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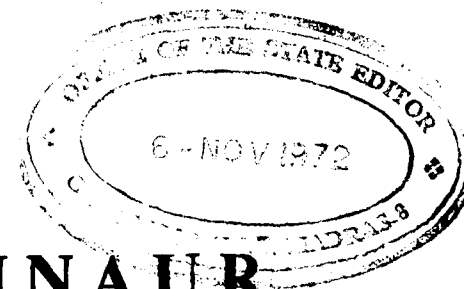
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HIMACHAL PRADESH

KINNAUR

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KINNAUR



BY

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HIMACHAL PRADESH

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PLAN OF CONTENTS

Chapters	Pages
Forewrod	I—II
Preface	III—v
I General	... I—47
II History	... 48—65
III People	... 66—123
IV Agriculture and Irrigation	... 124—156
V Industries	... 157—176
VI Banking, Trade and Commerce	... 177—193
VII Communications	... 194—207
VIII Miscellaneous Occupations	... 208
IX Economic Trends	... 209—227
X General Administration	... 228—233
XI Revenue Administration	... 234—255
XII Law and Order and Justice	... 256—269
XIII Other Departments	... 270—285
XIV Local Self Government	... 286—293
XV Education and Culture	... 294—299
XVI Medical and Public Health Services	... 300—305
XVII Other Social Services	... 306—309
XVIII Public Life and Voluntary Social Service Organisations	310—317
XIX Places of Interest	... 318—336
Appendices	... 337—395
Glossary	... 396—404
Bibliography	... 405—406
Index	... 407
Photographs	
Map	

FOREWORD

It gives me immense pleasure to place this third district gazetteer of Himachal Pradesh in the hands of the readers. It is too much to presume that any gazetteer will contain every single information relating to a district, but an effort has been made to make it competent, compendious and comprehensive. This book will, I hope, lend a hard-rock basis of facts, against which the validity of hypothesis, legends and myths could be tested. Of late a large number of research scholars is probing into the historical, socio-economic and cultural aspects of the people of this area. To them, it is hoped that this volume will serve as a useful guide.

In the present venture an effort has been made to present the very true picture of the chivalrous people of Kinnaur, their past and present, culture and language, history, trade and commerce, social taboos, fairs and festivals; and places of interest. The theory that they are the descendants of mythical Kinners is too bold an assertion to make and is risky to affirm. A number of theories have burgeoned as to how this race of celestial choristers lost that aura but it is established beyond doubt that the present area of Kinnaur was the country or a part of the country once occupied by the race of Kinners. The present inhabitants are the simple hill-folk, ignorant of the pride and prejudices of a modern man. Although vanity is a thing unknown to them their sense of self respect is of a very high standard. They are God fearing and law abiding. The numerous *devis* and *devtas*, lamas and rituals, songs and dances are peculiar to this land-locked district. No wonder that the rugged grandeur of snow-clad mountains, weird and awe-inspiring depth of the valleys, are considered the abodes of Gods by these people; its very mystery generates enough faith in the supernatural

Kinnaur a tahsil of Mahasu was elevated to the status of a district only in 1960. During this short period, against violent odds of nature, at the cost of many human lives, to-day most of the important villages have been connected with roads and places

which could once be reached only after long and arduous marches can now be reached within hours. Modern amenities and for that matter various developmental projects carried through by the Government of Himachal Pradesh have made profound changes. On the agricultural side alone the research work in progress on cumin, saffron, grapes, *chilgoza* and other dry fruits shall in near future greatly improve the economy of the district.

The co-operation and help rendered by various individuals and institutions will be suitably acknowledged in the Preface but I should like to congratulate Mr. M.D.Mamgain and his able and intelligent team of Compilers for this excellent work.

Simla-2,
August 11, 1971.

(U.N.Sharma) I.A.S.,
Financial Commissioner,
Himachal Pradesh.

PREFACE

The rugged grandeur, awe-inspiring rocks, snow clad mountains, scenic beauty in patches and *chilgoza* forests are the important and unique features of Kinnaur district. It is a treat and paradise for hikers, mountaineers, adventurers and aesthetes. For ages this area remained obscure and isolated. A few travelogues by English writers revealed some aspects of cultural and social life of the people. The emphasis was on physical features and the idea in mentioning these was naturally political for the colonial power.

There was a time when the district bore homogeneity, with the neighbouring Tibet with which they had not only a flourishing trade but marital relationship, particularly of the people inhabiting the valley of Hangrang. With the passage of time and with the opening up and linking of the district with the rest of the State, all such influences disappeared soon. The rapid progress which contributed towards the economic emancipation of this border land and changed the shape of things, was to take place after its elevation to its present status of a district in the early sixties. Till then it was just a tahsil of Mahasu district. During the erstwhile princely regime, the area formed part of the former principality of Bushahr State. Administratively the district did not come across many vicissitudes.

The volume is third in the series of district gazetteers of the State, the earlier two being those of Chamba and Sirmur Districts. The present venture was taken up as early as 1964-65 during the sub-editorship of Shri D. S. Kutlahria, when the basic material was collected. However, it came to my lot to see that the material is properly placed and edited. In the absence of any old gazetteer, the work had to be started from a scratch. The *Simla Hill States Gazetteer of 1910 (Bushahr State)* contained useful information but was rather sketchy and too little for writing a new gazetteer. The pioneering efforts aimed at discovering and writing about the various aspects of the district however, were

made by explorers like Alexander Gerard, Andrew Wilson, James Baillie Fraser, Rahul Sankrityayan the eminent Hindi writer and by a host of other writers. These books stood us in good stead.

The efforts of Shri Nalni Dhar Jayal of the Indian Administrative and Foreign Service, in his capacity as Deputy Commissioner to make the volume factually correct and depict the in-roads that the modern era has made cannot be acknowledged in ample measure here. The enthusiastic interest evinced by that young and energetic officer in our endeavour has really been great. Similarly Shri B. C. Negi, I. A. S., Secretary to the State Government readily extended his help and I am indeed grateful to him for his valuable suggestions and some additions particularly in the first four chapters of the volume. I also place on record my grateful thanks to the following departments and offices for the material furnished by them :-

1. The Survey of India,
2. The Geological Survey of India,
3. The Meteorological Survey of India,
4. The Directorates of Education, Health, Animal Husbandry, Agriculture, Industries, and Economics and Statistics, Himachal Pradesh,
5. The Chief Engineers of Public Works and Electricity Departments and the Chief Conservator of Forests, Himachal Pradesh,
6. The Inspector General of Police and his subordinate offices,
7. The Himachal Pradesh State Co-operative Bank, Simla, and
8. The Census Department of Himachal Pradesh.

