys and girls. Branches of Bank of India, Bank of Baroda, Dena Bank, State Bank of India and two branches of Urban Co-operative Bank are established here.

Karamsad is industrially developed. The industrial township known as Vithal Udyog Nagar has about 50 factories. There are two pulse mills, one rice mill, a rubber factory and a plastic factory. Among places of public worship there are several temples, a Jain Derasar, a catholic church and a mosque. It has a telephone exchange and offices of the Central Excise and the Kadana Project.

Many Patidar families from here have migrated to East Africa and England.

Kasor—Petlad Taluka (P. 7,115); Area in acres 3,691

Kasor is about 5 km., from Sojitra, the nearest railway station. It is said that the place was originally inhabited largely by the Nagar Brahmins. There are two primary schools, one Balmandir, one high school and a post office. It is equipped with electricity. Besides there is an Ayurvedic dispensary and a maternity home. Near the village, there is an ancient temple of Dholleshwar Mahadev with a white (*dhaval*) *Shiv ling* said to have been installed by king Vir Dhavai. In the temple there are several old idols of Shiv, Parvati, Lakulesh, Kubera, etc. A brick belonging to the Kshatrap period was discovered from here. Kasor is mentioned as a village on a Tamrapatra of Valabhi dated 648 A. D.

Kathlal—Kapadvanj Taluka (P. 10,006); N. P., Area in acres 4,123.

Kathlal is a railway station on the Nadiad-Kapadvanj narrow gauge section of the Western Railway, 27 km., from Nadiad and 15 km. from Kapadvanj with both of which it is connected by the State Transport bus services. It is the biggest village in the Kapadvanj taluka. It is known as a progressive village, which has developed traditions of public and social service like famine and flood relief, etc. The movement of Kheda Satyagraha had initially started from this place in 1917. A Satyagraha memorial was erected in 1958 to commemorate the movement initiated at this place. Kathlal has several co-operative societies, a regulated market yard and three oil-mills. The handloom cloth and textile dyeing of Kathlal are very well-known. A weekly bazar is held here every Sunday and is attended by many people from the neighbouring areas. A public dispensary and a maternity home are managed by the Panchayat. There are several educational institutions including a primary teacher's training college for males and two high schools. The village is served with electricity, post, telegraph and telephone facilities. Kathlal has several temples among which those of Nilkanth, Hareshwar, Kubereshwar, etc., appear to be more ancient. The bricks, coins and other ancient remains found here indicate that Kathlal must have been a flourishing place during the Maitraka period. The idol of Vayavya Devi, in the Ashapuri temple, rarely found in Gujarat, belongs to the ninth century. Another beautiful idol of Lord Vishnu in form of Trimurti kept in the local high school dates back to the 5th or 6th century.¹ The idol is 3.5 ft. in height and 2.5 ft. in breadth.

Bank of India and the Kheda District Central Co-operative Bank have established their branches here. Kathlal has a cinema house.

Khambhat—Cambay* (P. 62,097); Mu., 22° 19' N. 72° 37' E., Area in sq. km., 69.24

Khambhat (Cambay), a taluka town, is situated at the head of the gulf of the same name at the place where the great river Mahi discharges itself into the sea. It is the terminus of the Anand-Khambhat broad gauge railway line, 51 km., from Anand and is also connected by the State Transport buses with Ahmadabad (at a distance of 93 km., in the north), Vadodara (at a distance of 78 km., in the east), etc.

Puranic tradition and legends attribute several names to Khambhat, viz., Mahisagar Sangama Kshetra, Gupta Kshetra, Kumarika Kshetra,

1. GAUDANI H. R. (DR.), Article in the *Lokmat* (weekly), dated 7th September, 1974, page 8.

* Contributed by J. P. AMIN (DR.); PROFESSOR, Arts & Science College, Khambhat.

Stambhatirtha, Stambheshvartirtha, Stambhapura, Mahinagara, Tarakpura, Trambavati (Tamralipti) Bhogavati, Karnavati and Khambhayat. The name Stambhatirtha also occurs in several historical works and epigraphical records.

Wide controversy prevails regarding the etymology of the word "Khambhat".¹

In ancient and mediaeval times, Khambhat ranked as one of the richest and greatest cities of India and upto the 17th century A. D., it was a great centre of maritime activities. Since the beginning of the 9th century. A. D., we get reliable historical information supplied by excellent records left by merchants. The first known reference to the maritime activities of Khambhat was made by the Arab geographer Khardadba in his work, "*The book of Roads and States*" written in 865 A. D. The well known Arab traveller Al-Masudi visited Khambhat in H. 303 (913-914 A. D.). He records that Khambhat enjoyed great fame for its precious stones (*manekas*), which were very popular in the markets of Aden and Mecca. Moreover it was famous in Baghdad for its shoes. Ibn Haukal (968-996 A. D.) names Kambaya among the important cities of India and Al-Idrisi (1100 A. D.) mentions this place as a pretty and well-known naval station, second among the towns of Gujarat.²

It is probable that this port was developed by the Gurjar Pratihara sovereigns of Bhinnamal and Kanoj, as Bharuch was under the sway of the Rashtrakutas. Mularaj (942-997 A. D.) the founder of Solanki or Chaulukya rule in Gujarat got settled north-Indian Brahmins at Khambhat. It was indeed under the Solanki rulers like Siddhraj Jayasinha (1094-1142 A. D.) and Kumarapala (1143-1172 A. D.) that Khambhat began to emerge as a great commercial and maritime centre not only of Gujarat but also of India. Acharya Hemachandra and the famous minister Udayana, the great cultural leader of this time, resided here for some time.

During the Solanki-Vaghela period (1244-1304 A. D.) Khambhat maintained cultural traditions. The two brother ministers Vastupala and Tejapala and Jayantasinha, the son of Vastupala were the governors for some time of this port-city. They erected and reconstructed several Jain temples and set up many Jain Gnan Bhandaras, some of which have preserved very valuable manuscripts even to this day. During this period Khambhat was a great

1. Vide : RATANAMANIRAO B. JOTE, "*Khambhatano Itihas*," p. 22-23; DR. UMASHANKER JOSHI, "*Puranoman Gujarat*," p. 214; DR. R. M. MEHTA, "*Kumarikakhand and Khambhat*," "*Swadhyaya*," Vol. 2, I-4, p. 467. The word Khambhat is commonly believed to have originated from word *stambha* (pillar), but some derive it from *skambha* also.

2. *Bombay Gazetteer*, Vol. I, p. 514.

centre of literature, art, architecture, trade and commerce.¹ Its strategic importance as a gateway to Lat, Saurashtra and north Gujarat made it the source of conflict between various dynasties.

In 1290 A. D., Marco Polo found it as the chief city of a large country and the centre of a great trade. Muslim writers too, call it the first city of Hinda (India). With a poetic touch they describe :—"the air is pure, the water clear and the country charming both in scenery and buildings."² It was this irresistible charm and the wealth of the city accumulated by its maritime activities that repeatedly lured Muslim invaders to this "Garden of India". The last decade of the 13th century A. D., saw the end of the rule of Vaghelas of Anahilavada Patan and the conquest of Gujarat by the forces of Allauddin Khilaji of Delhi. Allauddin's general Nasaratkhan plundering the city secured an immense booty from the merchants in the form of precious pearls, jewels and stones.³ Subsequent to this first pillage by a Muslim invader, Khambhat was repeatedly sacked by various conquerors and rebels and looted in the similar manner ; but so great was the influx of wealth from beyond the seven seas, that within a short time the city became as prosperous as ever. Ibn Batuta on his way to China in 1345 A. D. found it as a very fine city remarkable for the elegance and strength of its mosques and houses. Both Marco Polo and Ibn Batuta complained about the piracy in the Gulf of Khambhat. Under Ahmed Shah I and Mahmud Begda, Khambhat, then a noble city 12 miles around, prospered with many crafts. It was called the "garment of the world" as it supplied textile goods to the whole of the East and the greater part of the West. In 1573, it was brought under the sway of the great Mughal emperor Akbar, who revived its trade. During his reign Khambhat, became so famous all over India that queen Elizabeth-the first, addressed Akbar as a "King of Cambay". Literature, art, architecture and various industries developed and flourished during this period. The English and the Dutch established their factories (*kothis*) here in 1613 and 1617 A. D., respectively.

The early decades of the 16th century marked the beginning of the end of the glory of Khambhat. Indeed it took nearly one full century for its decline. The first death blow to Khambhat as well as to many other ports of India was the Portuguese settlements in Gujarat. *The Gazetteer of Bombay Presidency* recorded the whole process thus : "Shortly after beginning of the sixteenth century, the control of the sea trade of Cambay passed from the hand of Gujarat to the Portuguese....They for several years (1529-1534 A. D.) spared no efforts to injure the harbour and shipping of Gujarat. Even when

(1533 A. D.) they became the acknowledged rulers of the Cambay seas, it was their interest to reduce Cambay to a local port and draw the foreign trade to their own cities, Diu and Goa."¹

A number of European travellers have described Khambhat as one of the greatest and richest cities of India. "It was the home and the nursery of all that was best in India." Till the beginning of the 17th century it enjoyed the same position as is enjoyed by Bombay and Calcutta today. Thereafter, Surat gradually became the chief port on the west coast. The tide at Khambhat was very forceful making it dangerous and difficult for ships to anchor at some distance. On the decline of the Mughal power, it became a separate state. It suffered repeated levies of Marathas and harassment by Kathis and Kolis. By 1797 A. D., the English factory (known as Kothi building today in Khambhat) was unremunerative and in 1818 A. D., the British Resident was withdrawn and then Collector of Kheda was made the Agent of the British Government. A historical anchor weighing about 41 hundred weights, with a British mark dated 1848 was recently discovered from here. It is believed that this anchor was gifted by the British merchants to the then Nawab of Khambhat for his hospitality. This shows the connection of the East India Company with the Nawab of Khambhat.² The decline of Khambhat was mainly due to the silting of the port, competition from European companies, transfer of maritime trade to other places like Diu, Goa, Ghogha and Surat and finally the construction of the B. B. and C. I. Railway in 1863 providing a direct route from Gujarat and central India to Bombay.

Khambhat was a cosmopolitan city where many tongues were spoken. It has always been famous for its handicrafts, chief among them being agate or Akik, known even during Ptolemy's time, i. e., 150 A. D. Raw agate stones and miscellaneous foreign stones were brought to Khambhat for being cut and polished into finished articles of great artistic value which were in great demand in foreign markets. According to the local tradition, an Abyssinian merchant called Bawa Ghor established a factory for the manufacture of agate stones at Nandod in Bharuch district in the fifteenth century and exported them to countries on the west African coast, China, Arabia and Europe through the port of Cambay (Khambhat) where his brother Bawa Saban was stationed as his representative. The Muslim artisans of Nandod taught the art to Kanbis and others who shifted to Khambhat and carried their business there. The artistic skill which had once reached its zenith no longer exists though Khambhat lapidary still excels in cutting and polishing of stones which attracted precious, semi precious and in recent times even synthetic stones from various parts of the country. Among other crafts, which thrived in the past were ivory and wood work, leather work, perfumes, corals, shields with inlay work, carpets, ivory bangles (*chudis*), clay pottery.

1. K. F. SOMPURA (DR.) AND J. P. AMIN (DR.), "A Descriptive Catalogue of the Anti-quinities at College Museum, Khambhat", p. 3. (unpublished).

2. *Gazetteer of Bombay Presidency*, Vol. VI, p. 215.

3. COMMISSARIAT M. S., "A History of Gujarat", Vol. I, p. 4.

1. *Gazetteer of Bombay Presidency*, Vol. VI, p. 188-196.

2. *Gujarat Samachar*, dated 8th September, 1975.

strong Khambhati iron looks, copper vessels, the well known "Khambhati" paper and coir ropes. However, the only other important handicraft now surviving is weaving of jari brocade and nylon saris woven by the skilled workers of Khambhat. There are two textile mills, 147 powerloom factories and three saw mills. Khambhat is also wellknown for its sweets, *Sutarfeni* (thread sweets) and *Halayasan* and eatables such as *Suka-Bhajiya*, which are specially prepared for long sea-journey.

Khambhat acquired a new importance owing to the discovery of petroleum and natural gas struck on 12th September 1958. The technical training institute of O. N. G. C., started in 1961, conducts two year courses for mechanics, fitters, turners, machinists, welders and ringmen in the oil industry.

The progress made by the Khambhat Municipality during the last decade is remarkable. It has erected various beautiful buildings of different designs, the glaring testimony of which is the most beautifully reconstructed Madala tank, besides the beautiful swimming bath which is the first of its type in Kheda district. The newly inaugurated maternity home near Sardar Tower and the T. B. Hospital under construction on the Khambhat-Ahmadabad Road are the major recent works of the Khambhat Municipality. The town enjoys other multifarious facilities such as 11 pre-primary schools (including 7 municipal Balmandirs), 22 primary schools, 7 secondary schools, 5 colleges imparting higher education in 6 faculties (Arts including Home science and an Archaeological Museum Science including post graduate courses and a research laboratory, Commerce, Education, Law and Pharmacy), 3 public libraries (including a municipal children library), 3 guest houses, 2 general hospitals, 3 maternity homes and 4 tanks and 4 gardens. The tidal scene of the sea during the fifteenth day of the bright half of Chaitra (Chaitri Purnima), and third day of the bright half of the Vaishakha (Akshayatrutiya) is mythologically and popularly famous in the vast area of the surrounding villages, and on these days, a fair is held and a bath in the sea is considered to be holy.

Khambhat proper is of immense importance from the point of view of antiquities. The surrounding environments of Khambhat such as the Vadava Ashram of Shrimad Rajachandra, the step-well at Vadava, Nagara (whose antiquities have been recently brought to light through the excavation carried out by M. S. University, Vadodara,), Bhimnath temple at Kalitalavadi, Kamnath temple and basin at Kanisa, Koteshtar and Neja deserve mention.

Among about 70 mosques, the most splendid is the Juma Masjid, erected as early as 1325 A. D., in the first year of the reign of Sultan Muhammad-bin

Taghbug and is still in excellent preservation. The mosque stands on the west side of a large court-yard, while on the other three sides are pillared corridors. It is remarkable for its fine proportions and spacious design and above all for its facade. It is 63 metres (212') long and 75 metres (252') wide including the mausoleum in south covering 16.5 metres (55') with its prayer hall of the size of 57 × 15 metres (189.5 × 50'), supported with 100 pillars each of the height of 3.12 metres (13.5') on the southern side. Adjoining the Masjid is a large mausoleum of the size of 60 × 15 metres (214' × 49'). The two tombs of white marble in the mausoleum are engraved with the inscription of the verses from the *Kuran* and the builder's epitaph. Some historians are of the opinion that the Masjid was built on the site of some Hindu temple and that its materials were used for the purpose of the new building.¹

Khambhat is depicted as an important *kshetra* in the Kumarika Khand, a part of the Maheshvarakhand of the *Skanda Purana*.

At present there are about 100 Shaiva temples, 45 Shakti temples, 30 Vishnu temples (including Swaminarayan temples, Pranami Mandir, Jagannath temple, Bethak of Vallabhacharyaji), 14 Ramji temples, 10 Hanuman temples, one Ganesh temple, one Saptarshi temple, and one Vishvakarma temple at Khambhat.

Kheda—Mahemadabad Taluka (15,333): N. P., 22° 45' N. 72° 41' E., Area in km. 21.62

Kheda, the district headquarters stands on a rising ground near the confluence of the Vatrak and Shedhi rivers, 12 km., from Mahemadabad the nearest railway station and about 20 kms., from Nadiad. Situated on the Bombay-Ahmadabad National Highway No. 8, it is connected by the State Transport bus services with Ahmadabad, Mahemadabad, Nadiad, Vadodara, Kapadvanj, etc.

Kheda is a very ancient town said to be in existence at the time of *Mahabharat*, when it was known as Chakravati Nagari. Its other names are Rastrakuta Nagar and Khetakpur, from which its present name is derived. The *Padama Puran* and *Dashakumar-Charita* of the seventh century also mention *Khetka*. The evidence of copper plate grants shows that under the name of Khaidra, this town was in existence as early as the fifth century A. D. A hundred years later it was a great city, the birth place of Shiladitya, the conqueror of Vallabhi.

Brahmins from different parts of India had come and settled here making it a place of great educational and religious importance. Kheda,

1. COMMISSARIAT M. S., 'A History of Gujarat', p. 64.

however, has little importance in the modern Gujarat history. It was taken by the Babis early in the 18th century, by Damaji Gaekwad in 1763 A. D., and was handed over to the British by Anandrao Gaekwad in 1803 A. D. As a strategic town with a healthy climate, the British had established a military camp about 2 kms. from Kheda. This made it a place of some importance. Though the military was later on shifted elsewhere, the area is still known as camp area. As Kheda was the gateway to Kathiawar by land routes, it was selected as the headquarters of the district and the military camp with a view to keep the turbulent chiefs and tribes of Kathiawar under control.

It was formerly a centre of trade and commerce, well-known for its weaving and textile dyeing industries. But with the shift in trade routes due to the opening of railway lines between Ahmadabad and Bombay, it is now merely an administrative town which has lost all its former importance. The town had a fortwall built in 1730 A. D., by its Governor Mohammad Khan Babi, which is now in a ruined condition. Besides the Collectorate built on a hillock, there are the offices of the District Superintendent of police, Executive Engineer, the Civil Hospital and the telephone exchange. There is a Jain temple which once had very beautiful dark wood carving now replaced by marbles. A church built about 1825 A. D., at a cost of about Rs. 80,000 is among the oldest religious places. However, the Khedia Hanuman temple is the oldest, said to have been in existence since Samvat Year 713. (A. D. 657). The other important places of religious importance are the Jumma Masjid, the Somnath Mahadev temple and the Swaminarayan temple, all of them believed to be more than a hundred years old. There is one Christian Mission and one Ashramshala.

A privately owned building known as Laxmiram Dhaneshwar Haveli built about 250 years ago has exquisite wood carving on its ceiling and pillars. One of the oldest Gujarati Weeklies, the *Kheda Vartaman*, is being published from this place since 1860 A. D. Fairs held on Ashwin Vad 14 and Bhaibij at the Khedia Hanuman temple attract about 10,000 persons from the town as well as neighbouring villages. A fair on the river bank on the Sharad Purnima attracts about one lakh visitors from nearby places including Ahmadabad.

Kheda has two Balmandirs, two Madresas, two Jain Pathshalas, four primary schools, two secondary schools, a college of education and a college of Arts and Commerce. There are five rice mills, three ice factories, two saw mills, one ginning factory and two iron factories. Besides the Kheda District Central Co-operative Bank established in 1974, and the Kheda Peoples Co-operative Bank, there is a branch of State Bank of India. Kheda has post, telegraph and telephone facilities. It has

a rest house and fire fighting service. The town has water works and electricity.

Lasundra—Kapadvanj Taluka (P. 5,660); V. P., Area in acres 7,273

Lasundra is situated on the river Luni, about 17 km., south-east of Kapadvanj with which it is connected by bus services. It is known for its hot and cold springs said to have medicinal properties curing skin diseases. A legend attributes their origin to Shri Rama, the place being called Rama Kshetra. There is an old step-well and a Swaminarayan temple. It has a pre-primary school, a primary school, a secondary school, a primary health centre and a maternity home. Besides there is post, telegraph and telephone facilities. The Mahashivratri fair held in February at the Somnath Mahadev temple near the spring is attended by about 4,000 persons. Lasundra has its water works, a milk producers' society, a service society, a library, a Roman Catholic Mission and a branch of Central Bank of India.

Limbasi—Matar Taluka (P. 4,547); V. P., Area in acres 5,305

Limbasi is about 12 km., from Tarapur, the railway station on the Anand-Khambhat broad gauge railway line. It is also served by the State Transport bus services connecting it with Ahmadabad, Khambhat, Petlad, etc. The name Limbasi is said to have been derived from goddess Limboji whose shrine is still in the village. The village was founded during the 16th century.

Limbasi has seven rice-mills including one run by a co-operative society. It has a sub-market yard. The village is mainly populated by agriculturists. Besides the Limboji Mata temple, there are temples of Khodiyar Mata, Nilkantha Mahadev, Baliya-Dev and Shri Swaminarayan with exquisite wood-carving. Limbasi is equipped with a primary school, a secondary school, a teachers training school and a primary health centre of the taluka. It is progressive in education. It has a post and telegraph office. Limbasi also has a co-operative society—one of the best in the district. Limbasi also boasts of the first high school in the taluka. It has branches of (1) Central Bank of India, (2) District Central Co-operative Bank and (3) Nagarik Sahakari Bank. The village has a public telephone call office and an electric sub-station.

Mahisa—Nadiad Taluka (P. 4,556), V. P., Area in acres 6,408

Mahisa is about 8 km., from Kathlal station on the Nadiad-Kapadvanj railway line and connected by the State Transport buses with Nadiad, Dakor, Kapadvanj, Anand and Ahmadabad. Believed to have been founded by a

Bania named Mahijisha in about V. S. 1300, it has two tanks, viz., the Marmasagar, a very big tank with large flights of steps in which lotuses grow in large numbers, and another called Ankleshwar Tank. The religious places worth mentioning include the 700 years old temple of Utkantheswar Mahadev, Bhimnath Mahadev, Marmeshwar Mahadev, Kalka Mata, Narsinhji, Swaminarayan and Rokadnath Hanuman, besides an old mosque and a church.

A chief attraction of the village is the beautiful idols of Brahma and other gods in the area called Brahmanvas. The idol of Brahma, with two hands is unique as most of the idols found in our country show Brahma with four hands. According to Dr. Gaudani the idols at Mahisa appear to belong to the tenth century A. D.¹ The temple of Utkantheswar Mahadev on the outskirts of the village acquires importance due to the idol of Nandi with stone inscriptions on three sides. Such idols of Nandi with stone inscriptions are rarely found in India.² The temple of Kalika Mata in the midst of the village is also unique in the sense that the Goddess Kalika is shown with three faces (Tri-Mukh). Besides these ancient idols, there are many other idols in the courtyard of the Ramji temple, belonging to the Solanki period. Dr. Gaudani therefore surmises that the village Mahisa must have been founded before the tenth century A. D.³

The village has two pre-primary schools, a primary school, a secondary school, a public library, a public dispensary and a post and telegraph office. Besides, there is a milk producers' co-operative society and a service co-operative society.