The assistance and encouragement provided by the two State Editors, Shri H.R. Mahajan now Member of the State Public Service Commission and Shri U. N. Sharma now Chairman of the Himachal Pradesh State Electricity Board, during whose stewardship the volume has been brought out, amply deserve the sincere gratitude of the Unit.

My grateful thanks are also due to Shri Goverdhan Singh Librarian of the Himachal Pradesh Secretariat Library for his ever ready help in providing material and to Sarvshri D.D. Sharma and S.L. Sharma Compilers of this Unit for taking pains in seeing through the proof reading and printing in trying circumstances. The help rendered by the other Compilers, Sarvshri B. S. Rawat, Kesar Singh Thakur, B.K. Sharma, Jai Lal Sharma and Puran Chander Sharma deserve my appreciation.

K: I will be failing in my duty, if I do not express my thanks to Dr. P.N. Chopra, M.A., Ph.D., Editor, District Gazetteers and the staff of the Central Gazetteers Unit, Ministry of Education and Social Welfare, (Department of Culture) Government of India, New Delhi, for their effective role in planning and co-ordinating the work of preparation of the District Gazetteers. The Unit scrutinized the draft of this volume with great care and made several suggestions with a view to improving the standard and the quality of the publication. It may also be mentioned here that a portion of the expenditure incurred on the compilation and printing of the District Gazetteers is being met by the Government of India.

The Gazetteer may be having its short comings to the critical and discerning eye and I do readily own the deficiencies, without holding, as a mitigating excuse, the numerous odds with which I was confronted, but I am sure it will be useful to scholars, sociologists and administrators alike.

Simla-2,
November 8, 1971

M.D. Mamgain
State Editor

CHAPTER I

GENERAL

INTRODUCTORY

Kinnaur until recently known as Chini tahsil of Mahasu district came into being as an independent district from May 1, 1960. Because it is one of the border districts, internationally, of the country, because it has certain peculiarities of language, history and natural phenomena, the Kinnaur district commands a certain uniqueness among the districts of Himachal Pradesh.

The present name and spellings, that is, Kinnaur were conceived and introduced officially when the district was formed. The earlier names and spellings were Kanawar¹, Kunavur², Koonawur³, Kanaur⁴, Kunawar⁵ and Kanauring⁶. Kinnaur has also taken its name after the principal community i.e. Kanauras occupying the area. Rahul⁷ Sankrityayan has also held the same view.

Location

Kinnaur, the north-eastern frontier district of Himachal Pradesh, is a secluded region, rugged and mountainous to an extraordinary degree and lies on both the banks of the Satluj. It is situated between 31° 05' 50" and 32° 05' 15" North latitude and between 77° 45' and 79° 00' 35" East longitude.

General boundaries

The district adjoins part of Western Tibet with which it shares its eastern boundary by following a well defined water-parting generally along the Zaskar Mountains. Its southern boundary adjoins the Uttarkashi district of Uttar Pradesh and the Rohru tahsil of Mahasu district in Himachal Pradesh by following the crest of the Dhaola Dhar which also divides the Satluj from the Yamuna and Ganga river basins. Its western boundary adjoins the Rampur tahsil of Mahasu district, Himachal Pradesh, while a small portion in the north-western corner adjoins, along the Sri Kand Dhar, the Kulu district of Himachal Pradesh. The northern boundary of Kinnaur adjoins the Spiti sub-division of Lahul and Spiti district

1. As spelt by Victor Jacquemont.

2. As spelt by James Baillie Fraser.

3. As spelt by Capt. Alexander Gerard & Edward Thornton.

4. As spelt by H. A. Rose.

5. As spelt by Thomas Thomson, Andrew Wilson and C. F. Gordon Cumming.

6. The local inhabitants have been calling the place like this.

7. Sankrityayan, Rahul. *Kinner Desh* 1956, p. 292.

by following mostly the water-parting of the Spiti and Satluj river basins until, near the international boundary, it follows the Spiti river and its main tributary the Pare Chhu river. The detailed delineation of the limits of Kinnaur clockwise from its north-eastern and on the international boundary are as follows.

Eastern boundary

(a) With Tibet—From a point on the Pare Chhu, a tributary of the Spiti river, south of Kaurik the boundary ascends one of the ranges leading to Leo Pargial from where it descends along a spur, crosses the Satluj at its bend, again mounts a spur on the opposite bank of the river and following the Zaskar Mountains, lies through the opposite bank of the Raniso pass, the Shimdang pass and the Shipki La, the Khimokul (Gumrang) pass. Thereafter, running in a south-easterly direction, the boundary of Kinnaur culminates on the range at a point which stands at the head of the ridge flanking the Chor Gad valley in the east.

(b) With Uttarkashi district of Uttar Pradesh—From Peak 5,428 metres the boundary of Kinnaur with the Uttarkashi district follows the crest of the ridge on the eastern flank of the Chor Gad valley, via Peaks 6,023 metres and 5,549 metres thence dropping to the Jadh Ganga river near Nelang village.

Southern boundary

(c) With Uttarkashi district of Uttar Pradesh—The boundary follows the Jadh Ganga westwards from a point near Nelang village and, from the confluence of Chor Gad and Jadh Ganga, rises to peak Chagle 5,992 metres, and thence to Peaks 6,075 metres, 5,989 metres and 5,812 metres. From Peak 5,812 metres the boundary with Uttarkashi continues to the Lamkhaga pass 5,280 metres. Whence it follows the crest of the Dhaola Dhar up to Lami pass via successively Peak, 5,890 metres, Borasu Ghati, Peaks 5,849 metres and 5,877 metres, Kimilay pass and Peak 5,712 metres. The boundary of Kinnaur with Uttarkashi terminates at the junction, just west of Lami pass, of this ridge with the ridge from the south dividing the Supin Gad and Nargani Khad.

(d) With Rohru tahsil of Mahasu district in Himachal Pradesh—From the junction west of Lami pass mentioned above, the boundary of Kinnaur with Rohru tahsil continues westwards along the crest of the Dhaola Dhar to successively the Nalgan Ghati, Peak 5,029 metres, Rupin Ghati, Buran Ghati (Brungrang), Peak 5,145 metres, Sharangchu pass, Peak 5,261 metres, Shathal pass and up to point of the ridge west of Shathal pass at its junction with the ridge from peak Hansbeshan 5,240 metres, to the north.

Western boundary

(e) With Rampur tahsil of Mahasu district of Himachal Pradesh—From the point west of Shathal mentioned above, the boundary of Kinnaur with the Rampur tahsil follows the ridge northwards to peaks Hansbeshan 5,240 metres and Termini 3,979 metres whence it drops down to the Satluj river west of Chauhra village, via 161st kilometre on the National Highway No. 22. From the Satluj the boundary follows the ridge dividing the Rupin and Kut villages of Kinnaur and Mahasu respectively, up to Peak 4,004 metres and continues along the ridge via peak Ghata Kanda 5,194 metres to peak Gushu Pishu 5,672 metres, on Sri Kand Dhar.

(f) With Kulu district of Himachal Pradesh—From peak Gushu Pishu the boundary of Kinnaur with Kulu district follows the ridge northwards to peak Kokshane 5,625 metres and up to a point at the junction of the ridge rising from Pin Parbati pass 5,319 metres to the north.

Northern boundary

(g) With Spiti sub-division of Lahul and Spiti district of Himachal Pradesh—From the point on the ridge south of Pin Parbati pass, the boundary of Kinnaur with the Spiti sub-division of Lahul and Spiti district follows the crest of the range dividing the Satluj and Spiti river basins successively through Shakarog Khango 5,100 metres, Tari Khango 4,865 metres, Peaks 5,530 metres, 5,635 metres, 5,871 metres and 6,593 metres, Manirang pass, and Peak 5,887 metres. From Peak 5,887 metres the boundary drops northwards via peak Poh 5,757 metres to the Spiti river just below Tabo village, whence it follows the Spiti river eastwards up to its confluence with the Pare Chhu river whence it then follows up to the international boundary just below Kaurik village.

Total area and population

The area of the district according to Central Statistical Organisation is 6,520 square kilometres. The major portion of the area is uninhabited because of the vast snowy mountains, inaccessible crags and forests. Besides, the extreme cold climate in the major portion of the tract accounts for scanty population. According to the 1961 census the population of the district is 40,980.

Administrative unit

Prior to the merger of the former princely states the area comprising Kinnaur was a tahsil named Chini of the erstwhile Bushahr State, under the charge of a Tahsildar. After the merger it continued to be a tahsil of Mahasu district. In 1960 this tahsil, for reasons of having efficient and convenient administration, was formed into a district to which the entire pargana of Athara Bis comprised in *patwar* circle No. 15, Paunda, the estates of Kandar, Natpa, Kachang (Gharshu,

Rakchang, Salarang), Chhota Kamba, Bara Kamba and Rupī (included in the Rupī *patwar* circle No. 16 of pargana Pandra Bis, tahsil Rampur) were added.

Sub-Divisions

The district stands divided into three sub-divisions, five tahsils and one sub-tahsil. Kalpa sub-division has two tahsils, Sangla and Kalpa. Tahsil Sangla, with headquarters at Sangla, comprises eleven villages, namely, Chhitkul, Rakchham, Batseri, Sangla, Kamru (Mone), Chasu, Shaung, Barua, Sapni, Kanahi and Kilba. Tahsil Kalpa, with headquarters at Kalpa, has twelve villages, namely, Rogi, Chini, Yuwarangi, Duni, Kothi, Khawangi, Telangi, Pangī, Purbani, Pawari, Barang and Mehbar.

Nachar sub-division has only one tahsil of Nachar with headquarters at Nachar, comprising twenty-two villages namely Chauhra, Taranda, Bari, Paunda, Kangos, Sungra, Nachar, Panwi, Punang, Jani, Ramni, Bhabha, Chagaon, Urni, Yula, Miru, Rupī, Bara Kamba, Chhota Kamba, Rakchang, Natpa and Kandar.

In the Puh sub-division are included two tahsils and a sub-tahsil. Tahsil Morang, with headquarters at Morang, includes fifteen villages, namely, Charang, Kuno, Thangi, Morang, Nesang, Rispa, Ribba, Rarang, Akpa, Jangi, Lippa, Asrang, Spilo, Labrang and Kanam. Tahsil Puh, with headquarters at Puh, has nine villages namely Puh, Dabbling, Khabo, Namgya, Rushkalang, Giabong, Ropa, Sangnam and Shyaso. Prior to September, 1965 Puh was a sub-tahsil. Sub-tahsil Hangrang with headquarters at Leo, includes eight villages namely Nako, Malling, Chango, Shyalkhar, Sumra, Leo, Chuling and Hango.

There are three police stations, three police posts, eleven checkposts and twenty-one bridge guards.

TOPOGRAPHY

The entirely mountainous district is more or less equally divided by the main Satluj valley, the river entering the district from the north-east and leaving at its western end. In its passage through Kinnaur the Satluj river successively crosses three more or less parallel mountain ranges: the Zaskar Mountains, the Great Himalaya and the Dhaola Dhar. The crest of the Zaskar Mountains forms the eastern international boundary of Kinnaur with Tibet; the Great Himalaya extends from the north-west to the south-eastern end of the district, roughly bisecting it; while the crest of the Dhaola Dhar constitutes the southern boundary of Kinnaur at the south-eastern corner of which the last two ranges merge. Between these three mountain ranges lie the subsidiary valleys of varying dimensions from

the narrow glens and ravines of the Tirung and the Taiti streams to the sizeable valleys of the Spiti and the Baspa rivers. The significant tributary streams and rivers that flow into the main Satluj river from the south or along its left bank are successively the Gyanthing Gad, Tirung Khad, Baspa river, Duling Khad and Panwi Khad; and likewise those that flow into the Satluj river from the north or along its right bank are the Spiti river, Ropa Gad, Taiti Garang, Kashang Khad, Baura Gad, Wangar Gad and Shorang Gad. In between are innumerable mountain rills that rapidly disgorge from hanging valleys into the main Satluj river and its tributaries. Most of the villages of Kinnaur lie along either bank of the main valley of the Satluj river, while the remaining habitations nestle inside the foregoing main subsidiary valleys.

The general elevation of the district may be determined from the fact that the bed of the Satluj, necessarily the lowest part as it drains the whole district, slopes from the elevation of about 3,050 m at its point of entry from Tibet at the north-eastern boundary to about 1,220 m near Chauhra where it leaves Kinnaur at its western boundary.