Mahudha—Nadiad Taluka (P. 12,723); N. P., Area in acres 3,413

Mahudha is a station on the Nadiad-Kapadvanj narrow gauge railway line, and is also served by the State Transport bus services. Said to have been built by king Mandhata about 2,000 years ago, it was the headquarters of a *paragana* in 1700 A. D., and was transferred by the Marathas to the English in 1802. A. D. In 1860 A. D., the *paragana* had 104 villages, with a Munsiff's court. Later on, it gave some of the earliest journals to Gujarat like *Swadesh Bandhu* and *Khambhat Gazetteer* established in 1885. The first Gujarati school opened here in 1828 A. D., while the first English school started in 1868 A. D. Mahudha had its first girls' school as early as 1868.⁴ The handloom cloth of Mahudha, especially the varieties known as Sushi and Chokhani, were once famous all over Gujarat. This industry flourished

1. GAUDANI HARILAL R. (DR.), Article in the *Lokmat* (weekly) dated 13th April, 1974.

2. *Ibid.*

3. *Ibid.*

4. *Charotar Sarvasangrah*, (1954), Part I, pp. 980-981.

till about 1935 A. D., leaving its trace in a small handloom weaving industry now in existence. Its other handicraft products are cart and cartwheels and wooden agricultural implements. It has six concerns engaged in tobacco curring and two in *bidi* making. The Jahera Pir Urs, held on Safar 10 attracts about 10,000 persons, and the fair on Janmashtami about 3,000 persons. Mahudha has a pre-primary school, three primary schools, one Urdu school, a secondary school, an arts and commerce college, primary health centre a newly constructed State Transport Depot and post, telegraph and telephone facilities. Among places of religious importance may be included the ancient temples of Vishwanath Mahadev and Ranchhodji, a Jain temple, the Juma Masjid and a Roman Catholic Church. Ruins of old temples are found near the lake.

Mankava—Mahemdabad Taluka (P. 4,932), Area in acres 2,613

Mankava, situated on the river Vatrak, is surrounded by it on three sides. It is about 9 km., from Mahemdabad, the taluka headquarters and the nearest railway station. The State Transport buses ply during fair season. The village is called Mankava or Mankva because there are many wells (*kuva*) around the village. It is said that the village is about 700 years old. The coins of the Muslim period were found from here. There is a hill in the midst of the village encircled by a fort-wall built of large bricks. Its entrance door is in ruined condition. There was a checkpost of Peshwa at Mankava. The original site of the village was a little away from the present one. The changing course of the river Vatrak is believed to have been responsible for this. Some houses of Vaniavad in the village have nice wood-carving and paintings of Salati style. In olden days the Mohaniya (*sari*) of Mankava village was popular. At present there is one hand-weaving unit in the village.

At a distance of about 2 km., from the village there is a hill called "Kotada" on the bank of the river Vatrak with natural surroundings. On top of the hill, there is a shrine of Kalika Mata. The place is a popular picnic spot. Ruins found from here and from village Modaj, Rinchhol, Aklacha and Kuna, indicate that a big town was situated here in old days. At Modaj there is an ancient step-well, now in ruined condition, belonging to the 16th century. Besides, there is a *dargah* of Modaja Pir.

The village has temples of Verai Mata, Becharaji Mata, Jogani Mata, Shri Ram, Nilkanth Mahadev, Bhathi Khatri, etc. The village has a Balwadi, a primary school, a secondary school, a reading room, a service co-operative society, a milk producers' society and a Vyayam Shala. The village has post and telephone facilities.

Matar—Matar Taluka (P. 8,797); V. P. 22° 42' N. 72° 40' E., Area in acres 3,870

Matar is the taluka headquarters about 5 km., away from Kheda, with the river Vatrak flowing nearby. The State Transport bus services connect it with Ahmadabad, Nadiad, Mahemadabad, Khambhat, etc. It is said that Matar was originally known as "Matbar" (a wealthy or prosperous village).

Matar had several co-operative societies in the past manufacturing iron agricultural implements. These are now closed. At present there are three rice-mills, five flour-mills, a card-board factory and a saw mill. There is also a high school and a girls school besides a primary school. Matar has the well-known Jain temple of Sachadev dedicated to Sumatinath, the fifth Tirthanker, whose idol found at Sinhuji (Mahemadabad Taluka) and installed in 1797 A. D., is associated with a number of miracles. The temple was constructed at a cost of Rs. 4 lakhs. It is visited every year by Jain devotees from all parts of India, for whom there is a large *dharmashala*. Festivals are held at the shrine on Chaitra Sud 15 and Kartik Sud 2 and 15. On the river bank, there is an ancient Shiv temple known as Latkeshwar Mahadev temple, visited by many. There is a public dispensary, a branch veterinary dispensary run by the District Panchayat, a public library and post, telegraph and telephone facilities. It is equipped with electricity also. Being the taluka headquarters, all taluka level offices are situated here. It has a telephone exchange. There are three branches of (i) State Bank of India, (ii) Kheda District Central Co-operative Bank, and (iii) Urban Co-operative Bank. A nearby hill popularly known as *Balangi-no-Tekro* has a legendary importance.

Mahemadabad—Mahemadabad Taluka (P. 17,592); N. P., 22° 49' N. 72° 45' E., Area in sq. km., 13.15

Mahemadabad is a taluka headquarters, situated on the river Vatrak. A station on the Bombay-Ahmadabad main line of the Western Railway Mahemadabad is about 28 km., south of Ahmadabad and 10 km., north of Kheda, the district headquarters. The State Transport buses connect it with Kheda, Mahudha and Kathlal. It had once the honour of being the capital of Gujarat, in the time of Mahmud Begada, who founded it, fortified it and built palaces. According to local information Mahemadabad was founded in the year 1465 A. D. An inscription to this effect is found near the Taluka office in the town. Mahmud, after whom it takes its name was the most renowned Sultan of Gujarat during whose long rule of 54 years the splendour of Gujarat greatly increased. His conquests reached far and wide, from Sind to Khandesh. The conquest of the two main Hindu strongholds, the impregnable forts of Junagadh and Pavagadh earned for him the title

of Begada, i. e., two forts. His prodigious physical strength and voracious eating habits have become legendary. The town was further developed by Mahmud III (1536-1554 A. D.), who built a deer park. During this period, a great annual festival was held on the Prophet's birthday, attended by all learned men of the kingdom. The state buildings existed till the close of the 16th century, as noted by *Ain-i-Akbari* in 1590 A. D., though in 1638 A. D., it still had the handsome castle in the west. It lost its grandeur thereafter and was reduced to the position of an ordinary village towards the end of the 17th century.

The Bhamario Kuvo, a big step-well with architecture all its own, is at a distance of two furlongs from the railway station. Built by Mahmud Begada as a hot weather resort, it is 74 feet long and 24 feet broad, and has eight underground chambers approached by four winding flights of stairs reaching upto the water-level. Above the ground it had four stone trellis work windows, and two arches, from which was hung the king's swing. Of the Chanda Suraj Mahel constructed by Mahmud Begada in memory of his wives on the bank of the river Vatrak, only some traces now remain. The most beautiful of the remains at Mahemadabad are the *Roza-Rozi* at the village *Sojali*, 3 km., east of the town on the river bank. The monument, containing the tombs of Mubarak Syed, a minister of Mahmud Begada and his son Miran is only 94 feet square and 60 feet high, with a dome, 52 pillars and a marble floor. Though small, it has a rare simplicity, a solidity and balance of parts, and graceful details. Double verandahs and a most beautiful screen of pierced stone work "give the seclusion and repose indispensable to a mausoleum". There are three religious and moral inscriptions, without any reference to the builder or date. Nearby are the tombs of the architect of the monument and of two relatives of the minister. The Bhamario Kuvo and the *Roza-Rozi* are protected monuments. There is an ancient step-well popularly known as *Bhutiya Vav* in the town built before the time of Mahmud Begada, which has fallen into disuse.

Oil, rice and saw mills and manufacture of brass-ware are the main industries of the town, which is equipped with electricity, water works and telephone exchange. There is a private industrial estate having factories manufacturing pipes, tiles, plywood, electric motor, etc. The Vasant-Rajab Sevadal Academy on the bank of the river is an important institution.

The Mahemadabad Nagar Panchayat is among the oldest, established as early as 1863 A. D. It runs a hospital since 1956-57. Among important places of religious importance may be mentioned the Gangnath Mahadev temple, the Bhimnath Mahadev temple, the Vajjnath Mahadev temple for the Hindus, a Jain temple still under construction, the Jumma Masjid for the Muslims and

two churches run by the Christian Missionaries one of which runs a montly, *Jeevan Prakash*.

Mahemadabad was a famous *ghee* producing centre in the past. During the pre-war days it exported *ghee* valued at Rs. 2 lakhs annually to Bharuch, Surat and Vadodara.¹ It was also well-known for hand weaving, Kinkhab, valvet, silver thread works, etc.²

There are two primary schools, three secondary schools, three public libraries, and branches of (i) State Bank of India (ii) Dena Bank, (iii) Kheda District Central Co-operative Bank and (iv) Urban Co-operative Bank. The town has post, telegraph and telephone facilities. There is a cinema house and a fire fighting service.

Nadiad—Nadiad Taluka (P. 108,269); Mu., 22° 42' N. 72° 52' E., Area in sq. km., 28,58

Nadiad is the largest town in the Kheda district, and a taluka and sub-divisional headquarters. It is a junction station on the Bombay-Ahmadabad broad gauge line of the Western Railway from where narrow gauge railway lines run to Kapadvanj and Bhadran. Situated on the National Highway No. 8, it is well connected by the State Transport bus services with all important towns in the district and with Ahmadabad, Vadodara and Godhra.

Nandgam is said to have been its ancient name. An old town, noted in the early 17th century for its indigo and cotton manufacture, it was in the eighteenth century one of the prettiest towns of Gujarat, with a fortwall and nine strongly built gates. In 1775 A. D., Raghunathrao Peshwa levied a heavy fine on it as it sided with Fatesinh Gaekwad. The Gaekwad handed it over to the British in 1803 A. D. It was one of the largest and thriving towns in Gujarat in the 19th century.

Mr. James Forbes in his '*Oriental Memoirs*' describes the town of Nadiad in the following words³:

"The city is one of the prettiest in Gujarat nearly three miles in circumference, fortified in the eastern manner with a slight wall flanked by round towers at irregular distances. It has nine strong

1. TRIVEDI A. B., *Post-war Gujarat*, (1949), p. 76.

2. MALEK JALALUDIN A., Articles on *Mahemadabad* in a Gujarati book-let *Nagar Mahemadabad* published by R. O. DESAI, (1973), p. 13.

3. JAMES FORBES, '*Oriental Memoirs*', (1834), Vol. I, p. 375, Vol. II, p. 288.

gates and a dry ditch round the walls. In the 17th century, it was a place of good trade, frequented by the English and Dutch merchants, and now contains about 12000 families, employed in fabricating the finest Baftas and other cotton manufactures. They also cut and polish the spirng stones from Copperwange (Kapadvanj) in a beautiful manner."

"If I were to point out the most beautiful part of India I ever saw, I should fix upon the province of Gujarat. If I were to decide upon the most delighful part of that province, I should without hesita- tion prefer to Purgannas of Vadodara and Nadiad. The crops in the other districts may be equal in variety and abundance, but the number of trees which adorn the roads, the richness of the mango topes round the villages, the size and verdure of the tamarind trees, clothes the country with uncommon beauty, such indeed as I never saw to so great an extent in any other part of the globe."

There is a step-well said to have been built by Minal devi, the mother of Siddharaj Jaisinh of Patan. The Mughal Kot a walled enclosure now housing the Government High School, the *alma mater* of Sardar Vallabhbhai Patell is believed to have housed Government offices and courts during the Mughal period. The locality known as Malhar Para commemorates Malharrao Gaekwad.

Most of the town walls and the gates have now disappeared, but the nine *bhagols* are still known by the old names. Around the town are nine tanks which have lost much of their utility since the execution of the water supply scheme.

Nadiad was in the fore-front during the struggle for Independence. It is reported that Tatyia Tope had visited Nadiad and had stayed here in the house of one Shri Viharidas Desai. In 1860 A. D., Nadiad had protested against the levy of income tax. Nadiad was the headquarters of Mahatma Gandhiji at the time of the Kheda Satyagraha, during 1917-18 A. D. Ably assisted by Sardar Vallabhbhai Patel, Gandhiji led the movement against the oppressive levy of land revenue by the British Government inspite of failure of crops. Being the first struggle of the cultivators on the basis of non payment of land revenue, it became an important landmark in the struggle for Independence. Nadiad staged revolt against the Rowlatt Act. The railway fish plates were dismantled during this period at Nadiad to stop the army proceeding to Ahmadabad. During the 1921 movement, the Nadiad Municipality severed its connection with Government and handed over management

1. Sardar Vallabhbhai Patel, was born at Nadiad on 31st October, 1875.

of the primary schools to a local patriotic body. During movements of 1930 and 1942 people of Nadiad defied the authority and played a prominent role. People of Nadiad thus took a leading part in all the political movements started during the struggle.

Nadiad is an important industrial centre. During the last century its exports included yarn, snuff and dyed cloth. A spinning and weaving factory worked by steam was opened as early as 1876 A. D., but did not thrive. The New Shorrock Mills established in 1913 produces excellent cotton textiles which are exported to foreign countries. There are several establishments manufacturing iron safes, furniture, brass and copper vessels and iron articles. Manufacture of gold and silver ornaments and wares is another important craft. There are several *bidi* and soap factories also. Large factories for manufacture of radio, cable wires and other electric goods, ready made clothes, pickles, etc., are established at a distance of about 2 km. from here. Nadiad is thus a centre of considerable trade and commerce. Nadiad has branches of (i) Bank of India, (ii) Bank of Baroda, (iii) Central Bank of India, (iv) Dena Bank, (v) Punjab National Bank, (vi) State Bank of India, (vii) State Bank of Saurashtra, (viii) United Commercial Bank, (ix) Union Bank, (x) Kheda District Central Co-operative Bank, (xi) Nadiad Merchants Co-operative Bank, and (xii) Natpur Co-operative Bank. Nadiad is famous for its contribution to Gujarati literature. During the late 19th and early 20th centuries a group of literators made it the "Sakshar Bhumi" or "the land of learned". Chief among them were Govardhanram, the author of the great novel *Sarasvatichandra*, whose house is preserved as his memorial, Manilal Nabhubhai a great Vedantist, scholar and essayist, poet Balashanker and author-statesmen Mansukhram Tripathi.

Nadiad is known for the Hari-Om-Ashram of Shri Mota Maharaj. Situated in ideal surrounding, about 5 km., from the town, the Ashram is engaged in activities aimed at bringing up the educational, cultural and spiritual welfare of the people.

Most of the district offices (except those located at Kheda), the District Court and the office of the District Panchayat are in Nadiad. There are four good rest houses. The town is equipped with electricity, piped water supply fed by wells on the river Shedhi about 3 km. away, underground drainage, a town hall and five municipal gardens. It has post, telegraph and telephone facilities and fire fighting station. There are seven cinema houses. The town has 12 Balmandirs, 54 primary schools, 11 high schools and one technical school. Besides there are arts, science, law, commerce and Ayurvedic colleges, a Sanskrit Pathashala and an institute of chemical engineering conducting degree and diploma courses in chemical engineering. The Vithal Kanya Vidyalaya has for long been an educational institution for women run on

Gandhian ideals. There are two public libraries. The Hindu Anathashram established in 1908, is an old and reputed social institution. Nadiad boasts of a Vyayamshala (gymnasium) for girls, the only one of its type in the Gujarat State. Besides, the town has branches of the Rotary Club, the Lions Club, the Junior Chamber, the Youth Hostel and the Balkan-ji-Bari of India. The well known Mission Hospital, the Municipal Hospital and the Maha-Gujarat Hospital are some of the important medical institutions. The Maha-Gujarat Hospital runs a nurses training school.

Among the important places of public worship is the Santram temple, built on the *Samadhi* of Santram, a saint who was the contemporary of Sahajanand Swami. It carries out religious, philanthropic and social welfare activities and maintains *dharmashalas*. In memory of the occasion when Gandhiji delivered a lecture from the upper storey of the temple during the Salt Satyagraha movement of 1930, the open square nearby is known as "Azad Chowk". A large fair held at Santram temple on Magh Sud 15, as the anniversary of the *Samadhi* of the saint, is attended by more than 25,000 persons and attracts large crowds from the countryside. A large number of devotees from all parts of the district come to the temple for *darshan*. Besides, there are the Swaminarayan temple, the Narayandev temple, the Laxminarayan temple, the Mota Kamnath temple, the Bhairav-nath temple, the Kalka Mata temple, the Mai Mandir, the Goswami temple, the Vaishnav Haveli and several Shiv temples. The town has three Jain temples. There are several mosques, important among them being those located in the Saloon Bazar, Vohra Vad, Kakarkhar Bari, etc. The Christian churches include the Methodist Mission church, the Roman Catholic church, the Episcopal church, etc.

Nagra—Khambhat Taluka (P. 4,581); V. P., Area in acres 3,550

Nagra is about 6 km., from Khambhat and connected with it by the State Transport bus service. It is said to have once been an ancient port and perhaps the site of the ancient town of Khambhat. It is said to have been referred to as Minnagar (from Mahi nagar) in the old Greek accounts of India, and mentioned by Ptolemy and the author of the Periplus. A local legend recorded in Jain works of Gujarat, states that Vikramaditya of Ujjain was born here at the place of his mother's father, a local ruler and that his ancestors belonged to the Gardha Bhilla dynasty that ruled at Anandpur or Anand. The old mound of Nagra is a site of archaeological interest. There are ancient large size idols of Brahmaji, Suryanarayan (the Sun God) and Buddha. The sculpture of the first two idols which are in white marble shows skill and artistic beauty of a very high order. Drilling of agate beads is an important handicraft of the place. The fair held on the last day of Shravan every year at the *kund* of Koteswar is attended by

about 3,000 persons. Nagra has electricity, a primary school, a public dispensary and a post office.

The Department of Archaeology and Ancient History of the M. S. University of Vadodara carried out excavations at Nagra between 1963-65. Details about the results of the excavations are given as Annexure at the end of the chapter.

Napa—Borsad Taluka (Talpad P. 5,325): Area in acres 2,136. (Vanto P. 3,635): Area in acres 1,764

Napa is 6 km., from Borsad the taluka headquarters. It is connected with Borsad, Nadiad and Anand with the State Transport bus services. On the outskirts of the village there is a large ancient tank constructed in the year 1212 A. D. by Tajkhan Nepani, the Suba of Mohmad Begada. Built of pucca bricks and lime, its cost of construction was Rs. 5 lakhs. There is a causeway leading to the middle of the tank from where there is a flight of steps through which one can reach down to the water level. The tank, though still in use, is in need of repairs. Napa has another tank known as Malav Talav and an ancient step-well.

It is believed that Napa was established in the 5th century A. D., by a king named Nrupsinh. It was then known as Nrupatnagar.

Napa has two primary schools, a secondary school, a hospital, a maternity home and a post office. It is also equipped with electricity.

Napad—Anand Taluka (Talpad P. 14,566): Area in acres 2,121. (Vanto P. 7,610): Area in acres 2,089. V. P.

Napad is 10 km., from Anand with which it is connected by the State Transport bus services. In the times of the Peshwas, and subsequently till 1869 A. D., it was the headquarters of the taluka, known as Napad taluka. In the 15th century of the Vikram Samvat when the Molesalam Garasias could not settle the State dues, half of the village area, now called Napad Talpad, was taken over by the State; the other half known as Napad Vanto remained with the Molesalam Garasias. An old office building with fortwalls surrounding it are the remains of olden days. There are a good pond and a step-well built in medieval times by a Pathan Governor of Petlad. By the side of the pond is an Idgah, beyond which traces of old buildings are found. Tobacco is its main produce, and tobacco processing, bidi making and tanning and currying of leather are its industries. Both Napad Talpad and Vanto have each primary schools for boys and girls, a high school and post, telegraph, telephone and electricity facilities. There is also a temple of the Swaminarayana sect, a Shiv temple and a mosque.

Nar—Petlad Taluka (P. 7,927): V. P., Area in acres 4,105

Nar is a station on the Anand-Khambhat-broad gauge railway line and on the Petlad-Sojitra bus route. It is believed to be a historical place, called Shri Nar or Narangpur, well-known in the 13th century. A memorial stone dated Samvat year 1765 is found near the village tank. Nar was a *paragana* of about 48 villages in the 18th century. There is an ancient temple of Bhurangraj Mahadev with eight old idols besides a Pranami temple. There are two tobacco processing units, a rice and pulse mill and a ginning press. Nar has some trade of buffaloes with Bombay and Surat. The village has electricity and piped water supply, two primary schools, two secondary schools, a public dispensary and a maternity home. There are two public libraries, a gymnasium and a Mahila Mandal which conducts sewing classes. Nar has branches of Union Bank of India and the Kheda District Central Co-operative Bank. It has post, telegraph and telephone facilities.

Navagam—Matar Taluka (P. 3,987): Area in acres 1,603

Navagam is about 23 km., north-west of the taluka headquarters and about 18 km., west of the district headquarters. The nearest railway station is Mahamadabad. It is believed to have been founded about 1300 A. D. The village acquired importance due to the project of the Oil and Natural Gas Commission established in the year 1963. Navagam is an important paddy producing centre. It has a paddy research centre. There are four rice mills and a factory manufacturing lace. Navagam has a Balmandir, a primary school, a high school, a Harijan Chhatralaya, a public library, a dispensary, a maternity home and a veterinary dispensary run by the Panchayat. Several people from this village had participated in the freedom movement. Gandhiji had stayed here on his famous Dandi March and during the Kheda Satyagraha when he was accompanied by Sardar Vallabhbhai Patel. The village Panchayat of Navagam was considered the best panchayat in the State during the year 1973. The village has electricity, water works, post, telegraph and telephone facilities, a multi-purpose co-operative society and a milk producer's co-operative society.

Ode—Anand Taluka (P. 14,620): N. P., Area in acres 8,148

Ode is 5 km., from the Ode Road station on the Anand-Godhra broad gauge railway line, and connected by the State Transport bus services with

1. *Charotar Sarvasangrah*, Vol. II, (1954), p. 327.

Umreth, Nadiad, etc. Ode is believed to be a very ancient place. It is said that during the early past there was a well-known Sanskrit Pathshala here. The village experienced severe difficulty of drinking water in the past which inspired some one to coin a proverb :

“ઓડ ઉમરેઠના ઉંડા કૂવા

દોકરી દે નેના બાપ મૂઆ”

There is a temple of saint Jankidasji, about whose supernatural powers various legends are current. The village is equipped with electricity, water work and post, telegraph and telephone facilities. There are two primary schools and a secondary school.

Petlad—Petlad Taluka (P. 39,535); Mu., 22° 29' N. 72° 48' E., Area in sq. km., 2.28

Petlad is the taluka and sub-divisional headquarters, and a junction station on the Anand-Khambhat broad gauge and the Nadiad-Bhadran narrow gauge railway lines, 22 km., from Anand. The State Transport bus services connect it with Khambhat, Anand, Sojitra, Nadiad, etc. The town is said to date back to the 5th century, when it was a trade centre known as *Petalapadra* on the highway from Khambhat to central and northern India. According to a legend, it was also known as *Prahladpur* after Prahlad, the great devotee and son of demon Hiranyakashyapa who is said to have lived here. It was considered to be the “Manchester of Baroda State” owing to its being the centre of textile industry. The dyeing and printing work of Petlad was famous throughout India. Even at present it is an important industrial town having three textile mills, a dye and paint works, three pulse mills, one rice mill, several brass and iron factories, 12 powerloom factories, a match-box factory, one co-operative sugar factory, two tiles factories, five cement pipe factories, three heavy engineering works, two dye-casting factories, one acid factory, two ginning works and a chemical factory. Tobacco is an important produce and item of trade. The town has seven tobacco processing centre.