Hills and mountains

The crests of the three mountain ranges that encompass Kinnaur, the Zaskar Mountains, the Great Himalaya and the Dhaola Dhar, lie generally in perpetual snow with many peaks rising between 5,180 m and 6,770 m, except where passes break the high ranges, generally between elevations of 4,267 m and 5,486 m, to allow passage from one drainage system to another. The highest two peaks in Kinnaur, Leo Pargial, 6,770 m and the other Peak 6,608 m are in the Zaskar Mountains rising from the Spiti river. The third and the fourth highest peaks, Peak 6,593 m, which overlooks Manirang Pass at the head of the Ropa valley, and Mt. Kinnaer Kailas or Raldang, 6,473 m rise in the Great Himalaya. The first rises on the Satluj and Spiti divide. The second i.e. Raldang Kailas rises from the base of Satluj river 1,900 m to spectacular 4,572 m in a sheer wall, a rock, ice and snow, overlooking on the opposite bank the district headquarters, Kalpa, from where the view of the Kailas is one of incomparable beauty and majesty. The characteristic dome-shaped summit of Raldang, with its northern shoulder is clearly visible from Kufri (near Simla), standing aloof amidst its lesser surrounding satellites. As one drives on the National Highway No. 22 up the Satluj valley, the first vision, as one enters the district is that of Mt. Kailas crowning the valley with impressive dignity. In the Kinnaer Kailas group of the Great Himalaya, there are five or six peaks over 6,000 m in the heart of the district each with its lone splendour and charm.

The peaks of the third mountain range, the Dhaola Dhar, are somewhat lower, ranging generally from 4,877 m to 5,791 m.

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The peaks of the third mountain range, the Dhaola Dhar, are somewhat lower, ranging generally from 4,877 m to 5,791 m.

About the general character of the mountains, the lee sides are invariably rugged, and commonly well clothed with wood, whilst the opposite ones are more gently sloped, not so well supplied with timber, and afford rich pasturage; this is particularly the case in the lateral valleys that run from N.N.E. and N.E. to S.S.W. and S.W., and branch off from the Satluj and Baspa rivers. They have all, the same character, which is very strongly marked. The north-western sides of the mountains are remarkably precipitous, and present bold cliffs of a thousand varied forms, and the opposite ones are gradual acclivities often covered with turf. In that part of the dell of the Satluj which lies N. E. and S.W. this difference is not so perceptible as the strata are inclined to the east and E. N. E., or nearly in the direction of the course of the river.

In the valleys that run N.W. and S.W. it is difficult at the outset for an inexperienced person to decide which face is most rugged, as they both seem equally precipitous. The huge steep rocks stand projected at an angle up to 70 degrees against the narrow valleys.

The Dhaola Dhar is traversed by the Satluj river between Chauhra and Taranda, and continues on either side of Tikadda Gad into Kulu, parallel to the Great Himalaya where it becomes the Pir Panjal range. The Dhaola Dhar stands between the watersheds of Pabar Gad and Satluj river. Near its termination a minor range starts in a south-easterly direction, and forms the watershed between the Pabar and Satluj rivers.

The boundary between Rampur and Rohru tahsils is a south-western extension of this minor range, which merges in the Lesser Himalaya, south of the Dhaola Dhar, on the outer flanks of which stand Simla and other hill-stations.

The district is formed of a great mass of mountainous spurs with very precipitous sides jutting out in every direction from the main ranges, between which there are narrow ravines or small rivers with sheer banks. The only level ground to some extent, is in the Baspa valley at elevation from 2,438 to 2,591 metres. Leo Pargial is a peak of the ridge separating the watersheds of the Spiti river from the Satluj, and rising about eleven kilometres north-east of the confluence of those rivers. Vegetation has been observed to reach the height of 5,180 metres; yonder its further progress is checked by want of soil. At the highest point reached, the peak had been found to be formed of enormous disunited blocks of granite, between which were large lumps of ice, clear as crystal.

Leo Pargial rises from the Satluj, in gigantic walls, towers and sharp peaks of cream-coloured granite and quartz, which has all the appearance of

marble. So precipitous are the walls that at various places a stone could easily roll unhampered from the summit down into the river, a descent of over 3,860 metres. In summer, here and there white rock is usually streaked with snow, and it is capped by an enormous citadel with small beds of soft granular snow, but there is generally little snow upon the gigantic mass of the rock, because the furious by howling winds which keep on blowing continuously all round the year do not permit any snow to stick about. Even during winter Leo Pargial presents much the same appearance.

Even¹ more remarkably than the Kailas, this gigantic mountain suggests, an inaccessible dwelling-place of the gods; a fortress shaped by celestial hands. And if the scene is impressive by day, it is absolutely overpowering at night, when the mantle of night rises slowly behind the dark precipices with lengthening shadows. While itself unseen, the moon's white light illuminates the deep gorges of the Spiti river, and throws a silvery splendour on the marble-like towers and battlements of Leo Pargial. It does not at all appear as if any external light is falling, but rather as if this great castle of the gods, being transparent were lighted up from without and yet within, out of its own radiance, throwing its supernatural light on the silent and savage scenes around.

The Hangrang ridge, on the mountain range on which the pass of Hangrang is situated, forms the boundary between the lower parts of Kinnaur and the Hangrang area where this range terminates close to the point where the Satluj is joined by the Spiti river. It also marks the highest limit of the deodar and *chilgoza* trees and beyond which no tree vegetation grows.

Raldang Kailas, a lofty mountain separating the valley of the Baspa from that of the Tidong, has for its crown pointed summits and in its lap immense expanse of snow. Gerard, who viewed it from the left bank of the Satluj, gives the following description.

"Some² idea of it may be formed by imagining an assemblage of pointed peaks, presenting a vast surface of snow, viewed under an angle of twenty-seven degrees, and at a distance of not more than five miles in a direct line."

At another place Gerard says, "There³ is a mountain of the same name near Reedung, which has an elevation of 30° to 32°. It rises to the height of 12,000 feet above the town, or 21,000 higher than the sea; and

1. Wilson, Andrew. *The Abode of Snow*, 1876, p. 149.
2. Thornton, Edward. *A Gazetteer of the Territories under the Government of the East India Company*, 1862, p. 818.
3. Gerard, Capt. Alexander. *An Account of Koonawur, in the Himalayas etc. etc.* 1841, pp. 140-41.

to show the idea the natives have of the Eastern Kylas, I need only mention that the Reedung Kylas, is not reckoned half of the other, and is said to be a piece of it, broken off and removed by the gods to please a devotee; they also say that the Eastern Kylas is much steeper than the Reedung one. This estimate is very vague, for if both the mountains called Kylas be taken at the same height from the ground, the eastern one will come out 30,000 feet. At all events, however, it must be very elevated, considering the vast height of the plain from which it rises."

According to the popular legend, Kailas is supposed to be the abode of Lord Siva where He dwells with His consort Durga or Parvati. Kailas and Khaskar opposite Kalpa village have a sacred character. Kailas is believed to be peopled by the souls of the dead, and Khaskar to be the abode of Siva. At certain seasons music is heard on Khaskar and old men say that on the smallest of the peaks visible from Chini there is a pool surrounded by mountains, where there is a temple of Siva, and that other deities have their homes in the neighbourhood. They tell how, many years ago, a holy fakir came to this place to worship Siva. Having done so he asked some favour, and there-by incurred the god's displeasure with the result that he was turned into a rock, which is said to be visible from Chini to the north of Kailas. According to the local belief this rock is tinted, white at sunrise, red at midday, and green at sunset.