Petlad has 12 primary schools, 6 secondary schools, colleges in arts, science, commerce and education, 3 public libraries, a Sanskrit Vidyalyaya, five hospitals and two sanatoria. Petlad has 3 cinema houses. The Petlad Boarding started by late Motibhai Amin in the year 1906 became a centre of patriotic movement during the first three decades of the present century.¹

1. *Charotar Sarvasangrah*, Part, I, (1954), p. 890.

There is a step-well known as *Shikotari Mata Vav* with an inscription dated Samvat 1755 (1609 A. D.)¹ The adjoining lake was formerly known as Pandav Talav which indicates the antiquity of this place.²

The ancient shrine of Ramnath Mahadev with a large *kund* having steps on all sides and the temples dedicated to the Vajinath Mahadev, the Somnath Mahadev, the Ranchhodji, the Laxminarayan, newly constructed Sainath temple and the Kalika Mata are important temples. There are two Jain temples, five mosques, two churches and the famous *dargah* of Arjansha Pir, a descendent of the Rajput ruling dynasty converted to Islam, who died in Hijri 633. The municipality has its Town Hall and a public garden.

Petlad has branches of (i) State Bank of India, (ii) Central Bank of India, (iii) Bank of Baroda (two branches) (iv) Union Bank of India, (v) Dena Bank and (vi) Kheda District Central Co-operative Bank. Besides it has the Petlad Urban Co-operative Bank.

Several fairs are held at various religious places in the town. These include the fairs held at (i) Kalika Mata temple on Ashadh Sud 11, (ii) Ramnath Mahadev temple on Bhadrapad Sud 11, (iii) Chamunda Mata temple on Aso Sud 8, (iv) Rokadia Hanuman temple on Aso Vad 14, (v) Arjansha Pir Dargah on Rajab 17 and (vi) Gebansha Pir Dargah on Rajab 18.

Pij—Nadaid Taluka (P. 6,519); V. P., Area in acres 4,242

Pij is a railway station on the Nadiad-Bhadran narrow gauge section of the Western Railway, 5 km. from Nadiad and connected with it by the

1. The inscription is located in a niche and consists of a short Persian record at the top, followed by a longer one in Sanskrit verse and ending with several lines in Gujarati prose. According to the Persian text, the well was built outside the town by one Ramji for a charitable purpose and the chronogram for the date of its construction gives the Hijri year 1110, or A.D. 1698-9. The Sanskrit text, which mentions the town under its ancient name of Petapadra, describes it as containing many houses of Nagar Brahmins who were much given to charity and states that Ramji, the son of Bhimji, had this step-well constructed for the benefit of the citizens and that it was completed on Friday the day of *Dhanteras* (i.e., the 13th of the dark-half) of the month of Ashvin in the year 1755 of the Vikram era (October 10, 1699).

The epigraph, proceeds to give some important details in Gujarati to the effect that, during the glorious rule of the Emperor Aurangzeb, and in the pargana that, which was held as jagir by Prince Azam Tara, and with the latter's consent, Ramji Thakor, the son of Bhimji, belonging to the Vadnagara caste and its auspicious Abhyantara section, had this step-well constructed to provide drinking water for all men, with the approval of Mustafa Quli Beg, the fauzdar and his subordinates, who are all mentioned by name. Then follows a list of various relatives of Ramji Thakor, who built the well, and the names of the chief supervisor, the master-mason in charge of the work, the persons who wrote the epigraph and the salat or stone-cutter who inscribed it.

2. *Charotar Sarvasangrah*, Part II, (1954) p. 225.

Source : COMMISSARIAT M. S., *A History of Gujarat*, (1957), p. 192-93.

State Transport bus services. An old village, it has long been famous for the manufacture of knives, scissors, etc. At present there are about 15 shops manufacturing these articles. The Kapileshwar Mahadev with a large pond is visited by about 10,000 persons at the time of the fair held on every Monday of Shravan. The temple belongs to the chalukyan style and has several idols belonging to ancient period. The Swaminarayan temple of Pij is visited by many. The village has electricity, two primary schools, a multipurpose high school, a Panchayat dispensary, water works, and post, telegraph and telephone facilities. There is a Vyayamshala, run by a local youth club and a Mahila Mandal. Pij has branches of Central Bank of India and the People's Co-operative Bank.

Pij has been selected as a centre for relaying developmental television programme under the Satellite Instructional Television Experiment of the Indian Space Application Centre, beginning from June 1975.

Piplav—Petlad Taluka (P. 3,243); V. P., Area in acres 1,472

Piplav is 6 km., from Petlad and connected by the State Transport bus services with Petlad, Nadiad, etc. Believed to have been settled in the 12th century by Pipa Rabari, it has the famous temple of Ashapuri Mata. The place was first consecrated in the 16th century, but the temple was built later by the Peshwa Government. Ashapuri is the family deity of many people all over Gujarat, who come here on pilgrimage, and for the tonsorial ceremony of their children. The temple has the idols of Asha and Puri, two sisters who fulfilled the desire of their devotees. There are old idols of Uma-Mahesh and Chaturbhuj and two *Shiv Lings*. Besides, there is a temple of the Swaminarayan. There are a tank, an old step-well (*Sat-Kothani Vav*) with waterworks, an ancient *haveli* and five *dharmashalas*. The *Sat-Kothani Vav* is popularly known as *Vanzarani Vav*. It is believed to have been so named as the Vanazaras camped here during their journey through Nadiad-Khambhat and the Mahemadabad-Khambhat roads which originally passed by this village. The village has electricity, two primary schools, including a girls school, a secondary school, a public library, a public dispensary, a maternity home, a family planning centre, post, telegraph and telephone facilities and a branch of Bank of Baroda. A large fair is held near the Ashapuri temple on Bhadrapad Sud 8 and 9 separately for men and women.

Pithai—Kapadvanj Taluka (P. 4,204); V. P., Area in acres 3,223

Pithai is 6 km., from Kapadvanj with which it is connected by the State Transport bus services. The nearest railway station is Kathlal, at a distance of about 5 km. The village has an ancient temple of Pitheshwari

Mata, with four idols of goddess Mahakali or Mahishasur Mardini which belong to not later than the tenth century.¹ Besides, there are 22 other ancient idols including the Sapta Matrukas and Nrisinha.

The original temple of the Pitheshwari Mata was believed to have been built in the sixth century. This temple had such a great height that the local people used to say:

“ સવારે પડછાયો સરવણી
ને સંજે પૂજે કઠલાલ
ભર બપોરે પીઠાઈમાં
મા, તને ઝાઝા કરું જુહાર ”

The original temple was destroyed by Alla-ud-din Khilji. It was rebuilt about 200 years ago. There is a Shiv temple, opposite to the Pitheshwari Mata. Inside the temple, there are two beautiful idols of Uma and Mahesh in sitting and standing postures similar to the idols found in the Elephanta and Ellora caves.² A large fair is held at the temple on the Bhadrapad Sud 8 and 9.

It is believed that the village was invaded by the Mevasis in Samvat year 1780 as a result of which it remained deserted for a long time. It was reinhabited in the Samvat year 1807.³

Pithai has a co-operative milk society which is the biggest in Kapadvanj taluka, four primary schools, a high school, a small library and a post office.

Rampura—Kapadvanj Taluka (P. 62); Area in acres 888

Rampura, also known as Sundervadi, is a tiny village of the Kapadvanj taluka. On its border and near the confluence of the rivers Mazam and Vatrak is located the site of the historical medieval fort believed to have been constructed by Sultan Mahmud Begada of Gujarat over 500 years ago. According to another opinion, the fort is believed to have been constructed by Samantsinh Bihola during the rule of Sultan Ahmedshah in the 15th century.⁴ The place surrounded as it is by wild growth of Kotar lands on the river banks is difficult to approach. The remains at the site consist of a huge broken fort that leads to what was once probably a palace. Inside the palace there is a 80 feet deep well which is now totally dry. A similar structure stands close to it, half buried. The well has dark tunnels in the

1. GAUDANI HARILAL R. (DR.). Article in the *Lokmat* (weekly), dated 23rd June, 1974

2. *Ibid.*

3. *Charotar Sarvasangrah*, Part I, (1954), p. 79.

4. FORBES, *Rasmala*, Part I, (1922), p. 445.

interior portion which probably served as escape routes. The remains indicate that adjacent to the wells there were two square shaped swimming pools. To allow the flow of water to and from the pools, the walls had pipe-like passages. Some silver and copper coins bearing the inscription of "Akbar" were found from this site.

Ras—Borsad Taluka (P. 5,607); V. P., Area in acres 3,166

Ras is a station on the Vasad-Kathana broad gauge railway line and connected by the State Transport bus services with Borsad, Khambhat and Kathana. It has become well-known all over the region because of the prominent part it took in the no-tax campaign under the leadership of Darbar Gopaldas (who originally belonged to this place) under the guidance of Mahatma Gandhiji and Sardar Vallabhbhai Patel. It has a spacious maternity and general hospital built at a cost of Rs. 1.50 lakhs from the funds of Kasturba Rashtriya Smarak Trust in appreciation of the sacrifices made by this village in the Satyagraha movement. The Vallabh Vad (Banyan tree) commemorates the arrest of Sardar Patel at the site while he was addressing a public meeting. There are two tobacco processing centres and a pulse mill. Ras has a pre-primary school, two primary schools, a secondary school, a public library and post, telegraph and telephone facilities. There is a branch of Bank of Baroda. The electric sub-station of the Gujarat Electricity Board is situated here.

Ravdavat—Kapadvanj Taluka (P. 3,648); V. P., Area in acres 1,622

Situated on the river Vatrak, Ravdavat is 20 km., from Kapadvanj which is also the nearest railway station. It is connected with Ahmadabad and Kapadvanj by the State Transport bus services. Ravdavat was settled about 500 years ago by Radaji Thakor. In the 15th century, Ajmalkhan, a Suba from Delhi, sent out to recover the tributes of the principalities of this area, founded a town here on the way from Ahmadabad to Pavagadh and called it Ajmabad. The present name of Ajmavat Kot, a suburb of Ravdavat, is thus derived from Ajmabad.

To the east of Ajmavat Kot, there is an old fort with a gateway on the bank of the river Vatrak. At present the gateway and the two storeys of the fort are in existence. The fort built of bricks, mortar and stones is considered unique of its type in Gujarat. It was built by the great Viceroy Azam Khan in about 1636-38 A. D., in the reign of Shah Jahan, on the banks of the Vatrak river, in order to keep the Kolis of the region under control.¹ Near this fort there is a well. The area of about 25 km., around

1. COMMISSARIAT M. S., *A History of Gujarat*, Vol. II, (1957), p. 181.

this fort is known as Pahada.¹ The suburb of Ajmavat Kot is mainly populated by the Chaturvedi Modh Brahmins.

The names of fields in the neighbourhood point to several localities of the town, that might have formerly existed on these sites. Wooden cots and carts of Ravdavat are well-known in the country side. There is a primary school, a secondary school, a primary health centre and a post office.

Samarkha—Anand Taluka (P. 13,113); V. P., Area in acres 5,256

Samarkha is a prosperous village 4 km., from Sadanapura railway station and connected with Anand by the State Transport bus services. It is said to have been dominated in turn by Gadhavis, Rabaris and Muslims in the past. When the Muslims migrated, their lands were occupied by Patidars. One Mr. Straford of Germany had established a creamery here in 1910, for producing separate milk and casein. At the time of the First World War, Straford went back to Germany in 1914, entrusting the creamery to his colleague Mr. Cowasjee who later on shifted to Anand where the creamery grew into the well-known Polson Dairy. Samarkha has a milk producers' co-operative society, milk being one of its chief products even today. There are two primary schools, a secondary school and a child welfare centre. Samarkha has post, telegraph and telephone facilities. It is also equipped with electricity.

Sarnal—Thasra Taluka (P. 1,129); V. P., Area in acres 902.

The village Sarnal is 8 km., from Thasra, the taluka headquarters. It contains the remains believed to be of 'Chandahas Nagari' of ancient times. It is also believed that the place was a big trade centre in the 10th and 11th centuries. It was at Sarnal that Akbar, with a small force, defeated the rebellious nobleman Ebrahim at considerable personal risk and put him to flight. The fairs held on Maha Shivratri and Janmashtami are attended by about 10,000 persons. The village has a primary school.

The Galteshwar Temple

Sarnal is known for the ancient temple of the Galteshwar Mahadev, about 1½ km., away. It is situated on the confluence of the rivers Mahi and Galti, 3 km., from the Anghadi station on the Anand-Godhra broad gauge railway line. Galteshwar is an ancient Shiv temple, and also a place where Galav Muni had his Ashram in early times. The temple is a protected monument and belongs to the Chalukyan period. According to Dr. Sankalia,² the temple of Galteshwar may be regarded as specimen of

1. *Charotar Sarvasangrah*, Part-II, (1954), pp. 86-87.

2. SANKALIA H. D. (DR.), *The Archaeology of Gujarat*, (1941), p. 113.

Chalukyan (and not Chaulukyan) architecture in Gujarat. This is evident from the plan of the shrine which consists of a *garbhagraha* (shrine proper) and *mandapa*. The outer wall of the temple depicts architectural beauty belonging to the ancient period.

According to Dr. Sompura¹, the Galteshwar temple was patronised by Paramara Siyaka II, in the 10th century A. D. He maintains that the temple resembles, to some extent the temple of Ambarnatha near Kalayan in Maharashtra. The *Mandapa* or portico is about 12 ms. each way, and its roof is supported by 8 pillars of the central dome and by the smaller ones standing in the screen walls that surround it. In plan this portico (*mandapa*) follows the pattern of temples of the Chalukyan style in the Kanerese districts, with their numerous projecting angles. The inner eight columns are each 4.3 ms. in height, have double capitals and are square for the lower third part of their height, then through an octagonal and sixteen sided belt are changed into cylindrical form. They are not spaced equally apart on the floor as in most Jain and Muslim domes : those on corners are only 1.7 ms., in height and so arranged as to bring them into a line in each direction with the outer pillars on the screen wall.

"A small ante-chamber or porch is formed in front of the shrine, and the door-way of the latter is elaborately carved on the jambs, lintel and architrave, but it has been much damaged by the iconoclast. The figure sculpture on the middle of the lintel indicates it to be a Shiv temple."

There is a perennial flow of underground water round the Shiv Ling in the temple. It is believed that the water of the river Galti flows here through a perennial stream. Fairs are held here on the Janmashtami and Shivratri festival and on every Monday of the month of Shravan.

Sarsa—Anand Taluka (P. 10,804); V. P., Area in acres 5,589.

Sarsa is about 12 km., from Anand and connected with Umreth and Vasad by the State Transport bus services. It is a prosperous and progressive village, said to have been settled in V. S. 1272. The chief agricultural products are food grains and tobacco. There are 13 tobacco processing concerns, two cotton ginning factories, a primary health centre and a high school. The Karunasagar Maharaj temple built in the forties to commemorate the founder of Kaivalya Sampradaya in 1829, is a popular shrine for the neighbouring villages. It runs a Sanskrit Pathshala and a library. Besides, there are ancient temples of Vajinath Mahadev and Narayandev Mahadev. A large fair held on Janmashtami (August) is attended by over

¹ KANERJAL P. SOMPUJA (DR.), *The Structural Temples of Gujarat*. (1968). pp 100-101.

20,000 persons. Sarsa has a water works since 1928 and a Gram Panchayat since 1940. Besides a dispensary and a family planning centre run by the Panchayat, there are three to four private dispensaries. The village has three primary schools, including one girls school, two secondary schools for boys and girls, and a post and telegraph office. It has electricity and telephone facilities also. Near Sarsa, there is banyan tree known as *Fansiyo Vad* as the mutineers of 1857 were said to have been hanged here.¹

Shili—Anand Taluka (P. 6,541); V. P., Area in acres 4,858

Shili is 15 km., from Anand, the taluka headquarters. It is situated on the fringe of the ravines of the river Mahi, 8 km. from Ode Road, on the Anand-Godhra broad-gauge railway line. On the bank of the river is the well-known and ancient temple of Siddhanath Mahadev with a splendid reservoir constructed about 1824 A. D. by the widow of an officer in the Gaekwad's service, as a resting place to pilgrims to Dakor from Vadodara. Extensive ruins are found on the east of the village. The Manba Mataji fair held on Bhadrapad Sud 8 in honour of a saintly Rajput lady is attended by 5,000 persons. The village has a primary school, a family planning centre, a water works, a post office, electricity and telephone facilities.

About a kilometre from the village, there is the Chandreshwar Mahadev temple with beautiful paintings on walls and the ceiling. It is said to have been built more than a hundred years ago by Gopalrao Mairal, a shroff to Gaekwad. There is a Hira Talav in the vicinity of the temple.

Sinhuj—Mahemadabad Taluka (P. 7,120); V. P., Area in acres 4,196

Sinhuj or Sinhaj is 12 km., from Mahemadabad, the taluka headquarters, with which it is connected by the State Transport bus services. It is believed that Sinhuj was once a prosperous town and that the area called "Shaher Vat" might be a main road of the town then in existence. Remains of its foundations are found in the nearby fields. Shamal Bhatt, the well-known poet of Gujarat, lived at Sinhuj in the temple of Vireshwar Mahadev, where he wrote many of his well-known poems. Sinhuj was the first to have a Gram Panchayat (1936) and a Nyaya Panchayat in the district. It has a pre-primary school, a public library run by the local youth club, two primary schools, a secondary school and a post office with telephone facilities. There is a milk co-operative society which supplies milk to Anand dairies. The village has a rice mill and is equipped with electricity and piped water supply. Sinhuj is a progressive village where almost every family owns and cultivates land.

¹ *Charotar Sarvasangrah*, Part-I, (1954), p. 895.

Sojitra—Petlad Taluka (P. 12,905); N. P., Area in sq. km. 14.34

Sojitra is an ancient place of historical importance. It is a station on the Bhadran-Nadiad narrow gauge railway line, 11 km., north-west of Petlad. The State Transport buses connect it with Ahmadabad, Nadiad, Petlad, etc. In ancient times, the important highway from Khambhat to the central India passed through Sojitra which was then an important trade centre of central Gujarat. Yule identifies Sojitra with Sazantion mentioned by Ptolemy (C. 130 A. D.) According to one view it dates back to the 2nd century B. C. A stone head belonging to the 1st or 2nd century was found from a *kund* while Kshatrapa coins of Rudradaman I, and Rudrasen were reported from the vicinity of Sojitra. This proves the antiquity of the town. During the 12th century, Sojitra was the seat of the Government of the Raval Thakors. In ancient times, the town was well-known for the manufacture of indigo and textiles which were exported from Khambhat. Other important products were chariots and carts, swords, leather jars and ivory bangles. The Sojitra locks were reputed for their strength. At present, handloom weaving is the only important craft. There are three small factories manufacturing iron furniture, several *Bidi* works, and four saw mills. The *kund* is the oldest existing remain of this ancient place. At some distance from this *kund*, there is an old step-well built with granite stones. The old Jain temples constitute the other ancient remains beautifully built in stone. Sojitra has four Jain temples with rich collections of old manuscripts, and idols as old as the 11th century. Since the 14th century, it has been one of the three seats of Bhattarakas of the Digambara sect of the Jains in Gujarat. There are several Hindu temples including those of Vajinath Mahadev, Bhimnath Mahadev and the Ramnath Mahadev, besides the *haveli* dedicated to Shri Hari Krishna Maharaj of Chuda. The step-well near the *haveli* has a stone inscription dated *Samvat* 1796. There are four mosques. Sojitra is an important centre of the enterprising Patidar community of Charotar. The shrine of Kojai Mata or Kshem-Kalyani Mata with two idols which date back to V. S. 1622, is the site of a fair on Bhadrapad Sud 14.

Sojitra has a private hospital, two dispensaries, a veterinary dispensary, water works, two pre-primary schools four primary schools, two secondary schools and two public libraries besides a rural arts and crafts centre run by Government. There are facilities of post, telegraph and telephone. A cinema house is recently constructed. It has branches of Bank of India and Union Bank besides the Sojitra Co-operative Bank Ltd.

Sureli—Anand Taluka (P. 3,922); V. P. Area in acres 2,880

Sureli is about 6 km., from Umreth, the nearest railway station. It is believed to have been named after Buhrankhan of Shur dynasty who had originally founded this village. It is mainly inhabited by Muslims.

At a little distance from this village, there is a tomb of Sultan Pir where a fair is held every year. During the Bakri-Id festival, to prove the innocence of an accused, he is brought to this place hand-tied. It is believed that if the man is innocent his hands get untied due to supernatural powers. The village has a primary school and a post office.

Telnar—Kapadvanj Taluka (P. 2,345); G. P., Area in acres 2,815

Telnar is 15 km., north-west of Kapadvanj, which is also the nearest railway station. The place is connected with Kapadvanj by the State Transport buses which ply during fair weather. It has an ancient temple of Kedareshwar Mahadev, said to have been originally founded by the Pandavas on a beautiful spot on the bank of the river Vatrak. The *Shiv Ling* of the temple is said to be *swayambhu*. There is a perennial spring of water nearby which reaches up to the *Shiv Ling* inside the temple. A fair is held on Janmashtami, attended by about 25,000 people. Another fair is held on Maha Shivratri festival which is attended by about 30,000 people. The village has a Balmandir, a primary school, a secondary school, a post-office and a library. It is also equipped with electricity. Besides there is a grant in-aid dispensary run by the Gram Arogya Mandal. The temple is beautifully situated in natural surroundings which need to be developed as a picnic spot.

Thamna—Anand Taluka (P. 3,361); V. P., Area in acres 2,997

Thamna is situated on the river Shedhi about 5 km., from the Umreth railway station. It is said to have been a flourishing town named Stambhanak or Stambhanakpur, before the 13th century A. D. Siddha Nagarjun well-known in Jain literature, had achieved *Parad Siddhi* here on the bank of the river Shedhi and had turned mercury into gold. The village took a very active part in the struggle for Independence and did without a *mukhi* for 15 years. Tobacco is its main produce. As early as the year 1862, this village had got a primary school. Thamna has a pre-primary school, a primary school, a girls school, a nutrition centre, a high school, a post office and electricity facilities. Besides, there is a Backward Class Chhatralaya and a library. Shri Babalbhai Mehta had started a basic school on experimental basis in 1941 but it was closed during the 1942 Quit-India movement. Besides, there are temples of Harshad Mata, Sinduri Mata, Verai Mata, Vahanvati Mata, Khodiyar Mata and Ambaji Mata.

Thasra—Thasra Taluka (P. 9,851); V. P., 22° 48' N. 73° 13' E., Area in sq. km., 14.41

Thasra is a taluka headquarters and a railway station on the Anand-Godhra broad gauge railway line, 8 km., from Dakor and connected with

several towns by the State Transport bus services *via* Dakor and Sevalia. Paddy and tobacco are its main produce. There are five tobacco curing establishments, three cotton gins, three stone quarries, a soap factory and an electric bulb manufacturing unit. Thasra has a Fabrication Workshop where big iron gateways for irrigation projects are prepared. There is a Mahi Canal Workshop where heavy machinery consisting of tractors, bulldozers, etc. is repaired. It has a training centre for agriculturists. Being the taluka headquarters, all taluka level offices are located here.

There are the temples of Baliadev, Thasariadev, Vaijnath Mahadev, Swaminarayan and a newly constructed temple of Ashapuri Mata. There is an old step-well called Bhamario Kuvo.

Thasra has a pre-primary school, two primary schools, a secondary school, a public library, a public garden, a public dispensary and a maternity home. Branches of State Bank of India, the District Central Co-operative Bank and the People's Co-operative Bank are established here. It has two post offices and a telephone exchange.

Umreth—Anand Taluka (P. 24,225); Mu., 22° 42' N. 73° 07' E. Area in sq. km., 20.20

Umreth is a station on the Anand-Godhra broad gauge railway line, 22 km., from Anand, connected by a cement concrete road and State Transport bus services with Nadiad, Dakor, etc. It is a very old town, stated to be the centre of Jainism in the past, where flourished a number of saints, artists, astrologers, sculptures and men of letters. It was a walled town surrounded by a fort which is now destroyed except the entrance doors and windows. Umreth is described as the "golden wing" in *Mirat-e-Ahmedi*. Food grains, tobacco and *ghee* are the main items of its trade. There are three oil and pulse mills, three lathe works, two saw-mills, a glass-line equipment factory, a handloom factory, several co-operative societies and a regulated market yard for agricultural produce. The town is equipped with water works, underground drainage, electricity, public telephone, and has civil and criminal courts and a town hall. There are several dispensaries including a hospital and maternity home. As regards other amenities, there is the Umreth Urban Co-operative Bank and the branches of State Bank of India, Bank of Baroda and Dena Bank. As regards educational institutions there is a Ved Shala to propagate the teaching of Sanskrit, a Vaishnav Pathshala, eight primary schools, four secondary schools, a Mahila College and a public library. Regarding places of public worship, there are about 60 Hindu temples and 19 places of Muslim worship. Besides, there are Bhadrakali Vav (a seven storeyed step-well) and Minaldevi tank.

Utkantheshwar—Kapadvanj Taluka : 23° 07' N. 72° 59' E

The wellknown and ancient temple of Utkantheshwar or Untadiya Mahadev near village Vaghajipura is situated on the bank of the river Vatrak. The place is picturesquely situated and also serves as a picnic spot. It is about 6 km., from Attarsumba and 10 km., from Kapadvanj the nearest railway station with which it is connected by bus *via* Attarsumba. It is said that the sage Jabal who had his *ashram* at this place, had by his austerities, caused God Shiv to manifest himself for *darshan*. The temple is situated on a hillock. Other important shrines in the vicinity are Kamnath Mahadev, Khernath Mahadev and Kedareshwar, on the Shivanand hill. The Yogashram, founded in 1941 by a Jain Sadhu on the riverside, maintains a *gaushala*, an *atithigriha* and a library of religious and philosophical books. Besides, Jain Sadhus and Sadhvis, people of other creeds also take advantage of the *ashram*. There are several *dharmashalas* belonging to different communities and buildings built by private persons. Due to its congenial and dry climate and scenic beauty, the place has grown into a health resort. There is also a Vanprastha Ashram, where the aged and infirm are provided boarding and lodging on payment of nominal charges.

The fair held on the Mahashivratri, Magh Vad 14 is attended by about one lakh persons. Smaller congregations of 40,000 persons are held on Janmashtami and Shravan Vad Amavasya. A Kumbh Mela is organised every 12 years when a very large congregation is held here.

Uttarsanda—Nadiad Taluka (P. 8,295); V. P., Area in acres 2,539

Uttarsanda is a railway station on the Bombay-Ahmadabad broad-gauge line of the Western Railway, situated on the National Highway No. 8 on which the State Transport buses ply. It is an ancient place. Under a grant given by the British the village remained with the family of Sheth Sundarji Sodagar, (the native agent of the East India Company) from 1826 to 1882 A. D. A *dharmashala* built by him here is still in existence.

Tobacco being its main produce, the village has several establishments for processing it. Moreover, there are about a dozen pipe factories, one plastic factory, one paper bag factory and one unit manufacturing electric switches. There is a cold storage unit of potatoes. A modern and well-equipped hospital has been built besides one general hospital and maternity home. The village has electricity, water works and underground drainage. A fair held at the Sadansha Pir Dargah on Rajab-10 is attended by about 5,000 persons. The Kuleshwari Mata temple here is a place of religious importance for the Vanjaras. The Paleswar Mahadev, a Jain temple, a

mosque and two churches are other places of religious importance. The village has a pre-primary school, five primary schools, a secondary school, a library and post, telegraph and telephone facilities. Uttarsanda has its own bank known as Uttarsanda People's Co-operative Bank. Besides, there is a branch of Bank of Baroda.

Vadasinor (Balasinor)—(P. 19,207) : N. P., 22° 57' N. 73° 20' E., Area in sq. km., 21.64

Balasinor or Vadasinor, is a taluka headquarters, situated in a hilly tract with the river Shedhi flowing about 6 km., away. It is 14 km. from the Sevalia station on the Anand-Godhra broad gauge section of the Western Railway and connected by the State Transport bus services with Sevalia, Nadiad, Virpur, Kapadvanj, etc. As it is half encircled by rocks its climate is hot. Before Independence, Vadasinor was the capital of a separate State. It was the biggest Muslim State of the second class in the Revakantha Agency. Originally under the Solanki estate of Virpur, it was conquered by a general of Mahmud Begada in 1505 A. D. and later came under the rule of Babis. After the British control was established over it about 150 years ago, it was under the supervision of the Kheda collectorate and since 1852 under the Revakantha Agency. It has a strong fort round the town which is now in a dilapidated condition. The former Nawab's palace is to the north of the town, overlooking the Sudarshan lake. There are two public hospitals and a Government dispensary besides a number of private dispensaries. As regards educational facilities, there are two Balvadis, two Balmandirs, seven primary schools, three secondary schools and one college of Arts and Commerce. Besides, there are a Sanskrit Pathshala, a public library, a reading room and two hostels for the Backward Class students. Among social service organisations, mention must be made of the Gram Seva Samai, the Sanskritik Vikas Mandal, the Mahila Mandal and the Vadasinor Yuvak Mandal. As regards places of worship, there are several Hindu temples including an ancient temple of Madanmohanji and the Gokulnathji temples and seven mosques. Two periodicals, *Jan-sathi* a fortnightly and *Lok-Vina* a monthly are published from here. The town had actively participated in the freedom movement. Vadasinor has branches of (i) State Bank of India (ii) Dena Bank (iii) the District Central Co-operative Bank and (iv) the Urban Co-operative Bank. There are several saw mills, one co-operative ginning factory, eight lime factories and a soap factory. The Mahadev temple on the Bhimbhamarda hill and the Chaturmukhi Shiv ling on the Dev-Dungariya hill nearby are ancient monuments. Fairs are held here on the Janmashtami day. Being the taluka headquarters, all taluka level offices are located here. Vadasinor has one cinema house and a public park.

Vadtal—Nadiad Taluka (P. 5,766) : V. P., 22° 36' N. 72° 53' E. Area in acres 1,358

Vadtal is famous for being the principal seat of the Vaishnavite sect called Swaminarayan, established in 1804 A. D. by Sahajanand Swami. It is 16 km. from Nadiad and is served by a broad-gauge railway branching off the Bombay-Ahmadabad main line at Boriavi 6 km. away. It is also connected with Nadiad by the State Transport bus service. Swami Sahajanand who was born in Chhapia (Uttar Pradesh) in 1731 A. D. made Gujarat and Saurashtra the field of his religious reforms which were propagated by him vigorously and energetically. The temple at Vadtal, an imposing structure built in 1824 during the life-time of the Swami at the cost of Rs. 75,000 is situated in a large square surrounded by a row of buildings with a gateway in the middle. Dedicated to Laxminarayan, it also has the idols of Radha-Krishna, Sahajanand Swami and his parents. The temple has beautiful wood carvings on pillars. Around the temple are *dharmashalas* for pilgrims. In the north-west, there is a large garden and the Gomti tank. The temple runs a charitable Ayurvedic dispensary and a Sanskrit Pathshala.

Vadtal is equipped with electricity and water works. There is a milk producers' co-operative society and a weavers' co-operative society. Besides there are several power looms and tobacco curing centres. Five large fairs are held here every year. The largest is held on the Jal-Jhilani Ekadashi, Bhadrapad Sud 11.

The local Roman Catholic Mission runs a charitable dispensary and a primary school. The village has three primary schools including a girls' school, a secondary school and has post, telegraph and telephone facilities. There is a branch of Bank of India.

Vallabh Vidyanagar—Anand Taluka (P. 15,509) : N. P., 22° 33' N. 72° 56' E.

Vallabh Vidyanagar, a new township spread over an area of 6 sq. km., has grown up recently as an educational centre. It is a station on the Anand-Khambhat broad-gauge section of the Western Railway 5 km. from Anand and connected with it by an asphalt road on which the State Transport buses ply.

It is wellknown for the rural residential university established with the object of bringing to villages prosperity, culture and character and offering solutions to their numerous problems. With these aims in view, the Charotar Vidya Mandal was established in 1945. Plans were drawn

up to pool and develop the lands donated by people of Karamsad, the native place of Sardar Vallabhbhai Patel and the neighbouring villages and the work was started with the approval and blessings of Mahatma Gandhiji and the Sardar in 1947. Educational institutions like arts, science, commerce and engineering colleges and a multipurpose technical school sprang up rapidly. Finally the Sardar Vallabhbhai Vidyapeeth came into being in 1955. Besides the colleges at Vidyanagar the Agriculture College at Anand was affiliated to this university. The Jaykrishna Indraj Verma Botanical Museum and an archaeological museum facilitate study and research. The university campus consists of about 500 acres of land with various colleges, laboratories, farms, hostels and residential quarters for teaching and technical staff built according to a planned layout. Pursuant to the object of bringing modern technical development to villages and to equip them with modern facilities and technical methods, the Charotar Gramoddhar Sahakari Mandali Ltd., was established in 1945. It runs a foundry, workshop, saw mill, cable factory, printing press, and manufactures tiles, hume-pipes and pre-stressed cement poles. It has also undertaken experiments to decentralise textile and cement industries. Manufacture of small machines for village and cottage industries and of products like *sigris*, soap, ink, *kum-kum*, etc., is also undertaken. The society also offers engineering and laboratory services like preparing and executing plans and analysis of soil, stone, water, etc. Thus these three institutions carry further the experiment of making villages self-supporting and equipping them with modern facilities for comfortable living and general uplift. The township is equipped with electricity, piped water supply and telegraph and telephone offices. It has a public dispensary and a maternity centre. At present the township has two primary schools, four secondary schools, one central school, a technical school, two arts colleges, two commerce colleges, two science colleges, one Engineering College and a Polytechnic. Besides, it has the H. M. Patel Institute of English, the N. B. College of Education, a School of Architecture, a B. T. College and a Home Science College.

The temple of Ramkrishna and Omkareshwar are impressive.

The Vidyanagar Mercantile Co-operative Bank has been recently established here. Besides, there are branches of the Kheda District Central Co-operative Bank, Union Bank of India, Bank of Baroda and United Commercial Bank.

Valvod—Borsad Taluka (P. 4,445); Area in acres 4,161

Valvod is 12 km., from Borsad, the taluka headquarters and is connected with it by the State Transport bus services. The name Valvod is said to have been derived from the name of saint Valmiki whose disciple

Badar Muni had settled here. The shrine of Tornav Mata was thereafter set up on a hill called Valmiki Hill which is now popular as Kukadiya Gadhi. The village situated on the bank of the river Mahi is known for the shrine of Jetbai Mata, believed to be about 500 years old. Near the village there is an old temple of Harkheshwar Mahadev, which has several ancient idols including those of Ganapati, Vishnu, Parvatiji, Hanumanji etc. The temples of Avad Mata with idols of Mahishasurmardini, Deepnath Mahadev and Oghadnath Mahadev are also old. The village has a huge well, known as *Haraniyo Kuvo* which supplies water to the villages population. Valvod has a snuff factory and two tobacco processing centres.

Valvod has a primary school, a secondary school, a dispensary, a post office and electricity facilities.

Vanakbori—Vadasinor Taluka (P. 1,191); V. P., Area in acres 1,304

Vanakbori is 15 km., from Vadasinor and 30 km., from the Sevalia station on Anand-Godhra railway line. The Vanakbori dam near the village across the river Mahi is a part of the Mahi project, a major irrigation work constructed at an estimated cost of Rs. 2,462 lakhs. (Details about this project are already given in Chapter IV—Agriculture and Irrigation). The village has a primary school, a panchayat dispensary and a post office.

Vasad—Anand Taluka (P. 7,221); V. P., Area in sq. km., 13.66

Vasad is a junction station on the Ahmadabad-Bombay broad-gauge railway line, about 18 km., south-east of Anand, from where a line branches off to Kathana. It is also connected with Borsad, Vadodara, etc. by the State Transport buses. It is situated on the bank of the river Mahi over which bridges for the railway and the national highway have been constructed. On account of its width, Mahi is called Mahisagar. Vasad is famous for pulses and *Tur dal* which are exported to many parts of the country. There are several establishments for curing tobacco, another important local product. Vasad is a picnic spot and a place of pilgrimage for people who come to bathe in the river. A research centre established at Vasad by the Government of India has been working on the problem of soil erosion and land reclamation in Gujarat ravines. Its experiments have yielded successful results. A Gujarati school was started here in 1880. As regards religious places, there is a Narmadeshwar Mahadev temple, about 500 years old, a Ram temple, a Jain temple, a mosque and a church. The Kashivishwanath temple situated nearby is picturesquely surrounded and

1. *Borsad-Ek-Adhyayan*, (1974), p. 16, published by the Arts and Commerce college, Borsad.

serves as a picnic spot. Fairs held on Chaitra Sud 15 and Janmashtami near the Kashivishwanath temple on the riverside are attended by about 5,000 persons.

The catalogue (book No. 232 P. 86) of the Jain Bhandars at Jesalmeir indicates that Vasad was mentioned as 'Vasav' or 'Vasappa' in Vikram Samvat 1240. This fact proves the antiquity of this place. Dr. H. D. Sankalia collected some microliths of the later stone age at Vasad on the right bank of the Mahi. The finds were coarse and scrapers of chalcodony, quartz chert and agate.

Vasad has a health centre, three primary schools and a secondary school. There are two banking offices of Bank of Baroda and Kheda District Central Co-operative Bank. There is an old well, known as Gangvo Kuvo.

Vaso—Nadiad Taluka (P. 10,614); N. P., Area in sq. km., 11.55

Vaso is an important town in Kheda district. It is a station on the Nadiad-Bhadran narrow gauge railway line 12 km., from Nadiad, with which it is also connected by the State Transport bus services. It is said to have been established in V. S. 1224 and named after Vasodhari Mata enshrined near the village. She was the family goddess of King Mordhvaj of Kheda. According to another story, the town was named after one Vachcha Patel who was the chief of the Patidars who stayed here during the 12th century. Rustam Ali Khan the last Mughal Suba of Gujarat, committed suicide at Vaso to save himself from defeat at the hands of Pilajirao Gaekwad.¹ Shrimad Rajchandra, the spiritual *guru* of Mahatma Gandhi had stayed at Vaso for a long time. Vaso happens to be the native place of Shri Punit Maharaj, the well known saint of Gujarat.² Vaso had its village Panchayat in 1881 A. D. Though small in size, the town is known for possessing modern amenities. It has two pre-primary schools, four primary schools, high schools for boys and girls, public libraries, gymnasias, a public garden, a District Panchayat dispensary, a veterinary dispensary and various co-operative societies. Vaso has its own co-operative bank since 1916. Besides there are branches of Central Bank and Union Bank of India. The residents of the town are well-educated and there are several voluntary social service institutions. Darbar Gopaldas Desai and Motibhai Amin, famous in the public life of Gujarat belonged to Vaso. They had started here the first pre-primary school³ on montessori line in Gujarat in

1. *Gazetteer of the Barodu State*, Vol. I, (1923), p. 440.

2. Nadiad Taluka Panchayat Darshan, (1966), p. 331.

3. RAJYAGOR S. B. (DR), *Gujaratno Kelavanino Itihas*, (1966), p. 199.

the year 1915. Vaso has three rice mills, two ice factories, two saw mills, water works, a telephone exchange and a cinema house. It has a school of dyeing (Rang Shala) run by Government. The two *havelis* known as Bhau Saheb's havelis contain some beautiful specimens of wood carving. They are magnificent old structures built about 1820 A. D., each at a cost of about Rs. 75,000. Vaso is equipped with water-works. In the past, Vaso was an important centre of handloom weaving with about 2,000 handlooms. At present, it has about 200 handlooms and a few powerlooms.

Virpur—Vadasinor Taluka (P. 5,280); V. P., Area in acres 3,119

Virpur is a small town on the river Bavli, about 42 km., from Vadasinor and connected with it by the State Transport bus service. This town dated from the 13th century and was taken from Barias by one Virbhadra Vaghela. It was conquered by Ala-ud-din Khilji and later on given by Aurangzeb to Sherkhan Babi in Inam. Near the town is the *dargah* of Darya Pir, a Muslim saint said to be a direct descendant from Abbas, the uncle of the Prophet. His real name was Mirza Muhammad. He looked after the administration of Virpur after the conquest of Ala-ud-din. The *dargah* is the chief attraction in the village. The Pirangali hill, nearby, is an object of interest.

Virpur has one pre-primary school, two primary schools, a secondary school, a public library, a primary health centre and a post and telegraph office. It is also equipped with electricity. There is a ginning factory and an oil mill. It has branches of the State Bank of India, the Kheda District Co-operative Bank and Urban Co-operative Bank. The Dholeshtar Mahadev temple and the temple on Kashikaka hill nearby are ancient places. In the village there is an old Jain temple.

A fair is held every year at the *dargah* of Darya Pir on the night of Rubbi-us-Sani 10-11 when miracles are said to be seen. The Janmashtami fair at the temple of Jharmar Mata on a Pirangali hillock attracts about 2,000 persons.

ANNEXURE

Note on Excavations at Nagara

The study based on the excavations at Nagara helped one to trace outline of the origin, growth as well as retardation of the settlement from its beginning in the 1st millenium before Christian era till the present day.

It seems that the area around this settlement was marshy, parkland type and with some creeks where sea-water might be remaining for a sufficiently long-time. This marshy area on littoral of Gujarat was penetrated by the early iron-using communities who established their first habitation in the area of present day Nagara. Around it, wild life was plentiful.

From the point of history, Nagara was a much larger town that began growing about 2700 years from now. The results of the excavations indicate that Nagara was first a small village (Period I). Slowly the village developed into a small town having contacts with other parts of the country (Period II). Then it developed into a flourishing international port (Period III). After that it slowly began loosing its importance (Period IV) and was replaced by Khambhat. The details of the conditions of Nagara during these periods are given in following account.

Period I

The excavations revealed that Nagara was inhabited for the first time by the people using the black and red vessels in the 1st millenium B. C. It may be pointed out that the earliest occupations at Bharuch, Kamrej and Timbarva on the coastal Gujarat also belong to this period. The uniformity of the material culture is also striking. This suggests that the primeval vegetation was being cleared by the people using the black and red ware, in many parts of coastal Gujarat, and they were able to penetrate in the plains. Whether they were able to do so with their knowledge of iron or better developed technique of clearing forest or both requires further work.

But the spread of the use of black and red ware in many parts of India in these centuries presents interesting picture. This period is marked by intense activity of the Upanisadas and the Brahmans on the one side and further development of Buddhism and Jainism on the other side. The spread of this ware in this period suggests the strong unifying influences prevalent

1. Contributed by DR. R. N. MEHTA, Department of Archaeology and Ancient History, Faculty of Arts, The M. S. University of Baroda.

at this time. Who were the bearers of this influence could not be ascertained in the present state of our information. The contradictory theories about Dravidians and Aryans could not be proved or disproved without further evidence, but the stamp of movement and features unifying some aspects of material culture of India are distinct. If we take literary data seriously Aryan movement might be considered responsible for it.

This habitation at the tip of the Gulf of Khambhat at Nagara as well as at Bharuch became important trading centres. The maritime activities of the latter were noted in the Jatakas and other literature. It may incidentally be noted that the earliest phase of Ujjain, the second phase of Nagada, the second phase of Bahal, the first phase of Mahesvara, indicate that this period marked the beginning of many new towns and villages as well as some more prosperity in those that were existing.

The actual area of this early habitation cannot be ascertained but the lowest point occuring for the habitation is about 10 metres high from the sea side. Some of the water channel of this area might have been used as a harbour for seafaring boats of traders, but the exact spot of the harbour requires to be traced. The coast of emergence here presents difficulty as the creeks often get silted up and require rapid changing of the harbours. The first settlers seem to have built a large embankment of yellow sand and clay. It looks like a rampart, but its correct nature could not be judged from the limited excavations. It is possible that it might be a bund or a pond.

As the trench revealed this feature, nothing could be known about the houses and other equipment of this interesting phase of history. The other trenches however indicate that the settlement of period I was less extensive than that of period II or III.

Period II

Once this habitation was established it began to develop in the succeeding centuries. The black and red vesseles continued to be used but the influence from the Gangetic Valley was also felt, as could be proved by the occurrence of sherds of the pottery known as the N. B. P. Ware. Its centres of manufacture were existing in the Gangetic Valley, from which they were spread in different parts of India in the later half of the 1st millenium B. C. This ware is obtained from Bharuch, Timbarva and Nagara on the Gulf of Khambhat. The port of Bharuch seems to have been popularised in literature as a famous trading centre. Along with it Nagara seems to have been a minor port at the tip of the Gulf of Khambhat.

As a point of alteration for trade, it was a flourishing centre of habitation. The material equipment of this period seems to be the black and red-

ware, the plain and burnished red-wares, the N. B. P., iron tools, and objects of bone. The people used bone as a material to prepare chisels, arrow-heads, points and probably, kohlsticks. These were very well made tools from long bones of animals by flaking and polishing. The use of bone tools suggests that iron might not have been produced in sufficiently large quantities in this period. As such the material though known would have been sufficiently costly so that it could not come in general use.

The advanced knowledge of working in stone, terracotta figurines of primitive form, excellent beads and chank objects, suggest that the period marks a high degree of material culture.