There is a chain of mountains emanating from Tibet which separates the valley on the southern side of the Satluj from that of the Ganga and its tributaries, including the Yamuna and ends somewhere near the south of the town of Nahan. Capt. Hubert in his *Geological Report of the Himalayas* calls this chain as the Indo-Gangetic chain.

Plateaus and plains

Kinnaur is not essentially a land of valleys. Its very physical constitution is such that flat lands or vast level grounds are rare. At best whatever small flat land is available, that is found mostly in the valleys of three important rivers of this district. At worst there are wide and rugged mountains. There is no plateau worth mentioning.

Valleys

The Satluj Valley—Among the valleys the largest is that of the Satluj embracing both the sides of the river. The length of this valley is about 140 kilometres, its general direction being from north-east to south-west. The

left bank of the river, which has a north-western aspect, contains comparatively more plain land. The villages are situated only a few hundred metres above it. Here are found extensive vineyards and thriving crops, interspersed with orchards of apricot and apple. The right bank of the river contains better pasturage. Needless to say that on either side there are streams and ravines exhausting themselves into the Satluj. On the sides of these ravines grow huge morina and rye pines. Far above these are the broad cedar trees rising on the snowy peaks in unbroken stillness and solitude. What damage centuries of rain and rough weather have not done to the glory of the old deodar, the material needs of man may disturb the equilibrium. Gradually with a view to supplying that need of this age the forests will have to be exploited and at the same time regenerated so that irreparable damage is not done to the catchment area.

On this valley there are many cliffs mentionable being Taranda, Wangtu and Rogi. Meadows of rich grass, golden with large yellow buttercups, and, well-cultivated fields form a striking spectacle which lingers on the memory of a visitor. The important places in this valley are Sungra, Nachar, Kilba, Pawari, Ribba, Morang and Namgya on the left bank of the Satluj and Ruppi, Bara Kamba, Chhota Kamba, Natpa, Chagaon, Urni, Kalpa, Kothi, Pangi, Rarang, Jangi, Kanam and Puh on the other side.

The Spiti Valley—The valley next in importance is that of Hangrang, also known as Spiti valley. It is on an elevated region bounded on the south and west by the lofty limestones range of Hangrang, on the north by Ladakh, and on the east by Tibet. The length of this valley is about thirty-two kilometres which includes the lower part of the course of the Spiti river which runs from north to south. The lowest village situated in this valley is at about 2,800 metres and the highest at about 3,660 metres. The ground on the western side declining gradually joins the dell of Satluj at an excessively rugged point.

With the exception of some narrow strips there are only few spots capable of culture such as Sumra, Shyalkhar, Hango, Chuling, Nako, Chango, Mallang and Leo but these are significant as far as their extent is involved otherwise the fields up to about 3,960 metres elevation at Nako, yield abundant harvests. The face of the valley by and large exhibits a picture of sterility, not easy to be conceived, so very different from the evergreen forests of the lower tracts. The ground is elevated for vineyards and the apricots do not thrive at the higher places.

The Ropa Valley—This valley, which runs north-west and south-east, formed by the Ropa stream is also known as Shyaso or Sangnam valley. The Ropa stream courses through the inhabited area of about thirteen kilometres and has little wood except stunted pines and birches in its run. On the north-east and south-east the ranges bounding the valley rise to about 4,500 m. For about eight kilometres on the face of the ranges the land is rich for cultivation and possesses orchards of apple and apricot as well as fields of vineyard. This is due to the abundant availability of water in the valley. Important villages lying in the valley are Ropa, Giabong, Sangnam and Shyaso.

The Wangpo or Bhabha Valley—Next to the Ropa is a small wooded valley of Wangpo or Bhabha. In this dell are about nine villages, namely, Katgaon, Huri, Karaba, Yangpa, Bei, Yutrang, Siangon, Kafnun and Homte. Through the valley runs a stream in torrential dashness merging with the Satluj.

The Tidong Valley—This valley or glen presents to the beholder appropriately described as smoothness but ruggedness which has been a picture not of the "a scene of savage grandeur." The pathway which leads along the coast of the river is almost frightening at most places. The length appropriate for cultivation purposes is about thirty-two kilometres and within itself the valley encloses the villages of Kuno, Charang, and Thangi, the village of Charang being the highest, about 3,600 m from the mean sea level. Being rugged in nature, full of rocks, caves, the population of the valley is rather low and the communication with the outside world is confined to those who have to go in or come out unavoidably. There are few dwarf pines, mountain ashes and some bushes except on the north-western slope where one comes across deodar and *Pinus Gerardiana*. The top of the valley is awe inspiring and rugged. The stream which runs its course in the valley is known as Tirung.

The Baspa Valley—It derives its name from the river of the same name that passes through it. It is also termed as Sangla valley after the name of an important village. Right up to its confluence with the Satluj the course of the Baspa river from its source is through a narrow gorge. It is the most romantic and beautiful valley of Kinnaur district and in a sense historic as well. The length is 95 kilometres and on either side of its course are situated most of the important villages of this district. The valley is richly cultivated. It has green pasture lands on either side and the meadows nearer the valley are full of flowers and fruit trees. Near the source of the Baspa we find only a wide grassy valley on either side crowned by astonishingly high snow-ridges. At the head lies the lofty

Chungsakhago pass. The upper part of the valley, almost half of its total length and as far as the village named Chhitkul, there are barren ranges covered with snow all the year round. Thereafter downwards to its meeting point with the Satluj begins the inhabited part reaching to an elevation of 1,830 metres from elevation of 3,475 metres, Chhitkul village. On the level spaces in the valley mostly the trees that grow are vines, willows, hazel, and sweet briar. The lower part of the valley has well laid-out fields and gardens where vegetables of unusual size and sweetness grow. Vine raising has not proved a success in this valley due to the uncertainty of rains.

The local people recall a vague tradition that this valley was once upon a time a sheet of water. This belief is perhaps strengthened by the appearance of the valley, from its breadth, flatness of surface and the quantity of soil. The Baspa river cuts its passage through the mountains which may have enclosed the lake draining out the waters to meet the Satluj at Karchham. Whereas at the confluence the other rivers usually appear to be gracefully silent and sedate in their flow, here the Baspa, at the point of confluence, presents a picture of stunning torrential character.