The knowledge of the coins, attested by the discovery of the punchmarked coins led to the further development of trade and commerce and consequent growth of the town.

Period III

This development led to the expansion of the habitation and hence the older bund like construction and its exterior was covered by the habitations of the later period. The remains of a number of structures of this period suggest the intensity of activity. The structures were built entirely out of the local material. The township expanded to a much larger extent as the remains of brick structures as well as mounds could be traced in the area that is under cultivation. The survey of this area suggests that the habitation of this period was spread at least in an area of about a square kilometre.

Some of the pottery, specially the Roman amphorae clearly indicate the relation of this sea-coast centre with the Western World. But it was not mentioned by the author of the Periplus. It is highly probable that he might have missed this small port or that it might have not been correctly identified. From this period seals, chank bangles, terracotta objects, stone objects, beads of glass and stone give evidence of the active industrial and commercial contacts either direct or indirect with Rajasthan, Saurashtra, Central Asia and the western world.

This was the most prosperous period at this site. At the close of this period, the habitation was abandoned for a few centuries, and the township shrunk into a village.

The chief reason for this seems to be the silting up of the creek and the shifting of commercial interest due to the better facilities provided by the sea-shore habitation of Khambhat. It is noted for the first time by the Arab travellers as a flourishing port. This mention indicates that the processess of

shifting were completed and the new centre had been quite active. This centre began expanding at the cost of Nagara. This fact has been preserved in the tradition that Nagara was older than Khambhat.

This transition might be placed after the destruction of the Maitraka power and before the rise of the Chaulukya power. Hence the Chaulukya records speak in glowing terms about the port of Khambhat. The powerful dynasties in Rajasthan and North Gujarat gave Khambhat a large hinterland for commerce, and this situation continued upto the 15th-16th century A. D., when Surat on the Tapti came into prominence.

The loss of commercial interest at Nagara was detrimental to its expansion, and hence the town shrunk and became a small village with the temple of Sun and Brahma marking its southern and northern boundary. This boundary suggests that large areas of the older habitation remained unoccupied.

Period IV

But with increasing prosperity during the Muslim period, the village of Nagara began expanding. The present castes began occupying the village. The Patidars and the Brahmins remained in occupation of the central part and around this nucleus the Voras, the Rabaris, the Bharwads, the Harijans, the Vagharis and the Kumbhars built their habitations and the village expanded to its present dimensions.

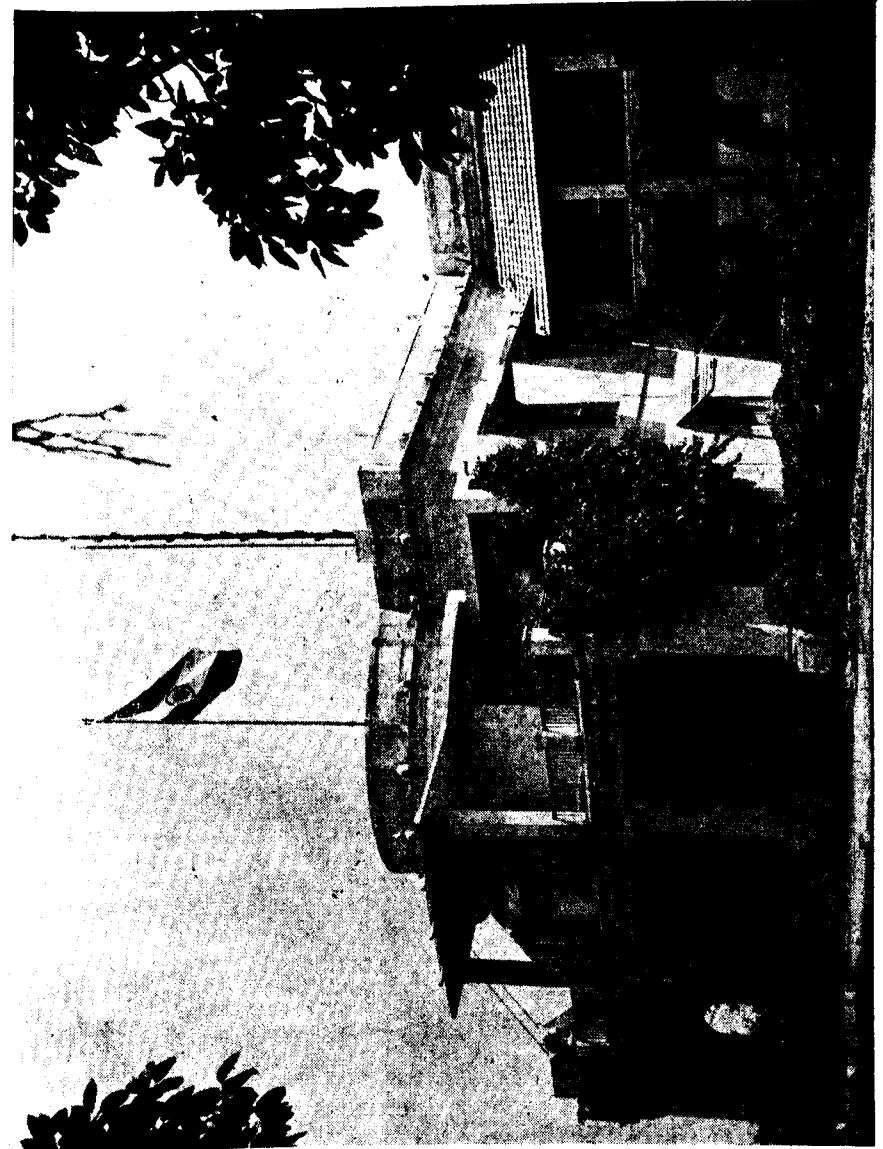
* (Bk) H-50—106 (Lino)

PLATES

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38. Swaminarayan Temple, Bochasan.
39. Hari Om Ashram of Shri Mota, Nadiad.
40. Santram Mandir, Nadiad.
41. Portrait of (late) Govardhanram, Madhavram Tripathi, author of Saraswatichandra.
42. Portrait of (late) Motibhai Amin, founder of Library Movement in Gujarat.
43. Temple of *Gnan Sampradaya*, Sarsa.
44. Statues found from excavations, Vidyanagar Museum.



1. Collector's Office, Kheda formerly used by the British as a fort



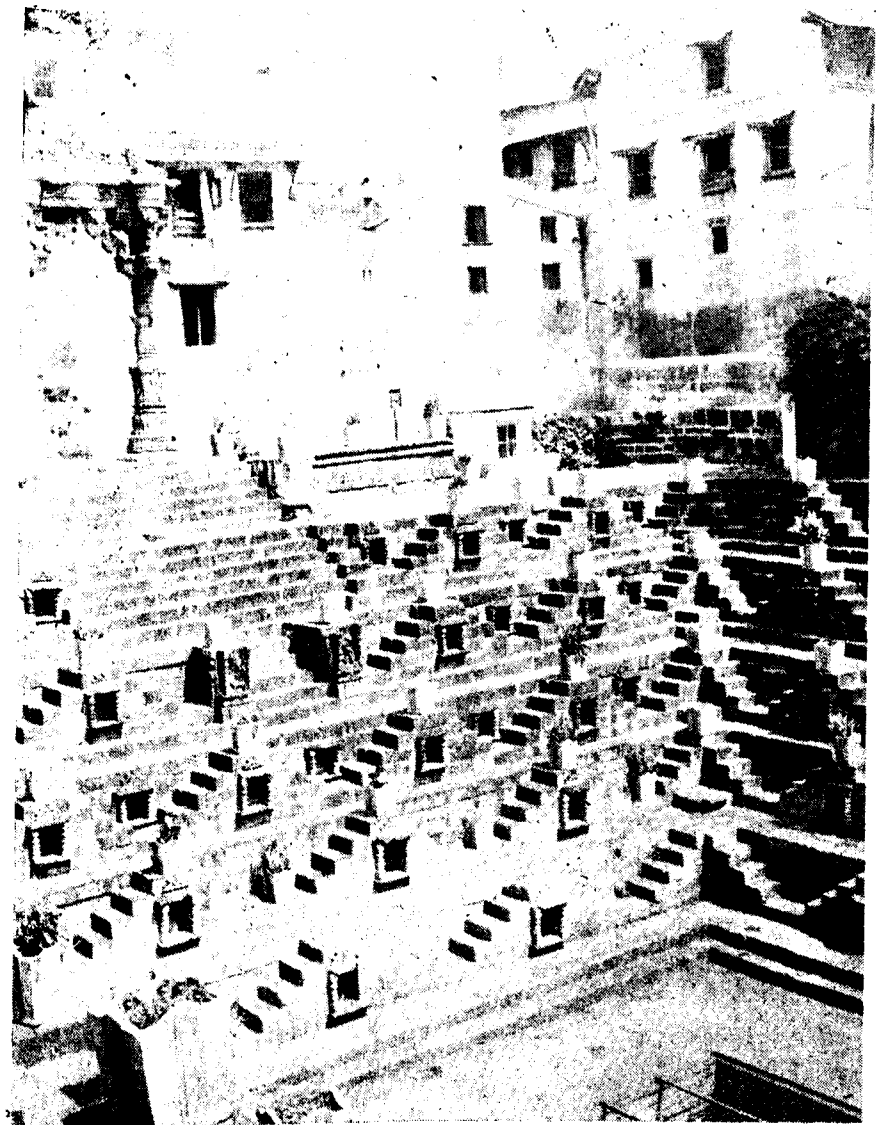
2 Vanakbori Dam on the river Mahi



3. The Bhammario well, Mehmabad



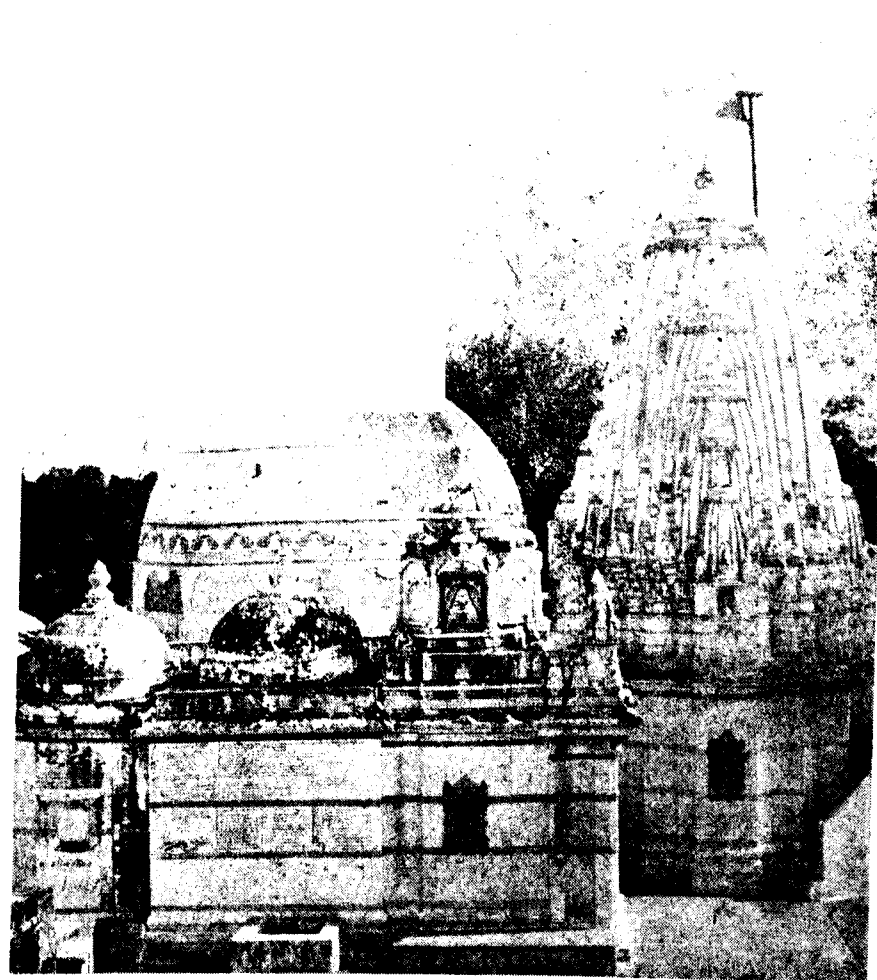
4. The Toran at Kapadvanj with its famous carving in stone during the Solanki period



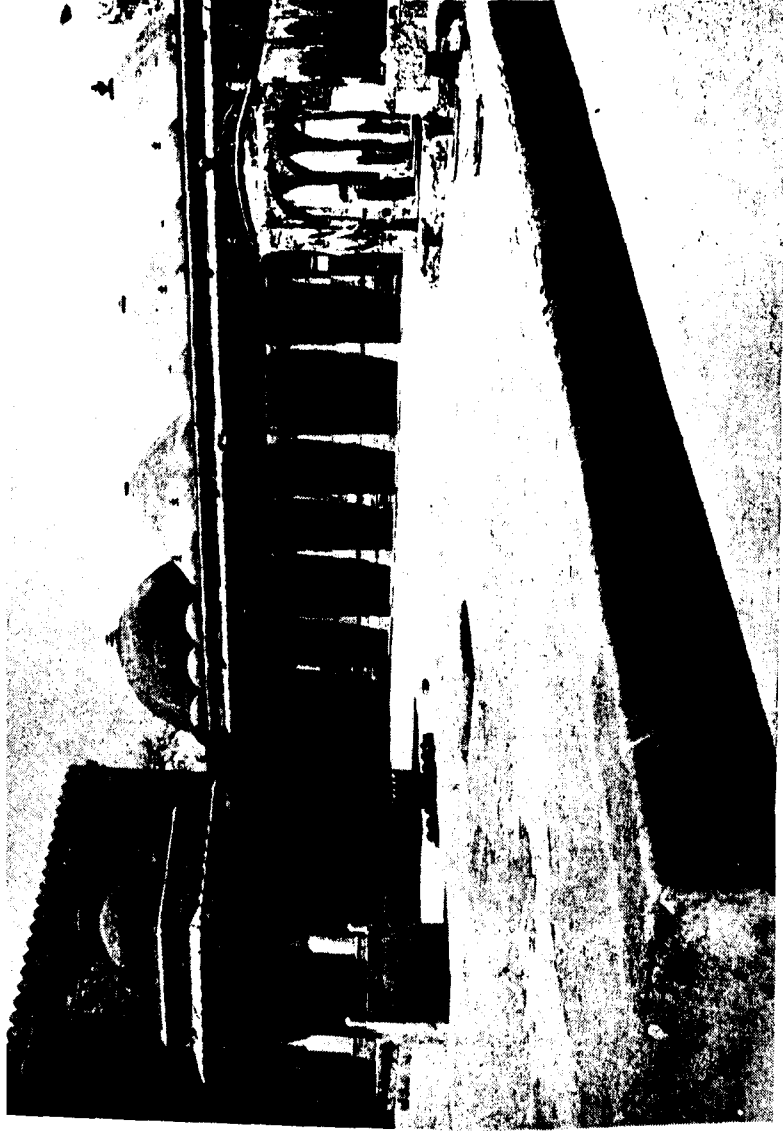
5. Reservoir with the famous Toran in the background



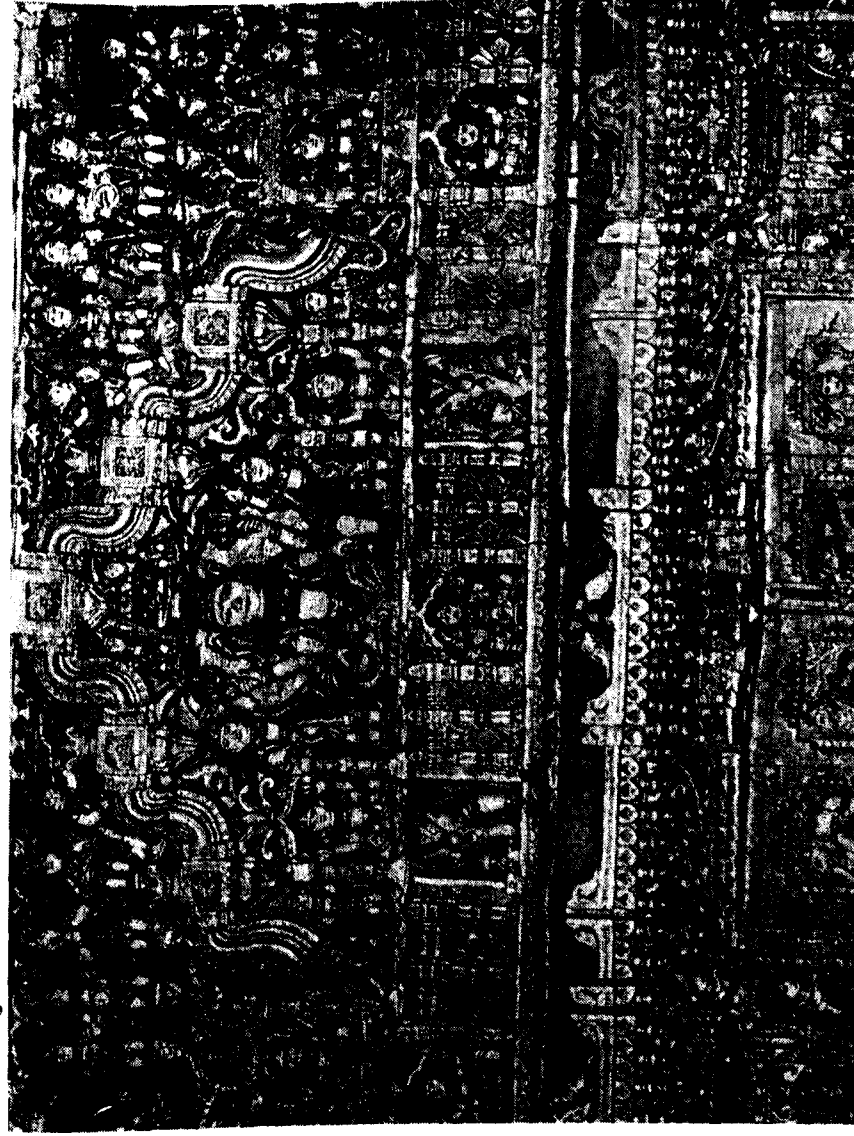
6. Hot-springs, Lasundra, Kapadvanj taluka



7. Temple of Utkantheswar Mahadev, Kapadvanj taluka



8 Inner view of a Mosque at Khambhat



9. Wood carving in a Jain temple, Khambhat



10. An excavated Idol of Shri Krishna kept in the Museum at Vidyanagar



11. Shiv-linga with Brahmastotra, Kanisa, Khambhat taluka



12. A broken image believed to be of Brahma and Savitri kept in the Arts College Museum, Khambhat



13. An excavated idol of Sun and his consorts from Nagara, Khambhat



14. A standing stone image of consort of Surya (Sun)
kept in Arts College Museum, Khambhat



15. A standing stone image of Lakshmi-Narayan kept
in Arts College Museum, Khambhat



16. A rare idol of dancing Ganesh, Arts College
Museum, Khambhat



17. An idol of Lakulisha, Metpur, Khambhat



18. A *shiv-linga* showing face of the deity



19. Specimen of Ornaments from agate stone



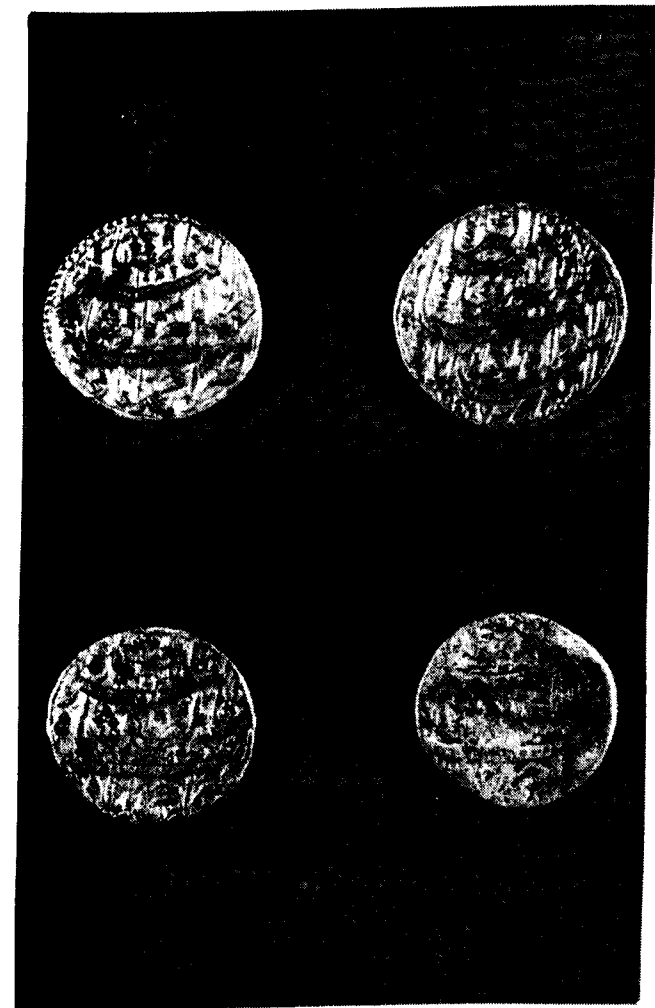
20. Kachagupta coin (obverse) excavated from Khambhat