Besides the above principal valleys we have others of lesser extent nay less interesting. These are the Gyanthing or Nesang, Pejur or Lippa, Kashang, Mulgoon and Yula. Their importance lies in having within their fold rich grazing lands, a boon for sheep and goats.

On the other side are the numerous lateral valleys which are diversified but contain beautiful landscapes and are carpetted with lovely grass, wild flowers of delightful fragrance. On these one finds for miles together the grazing cattle dotted against the green back-ground. Equally charming are the rivulets in these valleys leaping from rock to rock, passing through dark vaults and then emerging as clear water sources.

Description of the valleys given above envisages the existence of an equal number of notable rivers or rivulets, streams or streamlets. In addition to these there are torrents and innumerable rills issuing from sides, shoulders, tops and feet of numerous hills offering their tribute to the mighty Satluj and other rivers.

RIVER SYSTEM AND WATER RESOURCES

Rivers

The sources and the run along with other characteristics of the important rivers and streams draining various parts of Kinnaur and rolling down their waters to the plains of the Punjab are described below :—

The Satluj—This is the principal river of Kinnaur almost dividing the district into two parts. It runs within the Himalayan mountains for about 450 kilometres and the first part of its course is west-north-west. When it enters Kinnaur, it generally takes south-westerly direction. Within the district the length is about 130 km. Its source is supposed to be at a great elevation on the southern face of the Kailas range whence it flows into the sacred lake Rawan Hard. As far as the village of Khabo it is almost a raging torrent. At Khabo it receives the Spiti river where the bed of the stream is still about 2,589 m high from the mean sea level. This is a point which has appropriately been described by travellers as a "scene of awful sublimity."

The Satluj descends from about 3,050 m (the point of its entrance in the district), to 1,220 m at Chauhra flowing almost the whole way between narrow cliffs and therefore, there is no open ground worth describing all along its banks. The water of the river is more or less discoloured. Cultivated fields in terraces are generally at considerable height from its banks and thus immune from the turbidity of water which is largest in June, July and August. The points at which *jhulas* or bridges have been constructed are likewise kept very high and safe from being washed away on account of the flood and rush of water. During the month of January the volume of water is the lowest. The average discharge is about 2,000 cusecs during winter months and about 100,000 cusecs during June-July. Within the limits of the district the river is not navigable owing to the rapidity of flow and presence of boulders. After it leaves the district boundary near Chauhra it enters Mahasu district.

The tributaries of the Satluj in this district are the Spiti, the Ropa, the Taiti, the Kashang, the Mulgoon, the Yula, the Wanger, the Shorang and the Rupi on the right bank and the Tirung, the Gyanthing, the Baspa, the Duling and the Soldang running on the left bank. The following are some of the breadths, taken by Gerard at the narrowest places :—

<i>Suzum</i> (a kind of bridge) under Namgya	22.5 m
Namptoo, below Puh	32.3 m
Wangtu	28 m

There are also some smaller tributaries and a number of seasonal and unimportant streamlets which join the Satluj directly or through its tributaries. There is an interesting legend about the river which, for its mythological interest, may be mentioned.

*Banasur, a general of a raja, perhaps Dev Purna of Kamru, was envied by other courtiers. He left Kamru on a pilgrimage for the lake of Manasarovar where he found its waters in a state of turmoil. The sacred Kailas was not to the north of the Manasarovar and the Brahmaputra river containing yellow water flowed into it from the east. Cold blue water came to the lake from the nearby glaciers and mountains. The waters of the western half of the lake were pink in colour. There were sulphur springs on the banks of the lake emitting lukewarm water. The three waters got mingled together and drowned the colourless lukewarm springs. However, these waters could not live together for long in the same place in peace, and a quarrel among them ensued. When Banasur arrived on the scene of quarrel, Lord Siva, it is believed, was dancing the terrible dance of destruction somewhere in the *tapo bhoomi*. In the course of his deadly dance he kicked the Kailas. The earth gaped wide and the Kailas disappeared in it only to emerge north of the Manasarovar where it now stands. The disappearance of Kailas caused calamity unheard of. A great earthquake accompanied this disorder. Banasur seeking peace of mind, found confusion and utter chaos. He then assumed the role of a peace maker to bring about a truce among troubled waters. After hearing the conflicting views of the different coloured waters he found that a compromise among them was impossible. A division was, therefore, the only solution. He delivered his judgement. An earthquake carried out this decision. The Brahmaputra river, instead of flowing into the Manasarovar had to take its source from it. The pink waters to begin with were to be contained in the Rakas Tal and the excess was to flow into the Indus. As to the most abundant blue icy-cold water, Banasur decided to take most of it along with him. A stream, the Shohneet of the Puranas and the present Satluj was formed. It followed Banasur. He travelled to Shipki and then turned south. Near the domain of his ex-master (perhaps Dev Purna), Banasur turned west from Karchham and went on further about eighty kilometres. Then he ordered the Shohneet to find its own way to the sea. Banasur himself established his capital at Shohneetpur, named after the blue-water river. Shohneetpur is said to be the same as the existing Sarhan.

Banasur consolidated his state, made friends with Dev Purna who was issueless. When he perceived his end approaching fast he sent

*Agnihotri, B.S. The legend of Kinner Desh/Hindustan Times dated the 26th September, 1959.

for Banasur and offered him his state. Thus the Baspa valley got added to the Shohnetpur and a new bigger state called Bushahr came into existence. From that time onwards the investiture ceremony of the rajas of erstwhile Bushahr State used to be held at Kamru, once the capital of the state of Dev Purna.

About the name of this river as Shatadru there is a story in the *Mahabharata**. Once upon a time, sage Vasishtha was wandering in the Himalayas in a melancholy mood and was intent upon committing a suicide. The *Mahabharata* says that :—

दृष्ट्वा स पुनरेवर्षिर्नदीं हैमवतीं तदा ।

चण्डग्राहवतीं भीमां तस्याः स्त्रोतस्यपातयत् ॥

While wandering the great saint saw an awe-inspiring river, flowing from the Himalayas and containing in its current huge and ferocious crocodiles. He threw himself into the strong current of the river.

सा तमग्निसमं विप्रमनुचिन्त्य सरिद्धरा ।

शतधा विद्रुता यस्माच्छतद्रुरिति विश्रुता ॥

The sacred river felt the resplended saint Vasishtha as fire and began to run into hundreds of currents (*shatadru*).

There is a peculiar phenomenon attached to this river. All along its banks, right up to a considerable height from the sea level, residents are able to produce cereals like coarse paddy. It is not possible to grow paddy along the banks of other tributaries of this river even if the altitudes may be the same. It is believed that there is some sort of warm current flowing along the course of the river Satluj which keeps temperature warm, suitable for paddy cultivation.