21. Kachagupta coin (reverse) excavated from Khambhat



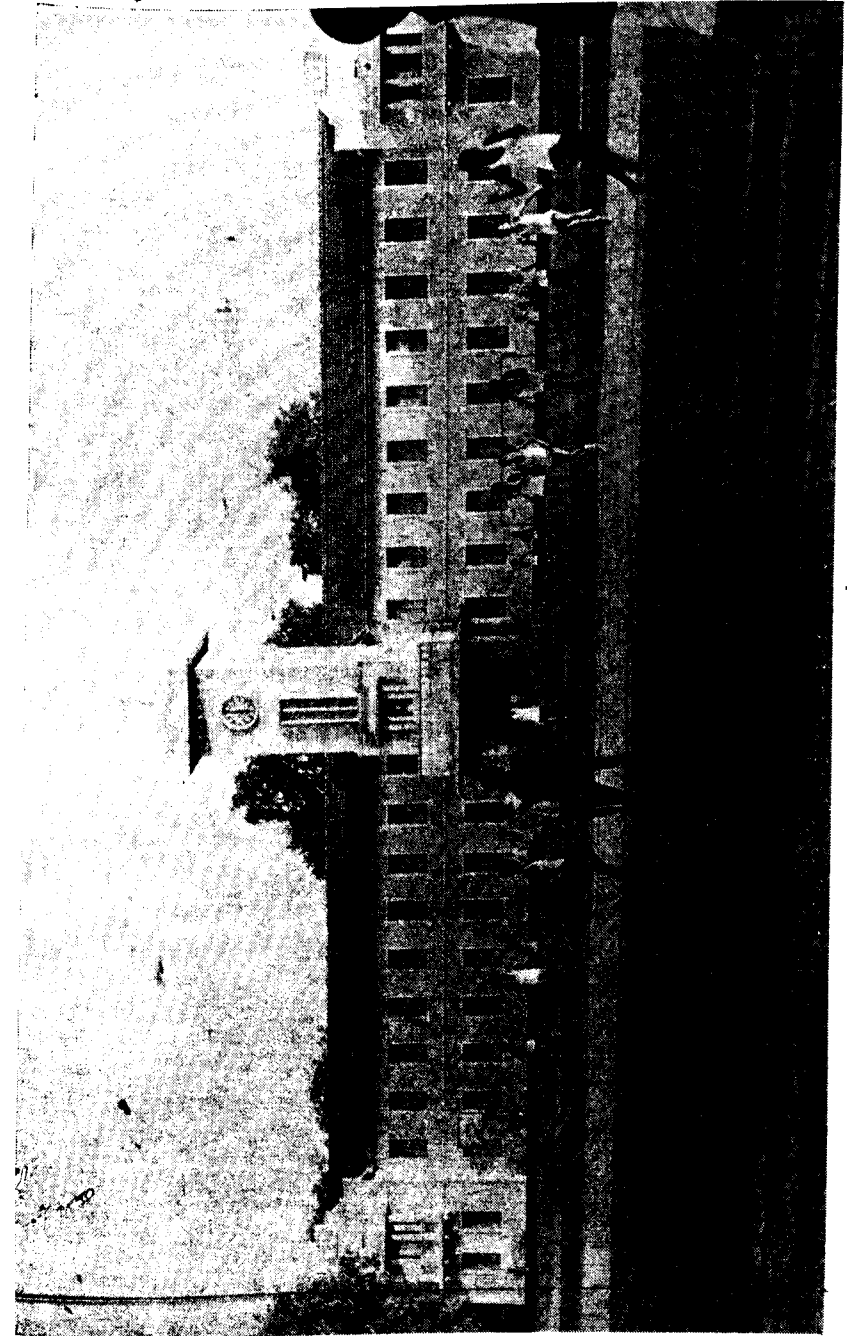
22. Jodiactal coins (obverse) minted on the eve of visit of Mughal King Jehangir at Khambhat ↵



23. Jodiactal coins (reverse) minted on the eve of visit of Mughal King Jehangir at Khambhat



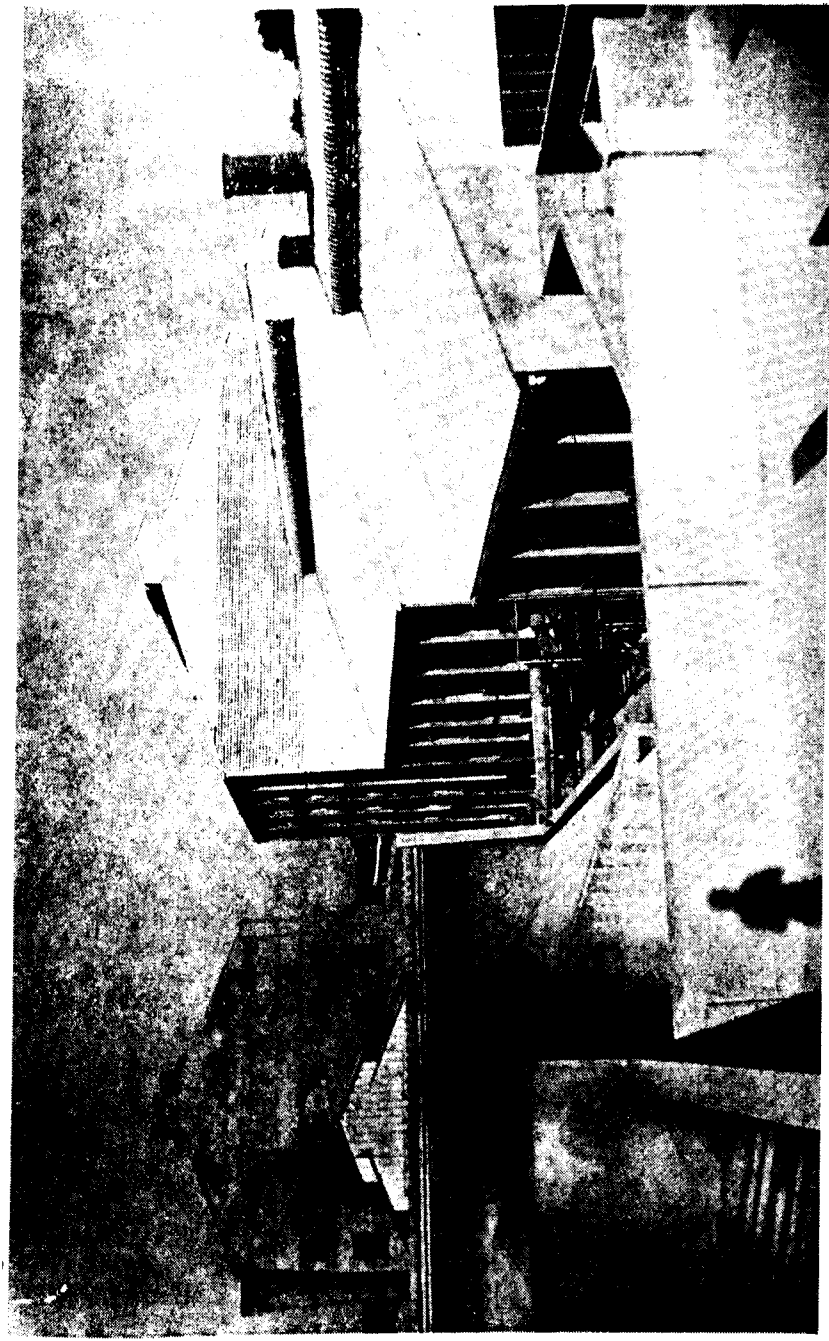
24. A memorial to Martyrs near Railway Station, Adas, raised in honour of Martyrs who laid down their lives during the Quit India Movement, 1942



25. Dadabhai Naoroji High School, Anand



26. Amul Dairy, Anand



27. Vallabh Glass Factory, Vidyanagar, Anand



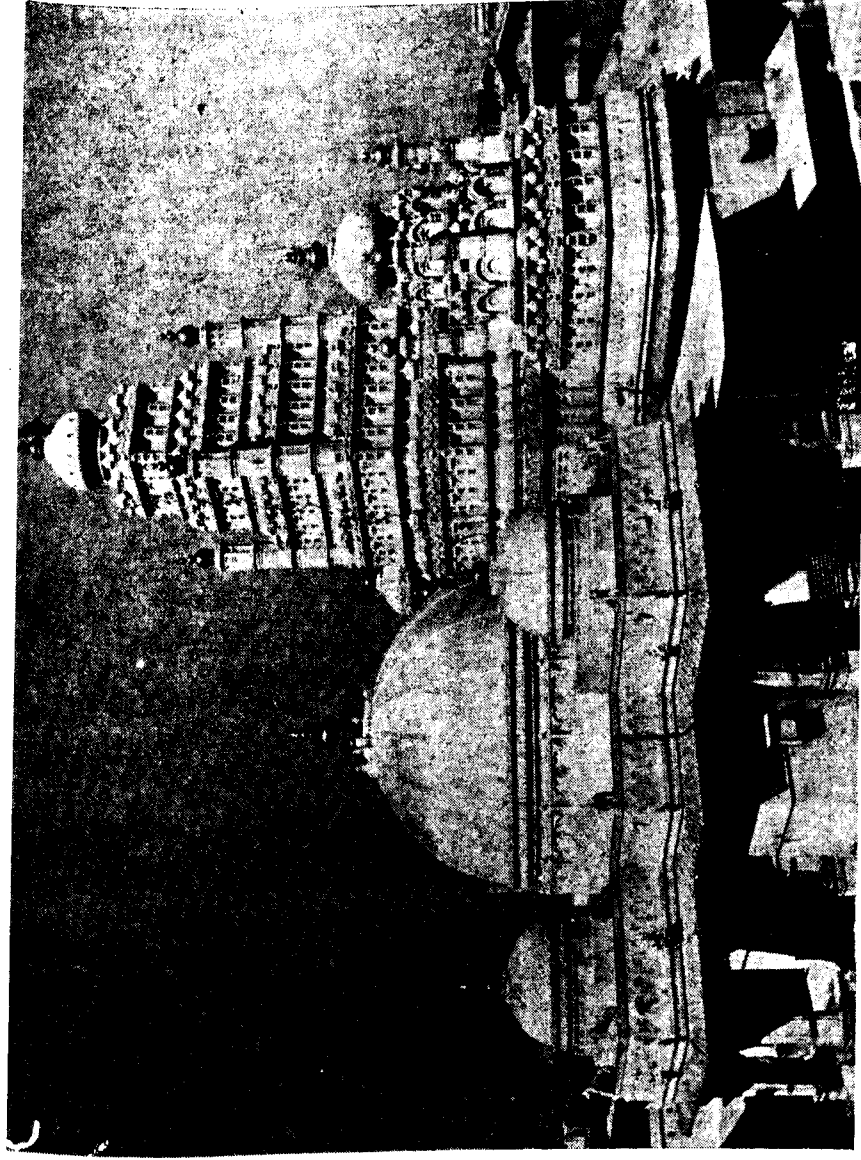
28. Statue of Sardar Patel at the entrance of the University, Vnyanz



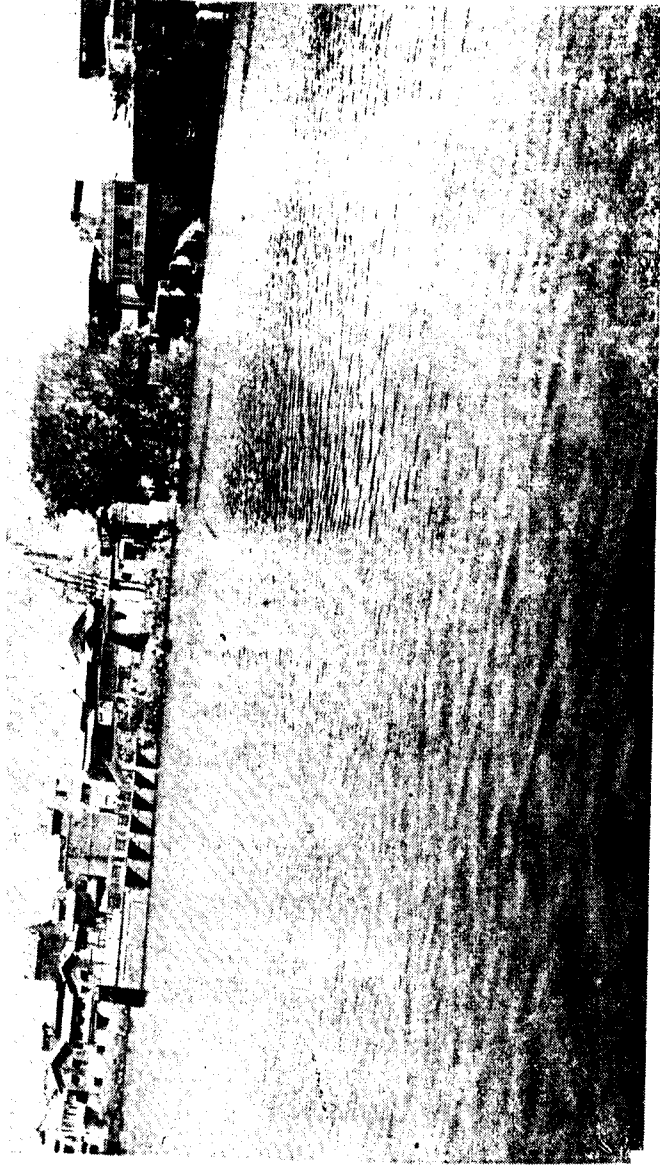
29. A view of Vithal Udyognagar, Vidyanagar



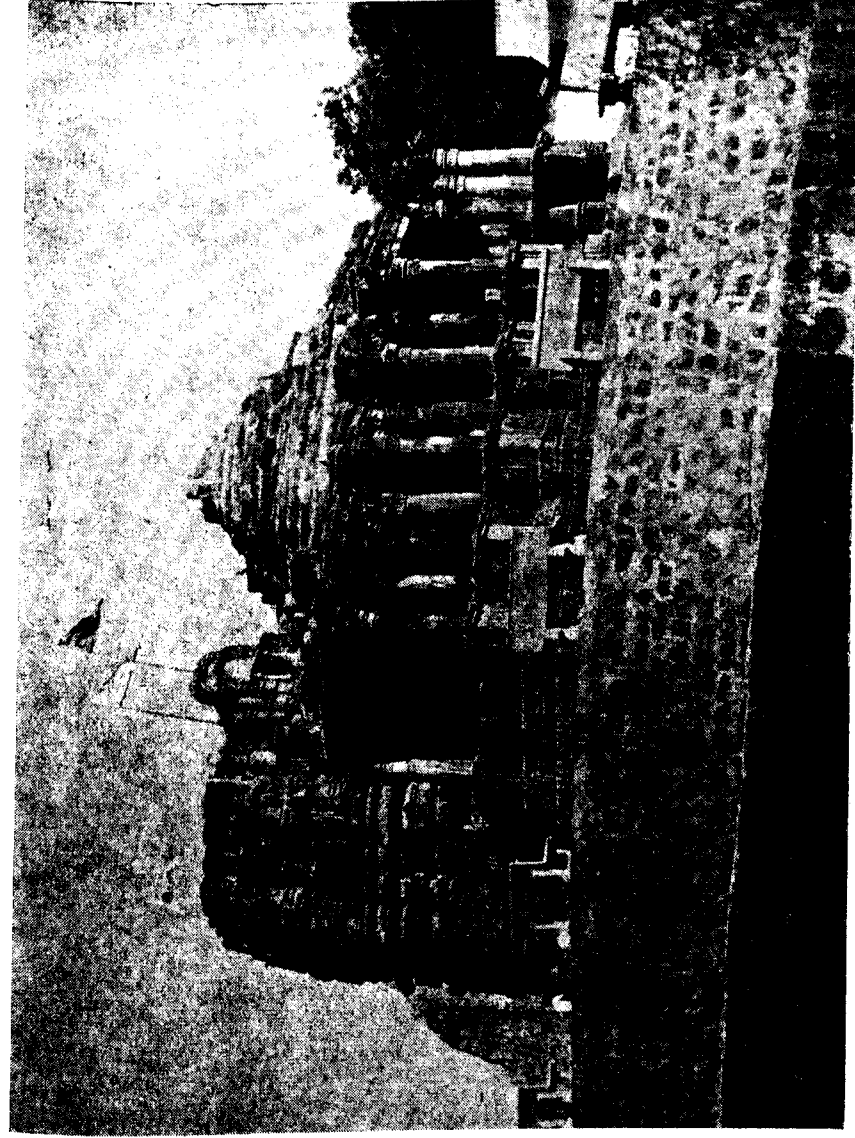
30. House at Karamsad where Sardar Patel was born



31. Shri Ranchhodraji Temple, Dakor



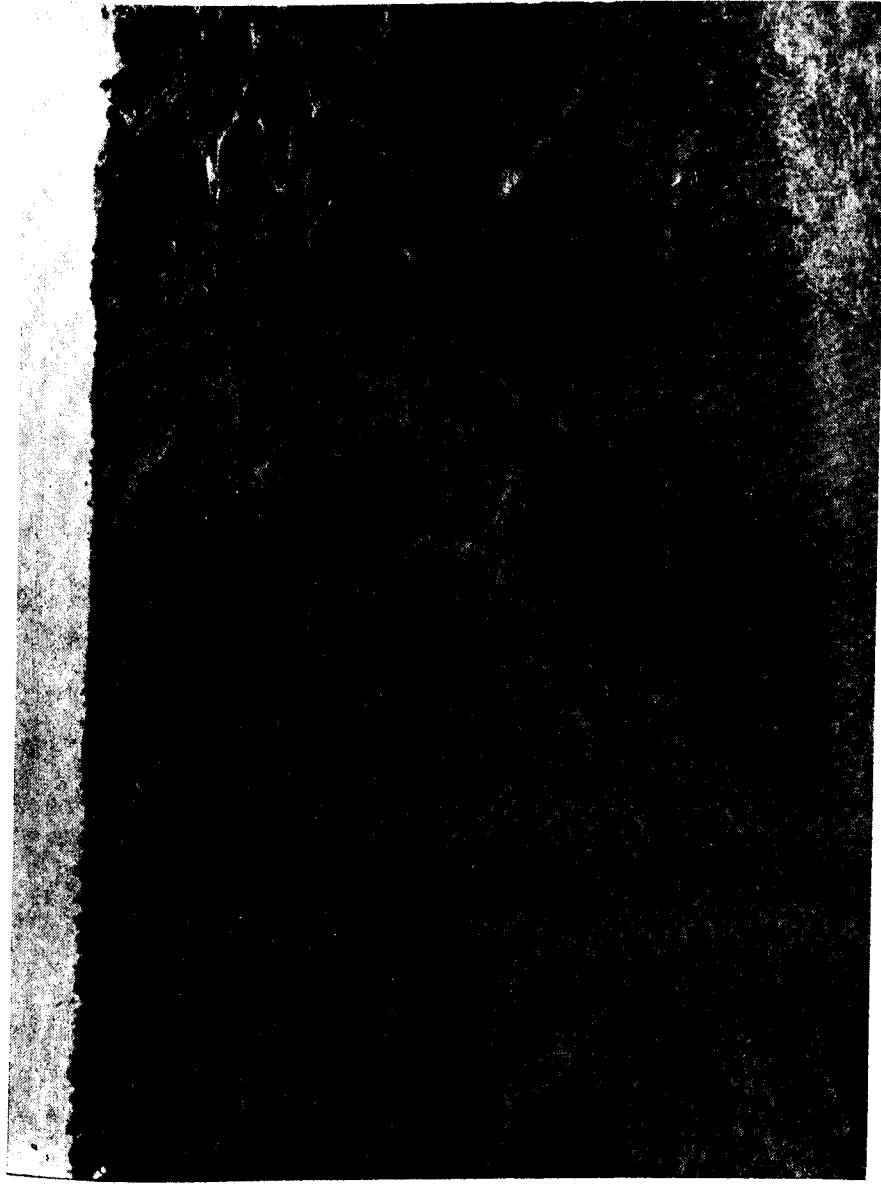
32. A view of Gomti lake, with Ranchhodji temple in the rear, Dakor



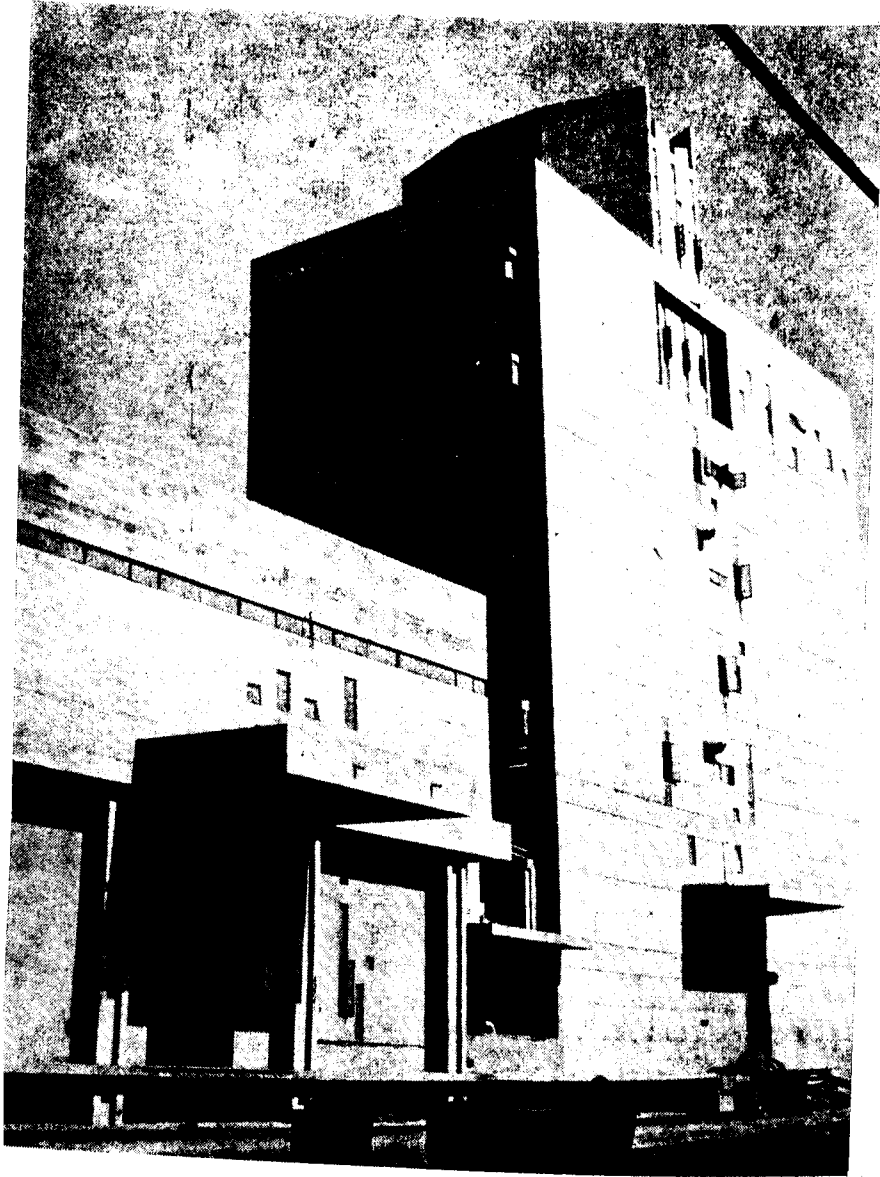
33. Galteshwar Mahadev Temple, Galteshwar