This river is called by many names such as Sitloda, Shatadru or Satrudra which are of Sanskrit origin, the others being Muksung, Sampoo, Zung-tee, Sumudrung and Sutoodra.

The Spiti—The Spiti river has its source far north on the eastern slopes of the mountain ranges which run between Lahul and Spiti. The river is formed at the base of the Kunzum Range by the confluence of Kunzum La Togpo and the streams Kabzima and Pinglung. It flows eastwards till Kaurik and then turns southwards to join the Satluj river, receiving

* महाभारत चैत्ररथ पर्व, प्रथम खण्ड, पृष्ठ ५१९ ।

in that interval several feeders, of which the principal are the Yulang and the Lipak, from the west. By these accessions it becomes a very considerable stream, measuring in width about 85 metres at Leo. The current is very rapid, and the body of water great. The flanks of the passage are solid granite, stratified, and seem perfectly mural. The contrast between the two rivers is remarkably fine and striking. The Spiti issues forth from its almost sub-terraneous concealment in a calm blue deep body, to meet the Satluj which is muddy and, breaks violently upon the rocks with horrid din; but the salutation is scarcely received before it is grasped in the embrace of its impetuous consort. The noise made by the collusion of the two streams, and echoed by the surrounding heights, is completely stunning.

In the middle of August, the Spiti contains as much water as the Satluj. Near Shyalkhar, its breadth is about twenty-eight metres but the average seems to be almost thrice as much. Spiti has four large tributaries within this district. The only mentionable tributary on the left bank is the Chaladokpo existing between Chango and Changrizang. This torrent rises in the mountains under perpetual snow, and after a north-west course between thirty-two kilometres and forty-eight kilometres, falls into the Spiti, on the left side. The width of the stream estimated by Gerard is about 7.6 metres and the length between thirty-two and forty-eight kilometres. The mentionable tributaries on the right side of the Spiti are the Yulang, the Lipak and the Tirasang. Towards the south of Leo village, the area is washed by a stream named Lipak, falling into the Spiti. The Tirasang is formed by joining the waters of Chuling and Hara streamlets.

The Baspa—This river, a feeder of the Satluj, rises on the north-eastern declivity of the outer Dhaola Dhar of the Himalaya. It is a big and valuable stream, running smoothly down a famous valley. It is bounded on the south-west by the Dhaola Dhar and on the north-east by the huge Raldang peak of the Great Himalaya. The channel of the river is wide. At Chhitkul its width is roughly twenty metres, lower down, the width is from twenty-three to twenty-five metres. After coursing in a north-westerly direction it falls into the Satluj at Karchham.

There is a legend, current among local inhabitants, associated with this river. According to the legend, both the Satluj and the Baspa rivers were brothers. When they first started flowing, it was agreed upon by them that whosoever reaches the point of confluence (i. e. Karchham) earlier, shall retain the name thereafter. Baspa being the

younger, was more boisterous with the result that when he came down, he brought along with him all the paraphernalia of musical instruments etc. whereas the river Satluj, being the elder was more discreet and stealthily approached ahead of the younger brother at the point of confluence. Observing both these rivers at the point of confluence, the aptness of the story becomes very vivid.

The Baspa is next to the Spiti in size and is about seventy-two kilometres in length. Its entire course lies within the district. The Baspa descends from an elevated ridge of the Himalaya which is traversed by Neelung. From Chhitkul the view of the Baspa towards east is shut up by snow clad mountains. The banks of the river are grassy and form gradual slopes. Before reaching Rakchham there is a steep descent of about a kilometre. The Baspa has here a very great slope of many hundred metres. Between the villages of Rakchham and Sangla the river either rolls smoothly on pebbles with gentle murmur, or rushes with rapidity in a narrow stream. Further down it glides gently along in an expanded bed of sand and pebbles, which it divides into a sort of islands.

As compared to other rivers of the district, the Baspa is fairly turbulent and frequently changes its course thereby doing extensive damage to the cultivated fields on its banks. Consequent upon the melting of snow in the higher regions, the river begins to rise steadily in early April and attains the highest water level during July and August. In the end of August, the water level starts receding and continues to recede till January when the volume of water is considerably reduced and large size boulders appear all over the bed of the river. It receives various streams and streamlets on both of its banks. On the left side mentionable tributaries are Zupkia, Thatang, Bering and Rukti and on the right Suthi.

This is the most inhabited valley and there are now permanent bridges at many places which make it easy for inhabitants to cross over. When the river is not in spate a number of temporary bridges are put up and are removed during the months when the volume of water increases. In October, the river can be forded at many places. An outlandish fish species known as brown trout (*salmo furio*) which has great potentiality for propagation, is found in this river. The river is not navigable.

Besides these three rivers there are a number of smaller streams and streamlets in the district. Some important ones among these are described below :-

The Yulang—The Yulang falls into the Spiti after a course of

about thirteen kilometres flowing in south-easterly direction. It is chiefly fed by snow, and has clear and refreshing water in its stream. It originates between Shyalkhar and Leo.

The Ropa—It rises on the south-western declivity of a range which bounds Kinnaur on the side of Lahul and Spiti. Gerard estimated the elevation of its source about 4,750 metres above the sea. After a total course of about forty-three kilometres it falls into the Satluj, near the village of Shyaso.

The Pejur—Pejur or Taiti, described as a very impetuous and great stream, is one of the largest feeders of the Satluj, into which it falls after running a course of about forty kilometres. It has south-easterly course throughout.

The Kashang—It is a hill torrent and is crossed by the route from Pangi to Sangnam. Flowing in a south-easterly direction, it falls into the Satluj. Its volume of water is considerable, and flows along with impetuous haste causing noise and violence looking like a stream of foam.

The Mulgoon—It is a large torrent rising on the south-eastern declivity of a very lofty range separating the district from Lahul and Spiti. The old Hindustan-Tibet Road crosses it near Pangi by an ordinary wooden bridge. The National Highway No. 22 also crosses it by a pukka bridge at a point where the link road to Kalpa bifurcates from it. After a course of about twenty-four kilometres in a south-easterly direction, it falls into the Satluj on the right side.

The Yula—It is also a considerable stream rising on the eastern declivity of the range forming the boundary towards Lahul and Spiti. It holds a course nearly southerly for about twenty-four kilometres, and falls into the Satluj on the right side.

The Wangar—This torrent is formed by the junction of two streams, namely Bhabha and Sooreh. It is a clear stream, rushing down with tremendous violence over huge boulders of water-worn granite. The lower part of this tributary of the Satluj exhibits a succession of fine rapids and a waterfall. It falls into the turbid, yellow Satluj on the right side.