34. Finds from excavations at Galteswar



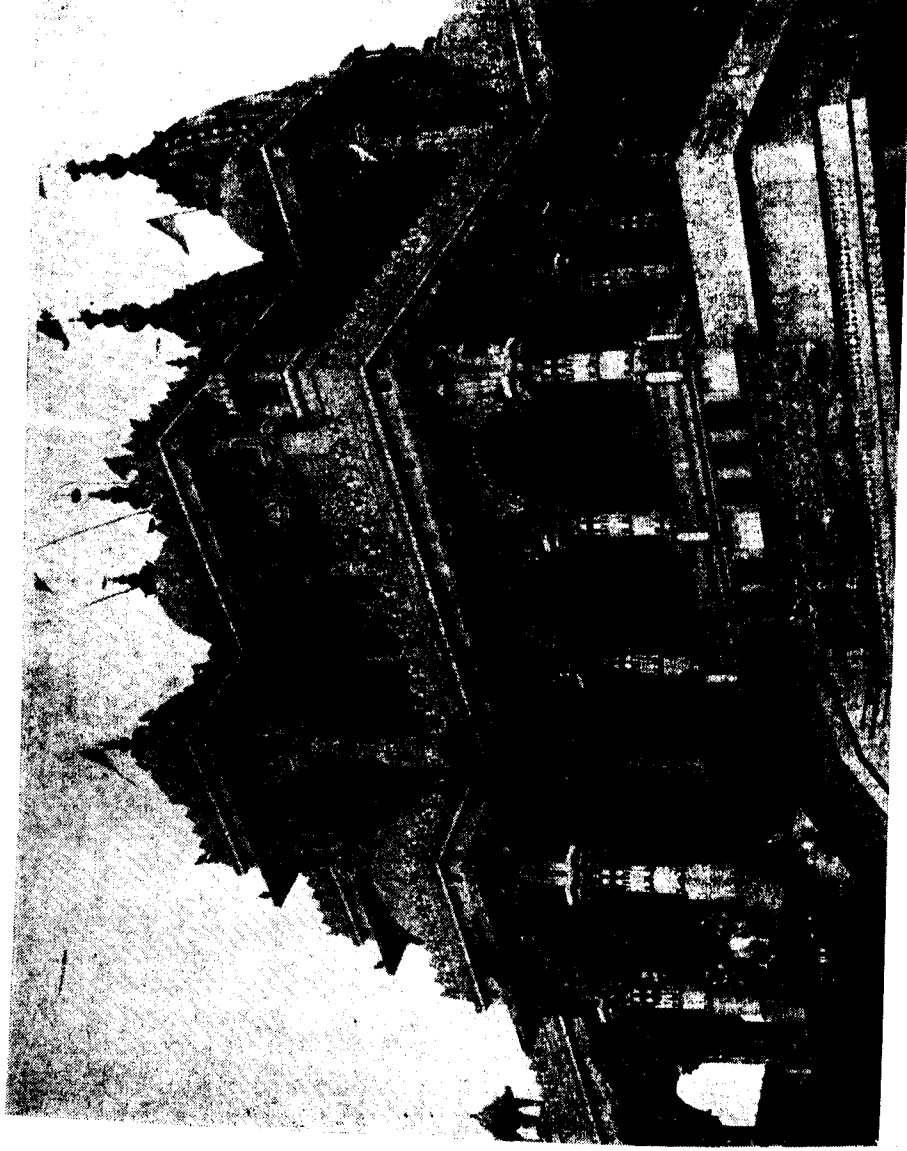
35. A view of ravines on the Mahi river



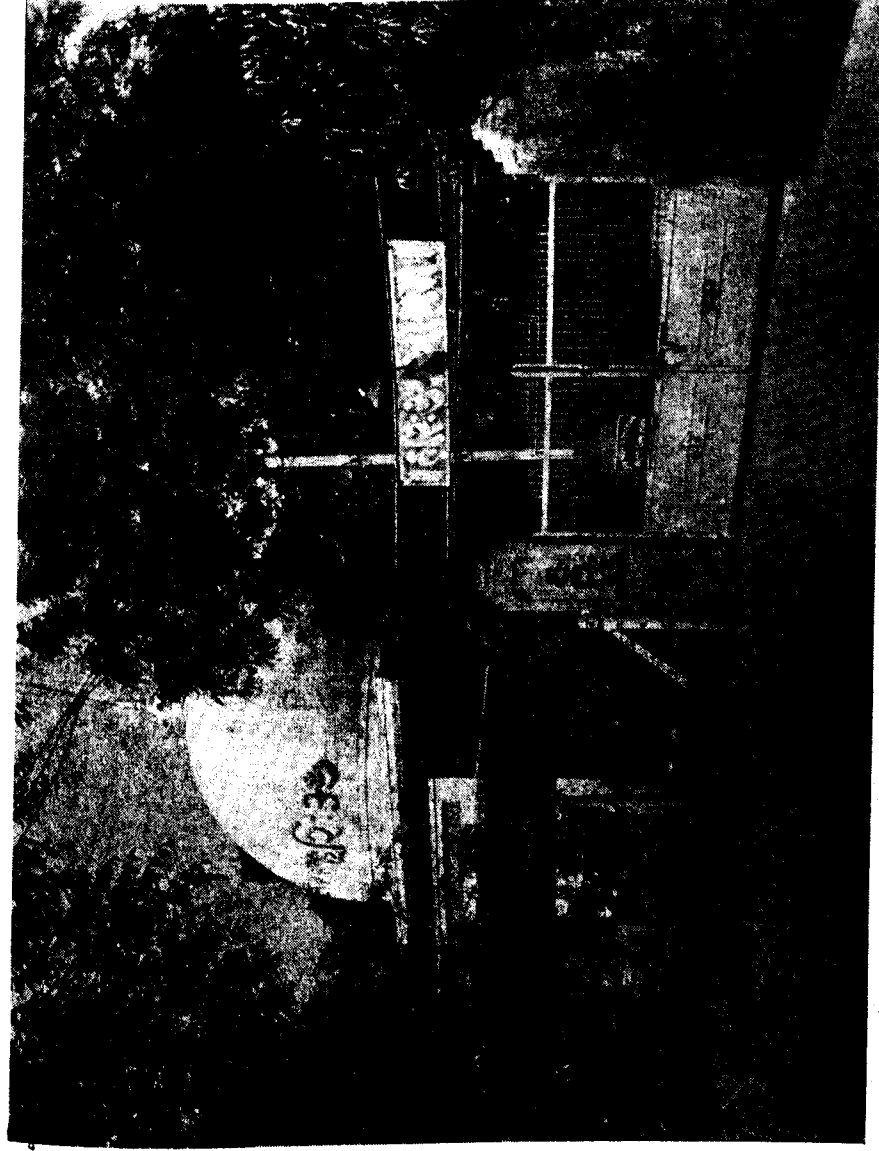
36. Amul Dan Factory, Kanjari



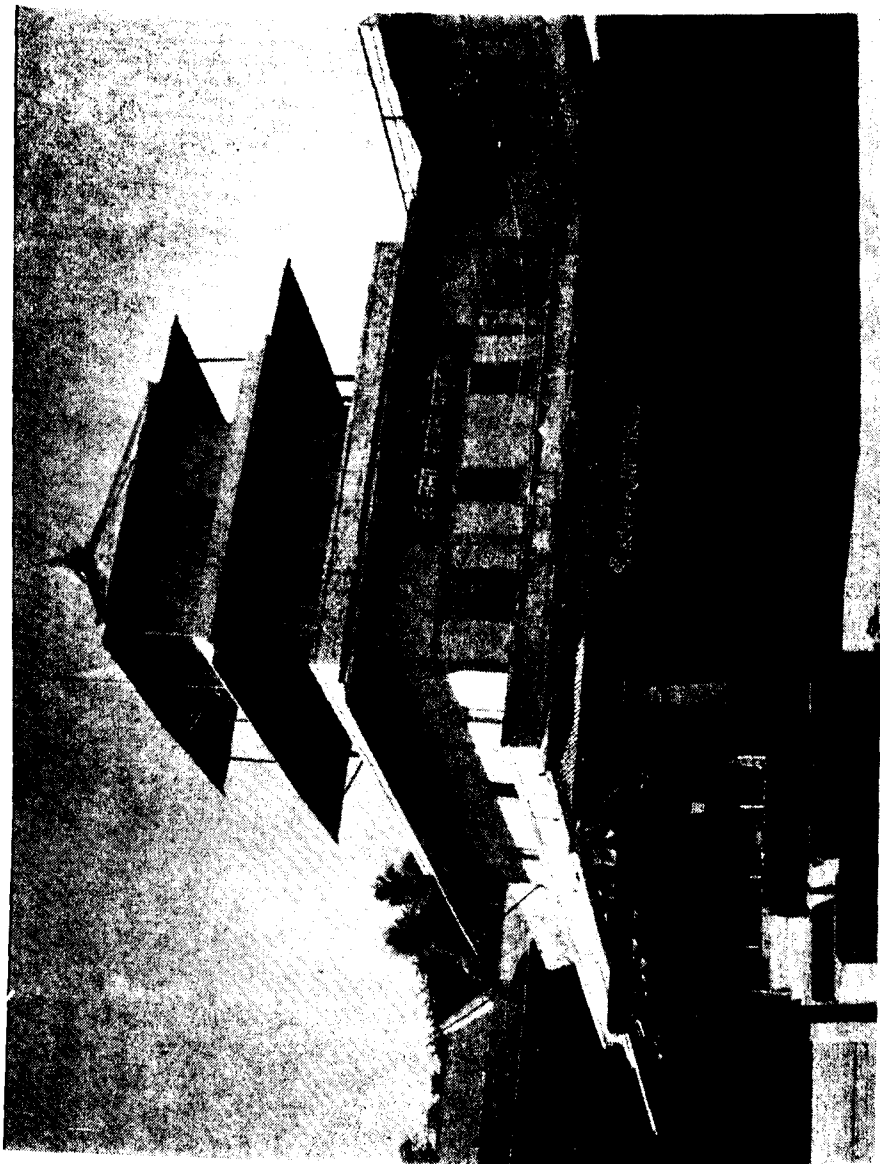
37. Swaminarayan Temple, Vadtal



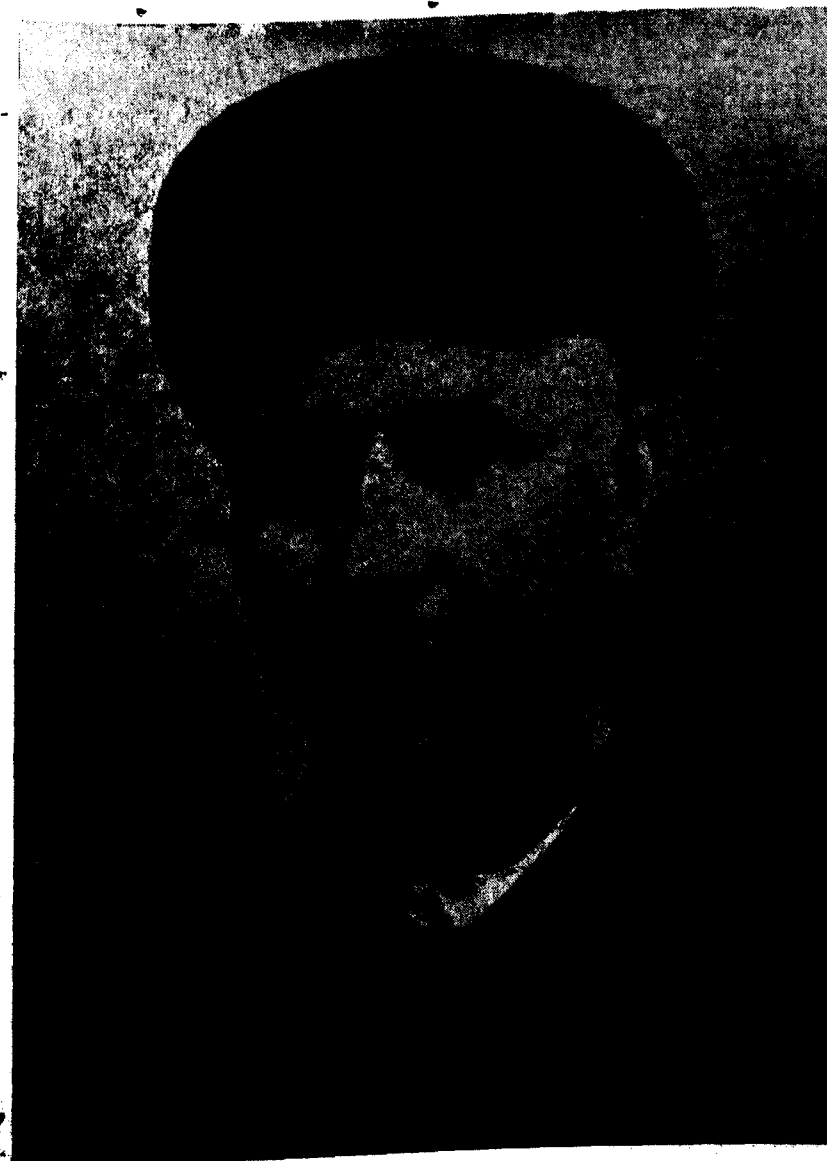
38. Swaminarayan Temple, Bochasan



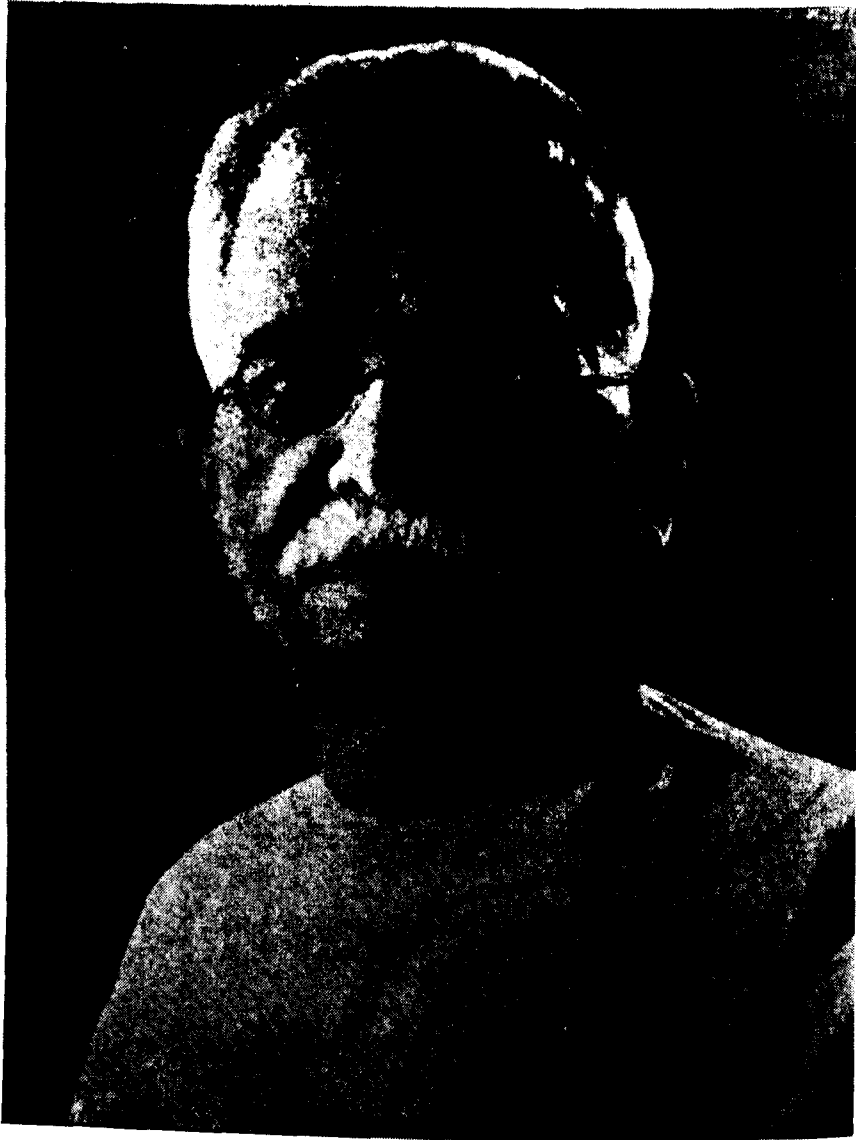
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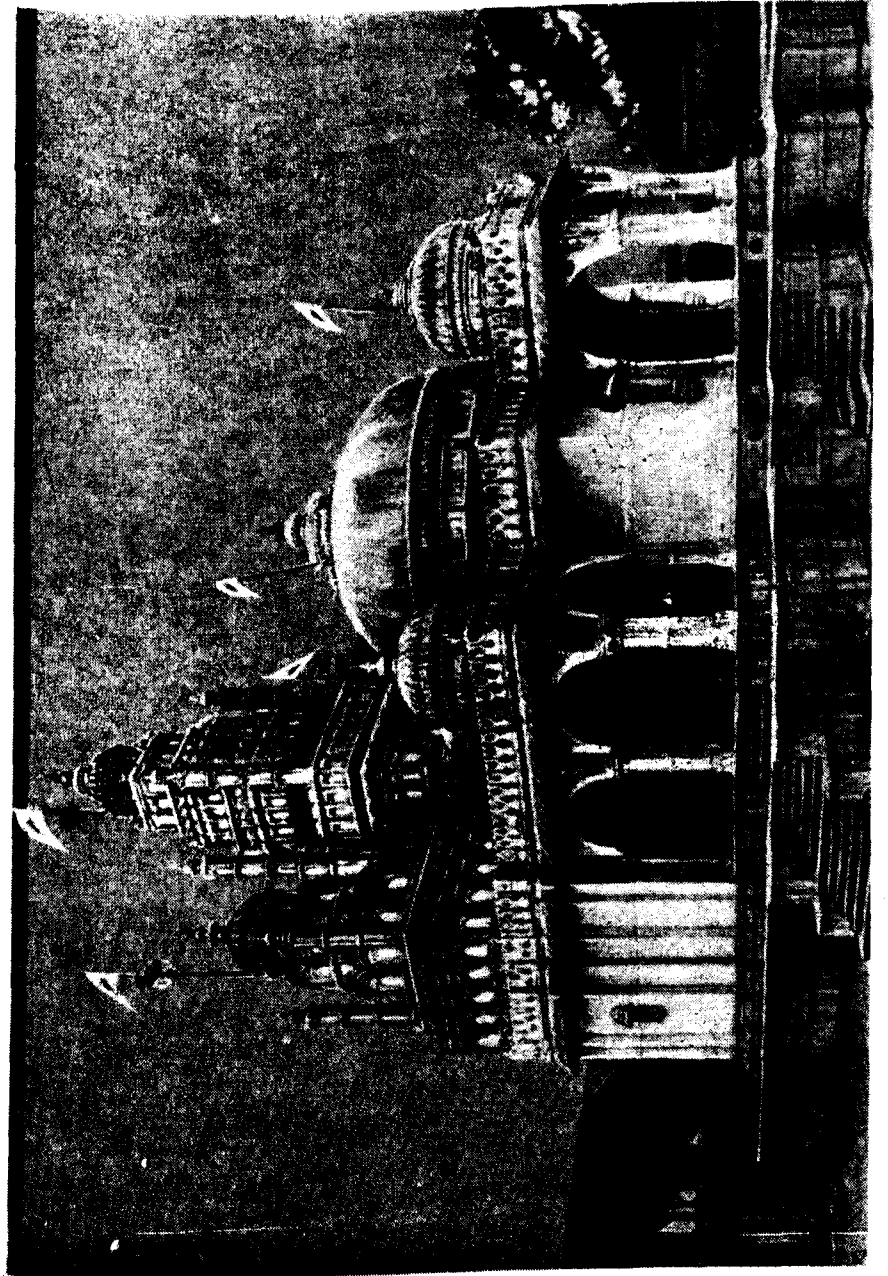
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42. Portrait of (late) Motibhai Amin, founder of Library Movement in Gujarat



43. Temple of Gnan Sampradaya, Sarsa



44. Statues found from excavations. Vidyanagar Museum

GLOSSARY

A

- Adad* .. Black gram (*Phaseolus radiatur*)
Adhyapan Mandir .. A Training College for primary teachers
Agarbatti .. An incensed stick ; usually lighted near a deity or a God
Agiarash .. Eleventh day of the bright half and the dark half of a month as per Hindu Calendar
Akhyana .. Narrative tale in verse
Akik .. Agate
Amavasya .. The last day of dark lunar fortnight
Amul-dan .. Nutritious cattle feed prepared by Amul Dairy
Angas .. Jain scriptures
Ank .. A number; a table of multiplication
Ankdo .. A number; a figure; a fixed sum
Annakoota .. An offering to a deity on the first day of month of *Kartika*, all possible varieties of food and vegetable preparations and fruits as *naivedya*
Apabhramsa .. One of the Prakrit languages
Atapata .. A type of Indian team game

B

- Badha* .. A vow
Bajri .. Indian millet ; name of a cereal (*Panicellaria spicatta*)
Bavto .. Name of a coarse cereal
Bandobast .. A strict watch kept by the police at the time of fairs or public meetings
Bhagbatai .. Land tax paid in kind by division of farm produce
Bhajan .. A devotional song in praise of a deity
Bhajan Mandli .. A band of devotees singing devotional songs
Bhakhari .. Bread made of wheat
Bhandar .. A store house
Bhavai .. Folk drama performed generally by troupes
Bidi .. An indigenous cigarette made from *timru* leaves and tobacco

C

- Chaluaganvat* .. Agreement for fields which always pay the same sum, although the occupant may change every season
- Chautha* .. One-fourth of the village revenue recovered under the Maratha rule
- Chhapanio* .. A well known famine of V. S. 1956
- Chhappa* .. A piece of poetry having six lines consisting of 152 *Mantras*, a stanza
- Chharthi* .. Worship of *Vidhata* or Goddess of Destiny performed by the grand mother or a relation on the sixth day after delivery. It is believed that the Goddess writes the destiny of a child on a plain white paper
- Chudo* .. An ivory bangle worn by a Hindu married lady whose husband is alive
- Churma* .. A sweet preparation of wheat flour mixed with *ghee* and *gur* or sugar

D

- Dai* .. Midwife
- Dal* .. Troop
- Dandiya-ras* .. Circular folk dance with sticks
- Dargah* .. A tomb of a Muslim saint
- Darshan* .. Sight or glimpse of a deity
- Devnagari* .. The sanskrit script ; the Balabodha character
- Dhat* .. Table of weights, measurements, etc.
- Dharmashala* .. Rest house for Hindus, run by a charitable trust
- Dhol* .. Drum
- Dhoti* .. A white waist cloth worn by males
- Diksha* .. Initiation

F

- Farsan* .. Spiced and salty preparation usually made from gram flour and fried in oil
- Fauzdar* .. A Police Sub-Inspector or a police officer

G

- Gadi* .. A hereditary seat
- Gaj* .. Measure of twenty-four inches
- Garbi* .. A sportive dance performed by males
- Gaushala* .. A cow-shed
- Gedidada* .. Name of an Indian game resembling hockey for boys

G—contd.

- Ghasadana* .. Money collection for grass and gram collected by persons in charge of revenue collection or a tax levied for maintenance of cavalry
- Ghee* .. Clarified butter
- Goras* .. Butter-milk
- Gulab dani* .. Flower pot; A pot for sprinkling rose-water.
- Gur* .. Jaggery
- Guru* .. Preceptor

H

- Hath* .. Length as measured by hand
- Havaladar* .. A Head Constable
- Hizarti* .. Migratory
- Hundi* .. A bill of exchange
- Hu-tu-tu* .. A type of Indian team game known as *Kabaddi*

I

- Ijara* .. a monopoly; contract

J

- Jamadar* .. Head of two to three Police Constables
- Jiwai* .. Land given rent free for maintenance in lieu of services rendered to the ruler
- Jowar* .. A kind of coarse cereal (*Sorghum vulgare*)

K

- Kansar* .. A sweet preparation of wheat flour, mixed with clarified butter and sugar or jaggery
- Kanyadan* .. Giving of daughter in marriage
- Kediyu* .. Jacket worn by men reaching down to the waist
- Kevaladvaita* .. The doctrine of absolute identity with *Brahma*
- Kharif* .. The monsoon crop, sown in the rainy season and reaped in autumn
- Khata* .. An account
- Khayal* .. Name of a kind of musical mode
- Khq-kho* .. A game of getting up from a sedentary posture and catching persons from opposite party
- Khotia* .. The Government land in a *Khatabandhi* village assessed at a mere nominal rate
- Kos* .. A leather bucket used for lifting water from the well
- Kotar* .. A ravine

K—contd.

<i>Kothali</i>	}	.. Fee charged by an indigenous money-lender at the time of lending money
<i>Chhodaman</i>		
<i>Kotwal</i>		.. A city watchman. He functioned as head of city (town) under the Mughals
<i>Kumkum</i>		.. Vermilion, red turmeric powder used for a mark on the forehead by a Hindu woman whose husband is alive

L

<i>Lathi</i>	.. A stick used for drill
<i>Lati</i>	.. A shop selling timber
<i>Lajjahoma</i>	.. This ceremony is one of the most important rituals of the Hindu marriage. The ceremony of scattering fried rice or grain denotes a symbol of fruitfulness and prosperity ; while the wife scatters grain, she prays for her husband's long life
<i>Langadi</i>	.. An Indian game
<i>Lapsi</i>	.. A sweet dish made of wheat flour, <i>ghee</i> and sugar or <i>gur</i>

M

<i>Mahajan</i>	.. Magnates ; the head of a caste, an illustrious man
<i>Mahalkari</i>	.. An officer in charge of a Mahal
<i>Mahila Mandal</i>	.. A women's society carrying on welfare activities
<i>Manta</i>	.. A vow
<i>Manotidar</i>	.. A money-lender, money broker
<i>Mehvas</i>	.. Refractory area or villages
<i>Mug</i>	.. Green gram ; <i>Phaseolus Mungo</i>
<i>Mukhi</i>	.. A village headman, a police patel
<i>Mulakshara</i>	.. An alphabet

N

<i>Nakabandhi</i>	.. A place restricted by the police
<i>Nala</i>	.. Cause-way
<i>Nama</i>	.. A writing, an account
<i>Nim</i>	.. A name of tree (<i>Melia azadirachta</i>)
<i>Nirvan</i>	.. Demise, attainment of the highest spiritual truth

O

<i>Oos</i>	.. Saline earth ; crude sodium bicarbonate
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GLOSSARY

P

<i>Pada</i>	.. A line of a verse or stanza
<i>Pan</i>	.. A betal leaf
<i>Panch</i>	.. A committee
<i>Panigrahana</i>	.. Acceptance of the hand of the bride by the bridegroom in the marriage ceremony
<i>Pargana</i>	.. A smaller administrative division
<i>Papad</i>	.. A sort of wafer-cake from black gram, etc.
<i>Parva</i>	.. Festival
<i>Pathshala</i>	.. A school, an oriental school
<i>Payjamo</i>	.. A trouser
<i>Pipal</i>	.. Name of a large Indian fig tree, (<i>Ficus religiosa</i>)
<i>Polku</i>	.. Blouse
<i>Prabhatia</i>	.. The morning hymn
<i>Pranam</i>	.. Reverential salute
<i>Prasad</i>	.. An offering to deity, which is later on distributed among worshippers
<i>Pucca</i>	.. Made of cement concrete or bricks
<i>Punam</i>	.. Full-moon day
<i>Pundit</i>	.. A scholar, a learned man
<i>Puranik</i>	.. Well versed in the Puranas
<i>Purdah</i>	.. Veil

R

<i>Rabi</i>	.. The winter crop
<i>Rajdharm</i>	.. Kingly duties, virtues appropriate in a king
<i>Rakhadi</i>	.. Protective thread usually of silk, tied round the wrist of a brother by a sister
<i>Ras mandli</i>	.. A band of persons playing the sportive dance
<i>Rasti</i>	.. Quiet, settled area

S

<i>Sadhu</i>	.. A mendicant ; an ascetic
<i>Samadhi</i>	.. Self-immolation ; a memorial raised to honour a particular saint or meditation
<i>Santh</i>	.. Rent of cultivated land
<i>Sanyasi</i>	.. A mendicant, or ascetic who has renounced worldly life
<i>Saptapadi</i>	.. Seven steps taken together by a bride and bridegroom round sacrificial fire during the marriage ceremony which makes the marriage complete and irrevocable among Hindus
<i>Sarai</i>	.. Rest-house for Muslims
<i>Sat-tali</i>	.. An Indian game

S—contd.

<i>Seer</i>	.. A measure of weight
<i>Shastri</i>	.. A person who was attached to the court for the trial of cases according to Hindu law and usage
<i>Shikari</i>	.. A hunter
<i>Shiro</i>	.. A sweet preparation of wheat, <i>ghee</i> and sugar
<i>Shrikhand</i>	.. Name of a particular dish made with sugar and mixed with dehydrated curd
<i>Simant</i>	.. A ceremony performed generally during the seventh month after the first conception of a woman
<i>Suba</i>	.. The Governor of a province under Muslim rule
<i>Surwal</i>	.. Long trousers
<i>Swayambhu</i>	.. Self-emerged

T

<i>Tadbhava</i>	.. Derived from an original Sanskrit word, and used in Gujarati in a slightly or greatly changed form
<i>Tajviidar</i>	.. Circle Inspector
<i>Talati</i>	.. Village Accountant
<i>Talpad</i>	.. The Government share in certain villages as opposed to the <i>wanto</i> or alienated portion
<i>Tamrapatra</i>	.. Copper plate
<i>Tatsama</i>	.. Original Sanskrit word which is used in Gujarati in the original form (of a word)
<i>Taziah</i>	.. The structure representing the <i>dargah</i> or tomb of Hussain at Karbala, made usually of bamboo and tinsel, carried in procession during Muharram festival for final immersion in water
<i>Thali</i>	.. A metal plate generally used for eating
<i>Thana</i>	.. A police station ; a sub-division of a district under the authority of an officer having both the powers of revenue and justice
<i>Tirthankara</i>	.. One of the 24 incarnations of God worshipped by Jains
<i>Tola</i>	.. A measure of weight ; the fortieth part of a <i>seer</i> (LB)

U

<i>Udyog Shala</i>	.. An Industrial Training School
<i>Upashraya</i>	.. A resting place for Jain monks

V

<i>Vadi</i>	.. Name of a kind of food prepared of various articles in round balls intended to be used on auspicious occasions
<i>Vahivatdar</i>	.. An Administrator or Manager, Revenue Officer in charge of a taluka in princely States
<i>Van Mahotsava</i>	.. A festival connected with planting of trees
<i>Vanta</i>	.. Share, allotment
<i>Vazifa</i>	.. Land granted rent free, or at a quit rent by the Muhammadan Government to pious persons for past services and to Kajis
<i>Vechaina</i>	.. Land that has been sold
<i>Vidyarthi Grih</i>	.. Boys' residential hostel
<i>Vishishtadvaita</i>	.. Qualified non-duality ; a doctrine of Hindu philosophy propounded by Ramanuj called qualified monism by which the individual soul and the insensate world are the attributes of the supreme soul and form his body
<i>Vivaha homa</i>	.. Marriage sacrifice
<i>Vyayamshala</i>	.. A gymnasium

W

<i>Wazir</i>	.. A prime minister
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BIBLIOGRAPHY

English

BOOKS, REPORTS, JOURNALS, ETC.

BOOKS

- AITCHISON, C. U. .. *Collection of Treaties, Engagements and Sanads*, Vol. VI, (1909).
- ANDERSON, F. G. H. .. *Manual of Revenue Accounts, Government of Gujarat* (1967).
- BARFIWALA, CHUNILAL D. .. *The Directory of Local Self Government in Gujarat State*, (1963).
- CAMPBELL, J. M. .. (i) *Gazetteer of the Bombay Presidency*, Vol. I, Part I, *History of Gujarat*, (1896).
(ii) *Gazetteer of the Bombay Presidency*, Vol. III, *Kaira and Panch Mahals*, Bombay, (1879).
(iii) *Gazetteer of the Bombay Presidency*, Vol. III-B, *Kaira and Panch Mahals*, (1926).
(iv) *Gazetteer of the Bombay Presidency*, Vol. VI, *Rewa Kantha, Narukot, Cambay and Surat States*, Bombay, (1880).
(v) *Gazetteer of the Bombay Presidency*, Vol. IX, Part I, *Gujarat Population, Hindus*, (1901).
- CHOKSEY, R. D. .. *Economic Life in the Bombay-Gujarat, 1800-1939*, (1968).
- COMMISSARIAT, M. S. .. *A History of Gujarat*, Vol. I, (1938) and Vol. II, (1957).
- DAMES, M. L. .. *The Book of Duarte-Barbosa*, Vols. I, (1918).
(TRANSLATOR AND EDITOR)
- DESAI, G. H. AND CLARKE, A. B. *Gazetteer of Baroda State*, Vols. I, and II, (1923).

English—contd.

BOOKS—contd.

- DESHPANDE, C. D. .. *Western India, a Regional Geography*, (1948).
- DESHPANDE, M. K. .. *Revenue Department Manual*, Vols. I and II, *Government of Maharashtra*, (1961).
- DHARAIYA, R. K. (DR.) .. *Gujarat in 1857*.
- DIKSHIT, K. R. .. *Geography of Gujarat*, (1970).
- DIRECTOR OF INFORMATION, *Folk Dances of Gujarat*, (1966).
GOVERNMENT OF GUJARAT
- DOCTOR, C. C. .. *Administrative Atlas, 1971 Census*.
- ENTHOVEN, R. E. .. (i) *Supplement to Gazetteer of the Bombay Presidency*, Vol. VI-B, *Rewa Kantha, Cambay and Surat Agency*, 1904.
(ii) *The Tribes and Castes of Bombay*, Vol. I, (1920).
- FORBES, A. KINLOCH .. *Rasmala*, Part I.
- GEORGE, WATT .. *A Dictionary of the Economic Products of India*, Vol. III.
- GOVERNMENT OF GUJARAT .. *Gujarat, the torchbearer of Prohibition*, (1971).
- GRANT, DUFF .. *The History of the Marathas*, Vol. I.
- GREEN, A. M. .. *Supplement to Gazetteer of the Bombay Presidency*, Vol. III-B, *Kaira and Panchmahals*, (1914).
- KHERA, S. S. .. *District Administration in India*, (1965).
- KUMARAPPA, J. C. .. *Economic Survey of Matar Taluka*, (1930).
- MAJMUDAR, M. R. (DR.) .. *Cultural History of Gujarat*, (1965).
- MEHTA, R. N. (DR.) .. *Excavations at Nagara*, (1968).
- MISRA, S. C. (DR.) .. *The Rise of Muslim Power in Gujarat*, (1963).
Muslim Communities in Gujarat, (1963).

English —contd.

BOOKS—contd.

- MUHAMMAD QASIM FIRISHTA *Tarikh-i-Firishtah* (1606-1611), (ENGLISH TRANSLATION BY JOHN BRIGGS).
- NAIK, T. B. .. *The Bhills—A Study*, (1956).
- PATEL, G. D. (DR.) .. (i) *The Agrarian Reforms in Bombay*, (1950).
(ii) *The Indian Land and Legislation*, (1954).
(iii) *The Land Problem of the Re-organized Bombay State*, (1957).
(iv) *The Land Revenue Settlements and the British Rule in India*, (1969).
- PATTAMBHI SITARAMAYYA .. *History of the Indian National Congress*, Vol. I, Delhi, (1969).
- RAJYAGOR, S. B. (DR.) .. *Education in Gujarat from 1854-1954. A Thesis for the degree of Master of Education*, Maharaja Sayajirao University of Baroda, Faculty of Education and Psychology, (1958).
- ROGERS, A. .. *The Land Revenue of Bombay*, Vol. I.
- SHAH, P. G. .. *The Naikas-Naikdas, (A Gujarat Tribe)*, Part I, (1959).
- SIKANDAR BIN MUHAMMAD *Mirat-i-Sikandari*, (1960).
ALIAS MANJHU CIR, 1611,
(TRANSLATED INTO ENGLISH BY SIR, E. CLIVE)
- SYED, NURULLAH AND NAIK, F. P. .. *A History of Education in India, (During the British Period)*, (1951).
- TIRMIZI, S. A. I. .. *Some Aspects of Medieval Gujarat*, (1968).
- TRIVEDI, A. B. .. *Post War Gujarat*, (1949).
- TRIVEDI, R. K. .. *Village Survey Monograph Ambav, District Kaira, Census of India, 1961, (1969)*.

English—contd.

REPORTS, JOURNALS, ETC.

- ALL INDIA CONGRESS, CHAIRMAN, RECEPTION COMMITTEE .. *Souvenir of 66th Session of the Indian National Congress at Bhavnagar, (1961).*
- BALASINOR STATE .. *Report on the Administration of the Balasinor State for the years 1905-06 to 1943-44.*
- BUREAU OF ECONOMICS AND STATISTICS, GOVERNMENT OF GUJARAT (i) *Directory of Small Industrial Units in the Unorganized Sector in Gujarat State, Vol. IV, (1972).*
(ii) *Location of Industries in Gujarat State, 1956, 1960 and 1965, (1969).*
(iii) *Quarterly Bulletin of Economics and Statistics, Vol. II, No. 1, January-March, (1962) and Vol. XII No. 1, January-March, (1972).*
- CAMBAY STATE .. *Administrative Reports of Cambay State for the years 1937-38 and 1938-39.*
- DIRECTOR OF EDUCATION, GOVERNMENT OF GUJARAT. *Annual Administration Reports on Education, from 1961-62 to 1970-71.*
- DIRECTOR OF PORTS, GOVERNMENT OF GUJARAT *Traffic Review of ports of Gujarat (1964-65, 1965-66).*
- ELECTION COMMISSION, GOVERNMENT OF INDIA *Reports on General Elections in India, 1951-52, 1957, 1962 and 1967.*
- FOREST DEPARTMENT, GOVERNMENT OF GUJARAT *Forests Gujarat, (1968).*
- GOVERNMENT OF BOMBAY .. (i) *First Five Year Plan, Bombay State Kaira District, (1951-52 to 1955-56).*
(ii) *Papers relating to the Second Revision Settlement of the Anand Taluka of the Kaira District, Bombay, (1912).*
(iii) *Papers relating to the Second Revision Settlement of the Borsad Taluka of the Kaira District, Bombay, (1942).*
(iv) *Papers relating to the Second Revision Settlement of the Kapadvanj Taluka of the Kaira District, (1942).*

English—contd.

REPORTS, JOURNALS, ETC.—contd.

- (v) *Papers relating to the Revision Survey Settlement of the Matar Taluka of the Kaira Collectorate, Bombay, (1895).*
- (vi) *Papers relating to the enquiry into the Current Revision Settlements of the Matar and Mahemadabad Talukas of the Kaira District.*
- (vii) *Papers relating to the Second Revision settlement of the Nadiad Taluka of the Kaira District, Bombay, (1912).*
- (viii) *Jamabandhi Revision Settlement Report of the Petlad Taluka of the Baroda Division, Baroda, (1921).*
- (ix) *Papers relating to the Revision Survey Settlement of the Thasra Taluka of the Kaira Collectorate, Bombay, (1895).*
- (x) *Statistical Atlas of Bombay State, (1950).*
- (xi) *Statistical Atlas of the Bombay Presidency, (1925).*
- (xii) *Supplement to Gazetteer of Bombay Presidency, Vol. VI-B, Rewa Kantha, Cambay and Surat Agency, Bombay, (1926).*
- (xiii) *Survey and Settlement Reports of Nadiad, Kapadvanj, Anand, Borsad, Mahemadabad and Matar.*
- (xiv) *The Bombay Treasury Rules, 1960, Vols. I-II, (1960).*
- GOVERNMENT OF GUJARAT .. (i) *Basic Agricultural Statistics, (1968).*
(ii) *District Census Hand Book, Kaira District, 1961 and 1971.*
(iii) *District Census Hand Book 1971, Kheda District, Part X-C-I, (1973).*

English—contd.

REPORTS, JOURNALS, ETC.—contd.

- (iv) *District Census Hand Book* 1971, Kheda District, Part X, A and B, (1972).
 - (v) *Draft fifth Five Year Plan*, 1974-79, (1973).
 - (vi) *Gujarat Government Gazettee*, Vol. VII, No. 13, Part IV-C, dated 31st March, 1966.
 - (vii) *Perspective Plan of Gujarat*, 1974-1984, (1972).
 - (viii) *Statistics of Area, Production, yield per Acre of Principal Crops in Gujarat State for the period 1949-50 to 1963-64*, (1965).
- GOVERNMENT OF INDIA ..
- (i) *Cultural And Migration Tables, Census of India 1961*, Gujarat, Vol. V, Patr-II-C, (1964).
 - (ii) *Fairs and Festivals, Census of India 1961*, Gujarat, Vol. V, Part VII-B, (1965).
 - (iii) *Gazetteer of the Bombay Presidency*, Vol. VII, Baroda, (1883).
 - (iv) *General Report on the Census of India 1961*, Gujarat, Vol. V, Part I-A (i), (1965).
 - (v) *Housing and Establishment Tables*, (E-Series Tables), *Census of India 1961*, Gujarat, Vol. V, Part IV-B, (1963).
 - (vi) *The Imperial Gazetteer of India*, Vols. II, IX and XIV, (1908).
 - (vii) *Tables on Scheduled Castes and Scheduled Tribes, Census of India 1961*, Gujarat, Vol. V, Part V-A, (1964).

BIBLIOGRAPHY

English—contd.

REPORTS, JOURNALS, ETC.—contd.

- GUJARAT STATE CO-OPERATIVE LAND DEVELOPMENT BANK LTD. *Annual Report* (1972-73).
- HEALTH AND INDUSTRIES DEPARTMENT, GUJARAT STATE *Report of the Municipal Rationalisation Committee*, (1961).
- H. K. L. KAPOOR COMMITTEE *Report on Consolidation of Holdings, Gujarat State*, Vol. I and II, (1964).
- KHEDA JILLA PANCHAYAT .. *Pragati Darshan*, 1970.
- NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING, NEW DELHI
- (i) *The Indian Year Book of Education 1964, Second Year Book 'Elementary Education'*.
 - (ii) *The Indian Year Book of Education 1961, First Year Book. A Review of Education in India*, (1947-61), Revised Edition (1965).
- PANDIT, P. B. .. *Article on the Language and Dialects, Published in the Bhavnagar Souvenir of the 66th Session of the Indian National Congress*, 1961.
- PATEL, G. D. (DR.) .. *Reports of the Alienation Enquiry Officer for the Gujarat States on Balasinor*, (1951), *Cambay* (1951), *Godasar* (1951) and *Umata States*, (1951).
- RESERVE BANK OF INDIA ..
- (i) *Statistical Tables Relating to Banks in India*, 1970.
 - (ii) *Annual Reports of Industrial Finance Corporation*.
 - (iii) *Gujarat Industrial Development Corporation*, (1972).
 - (iv) *Gujarat Industrial Investment Corporation*, (1972).
 - (v) *Gujarat Small Industries Corporation*, (1972).

English—concl'd.**REPORTS, JOURNALS, ETC.—concl'd.**

(vi) *Gujarat State financial Corporation*,
(1972).

(vii) *Industrial Credit and Investment Corporation*, (1972).

(viii) *Industrial Development, Bank of India*, (1972).

(ix) *National Industrial Development Corporation*, (1972).

SANDESARA, B. J. .. 'Origin and Evolution of Language' Article in the *Bhavnagar Souvenir of the 66th Session of the Indian National Congress*, 1961.

THE TIMESS OF INDIA PRESS, BOMBAY .. *The Indian Year Book and Who's Who for the years 1933, 1940-41, and 1945-46.*

Gujarati**BOOKS, REPORTS, JOURNALS, ETC.****BOOKS**

DESAI, SHANTILAL (DR.) .. *Rashtrano Swatantra Sangram Ane Gujarat*, (1972).

GUJARAT, LOK SAHITYA SAMITI, AHMADABAD .. *Gujarati Lok Sahitya Mala, Mankō 11*, (1969).

JOTE, R. B. .. *Khambhat-no-Itihas*, (1935).

KALELKAR, D. B. .. *Jeevta Tahevaro*, (1930).

PARIKH, N. D. .. *Sardar Vallabhbhai Patel, Part I*, (1950).

PARIKH, S. D. .. *Kheda Satyagraha*, (1954).

PARMAR, JAYMAL .. *Aapni Lok Sanskriti*, (1957).

PATHAK, RAMANARAYAN AND DESAI, SHANTILAL (DR.) .. *Gujaratman Rachnatamak Sanstha Ane Sevako*, (1970).

SHAH, P. C. AND SHAH, C. F. (EDITORS) .. *Charotar Sarvasangraha, (Kheda Jillo Mahiti Granth)*, Part I, and II, (1954).

Gujarati—concl'd.**BOOKS—concl'd.**

SHUKLA SHIVSHANKAR P. .. *Gujaratni Lokmatao*

RAJYAGOR, S. B. (DR.) .. *Gujaratno Kelavanino Itihas*, (1966).
Gujarat-Ek-Darshan, (1969).

YAGNIK, I. K. .. *Atmakatha, Vol. I*, (1967).

REPORTS, JOURNALS, ETC.

BOMBAY STATE .. *Biji Panch Varshiya Yojna, Kheda Jillo*, (1959)

DIRECTOR OF HARIJAN AND ADIVASI WELFARE DEPARTMENT, GOVERNMENT OF GUJARAT .. *Pachhatvarg Kalyan Khatano Varshik Vahivati Aheval*, (1968-69).

GOVERNMENT OF GUJARAT .. (i) *Adivasi Kalyan Karyakram*, (1972).

(ii) *Audhyogic Ruprekha, Kheda Jillo*, (1971).

(iii) *Harijan Kalyan Karyakram*, (1972).

(iv) *Pragatina Panthe, Gujarat Rajya, Ayojanna Adharvarsha, Kheda Jillo*, (1970).

(v) *Swatantrya Sangramna Ladvaiya, Part I*, (1969).

(Bk) H-50—109 (Lino)

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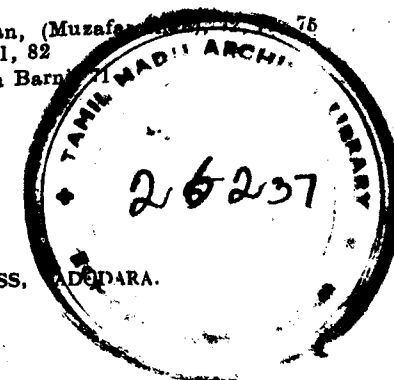
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