The Tirung—Tirung, a large torrent, rises on the Indo-Tibetan frontier. Holding a north-westerly course along the north-eastern base of the huge Raldang peak it falls into the Satluj on the left bank. For about ten kilometres the fall of the stream on an average is fifty-seven metres a kilometre, and in some places nearly double, where it displays an entire sheet of foam and spray, thrown up and showered upon the rocks

on its way with loud concussions, echoing with noise and thunder from one side to the other. It is about fifty-six kilometres in length.

Water resources

The resources of water supply comprise in the main, hill rills jutting out of the sides of the mountains or such streams that have their sources in the snowy summits of the higher hills. The topographical formation of the surface of Kinnaur does not permit of extensive irrigational facilities, nevertheless, where possible, human efforts have never been wanting to convey to their fields the water, even to such cultivated areas which lie comparatively higher up. On the other hand the areas lying near the banks and beds of the various rivers get better supply of water, ensuring security of the crops and perpetual fertility. Of late development of water channels has been going on. Achievements secured so far are given in Chapter IV of this volume. The rains play but an insignificant role in watering the land because the major portion of the district falls outside the range of the monsoons. Thus the rains are less relied upon for agricultural operations.

Lakes and tanks

There are no large-sized lakes in this district. However, there are two mentionable pools of standing water.

A small lake with its grassy banks, lies at village Nako in the Puh sub-division. Amidst the desolated region, this small lake, with large poplar and willow trees on one side thereof, appears exceedingly beautiful in this area. The lake and the village are situated on the western declivity of the large mountain of Leo Pargial and about 1.6 km above the left bank of the Spiti river.

There is a cutcha tank locally called *sorang*, situated above the villages of Jani and Ramni in tahsil Nachar. It is at a distance of about twenty-six kilometres from the village of Nachar. Its area is about 420 square metres with a depth of about fifteen metres. It is approachable from Sholtu forest rest-house by an inspection path, about thirteen kilometres long.

Springs and spring-heads

Springs are scattered all over the district and may be found on the surface of such soil as can admit the passage and exit of the subterranean water. These springs occur at the foot, on the sides, shoulders, saddles and depressions of a mountain or a hill. Where possible, water from a spring is used for drinking purposes as well as for irrigation. The inhabitants are usually careful to utilise the water, and convey it to their fields by constructing small cutcha *kuhls*.

The spring water mostly comes from the snow. In winter the district experiences heavy snowfalls. When with the advent of summer the snow melts, the greater part of the melted water is absorbed by the surface of the hills. The water so absorbed is always percolating through its sub-terranean passages so long as it does not come to a point where it can force its way out of the ground to form a spring. The supply of water in certain springs may decrease, it may even die out altogether, but generally, before the supply is exhausted altogether, the winter season sets in and the nature replenishes the stock by snow and thus a permanent water-supply is ensured.

In Nachar tahsil, there are a number of hot water springs, one at Natpa village, five kilometres towards north of Nachar, three at Tapri and one near Joktiaring hamlet about five kilometres towards east of Nachar. Their water is used for bath and washing of clothes.

Snow fields, glaciers and ice caves

The terrain of the district, above 5,200 metres, from the mean sea level, remains under permanent snow. The area above 4,250 metres remains covered with snow for more than six months in a year. The area falling between 4,250 and 3,050 metres remains under snow for five to nine months and the tract falling between 3,050 to 2,000 metres remains under snow only for three to six months. The tract between 2,000 and 1,200 metres above the mean sea level experiences snowfall during winter season. The extent of snow, however, varies from season to season.

Winter snowfall occurs throughout the district up to the bed of the Satluj upstream of Wangtu, and sometimes even downstream to an elevation of 1,200 m to 1,500 metres. The snow-line descends in the winter to lower altitudes, between 2,150 and 2,750 metres, depending upon the aspect and the severity of the winter and the frequency of snowfalls.

There are thus mountains with altitudes high enough to provide a region where the snow lies permanently without melting. Such permanent and wide expanses of snow in the mountainous regions may justly be given the epithet of snow-fields. The higher parts of high mountains like the Pargial and Raldang Kailas are mentionable as the snow-fields.

Avalanches occur fairly commonly during the six winter months from December to May during or after heavy snowfalls, largely upstreams of the confluence of the Satluj and the Baspa rivers at Karchham, when they frequently span the rivers and even form snow-bridges. Some villages like Mehbar are prone to destruction of houses, forests and fields

due to their being near gulleys that carry fierce avalanches funnel-like to the bottom of the valleys from massive accumulation of snow on ridges high above. Six rain gauges installed at Kilba, Sangla, Purbani, Kalpa, Nachar and Rupi record snowfall also.

Underground water resources

Underground water resources, speaking strictly in the sense of the term as current in the plains, do not exist at all. So far as that class of subterranean water which goes under the name of springs is concerned, a mention has already been made. The slopes covered with forests retain more of natural water received in the form of rain in the monsoon zone and in the form of snow elsewhere and thus produce an equable flow of water down the streams and springs. The dry zone experiences scarcity of water owing to absence of monsoonic rains. This scarcity is lessened to some extent by the moisture obtained from the snowfalls.

GEOLOGY

"The* known geological formations in the district are as follows :—

Recent-Sub-Recent	— Soils.
Triassic-Rhaetic	— Limestone, shales, dolomites, etc.
Carboniferous	— Quartzites and limestones.
Silurian	— Coral limestone, quartzites.
Late pre-Cambrian	— Haimanta system-phyllites,
Cambrian	quartzites, conglomerates, Shales and slates.
Pre-Cambrian	— Schists, gneisses, granites, quartzites. (Vaikrita system).

Pre-Cambrian—The Pre-Cambrian rocks are represented by gneisses, schist, phyllites, quartzites and granites. Among the members of the schistose series micaceous schists, talcose rocks, phyllites and gneisses are commonest. The schists seem to pass gradually into the overlying slates, phyllites, and quartzites of Haimantas. This series of schists is termed as Vaikrita system. In addition to the two great rock groups of the metamorphic belt i.e. the granitic gneiss and the schistose strata of the Vaikritas, there are intrusive rocks, which play an important part in the geology of the Himalayas. Foremost among these rocks must be considered the great masses of granite which penetrate the older granitic gneiss and schists and are even seen to traverse the overlying Haimanta system. The granite forms usually a network of veins in Vaikritas, and in the older masses of granitic gneiss. It is chiefly composed of muscovite,

* Courtesy, Geological Survey of India.

quartzite and albite with accessory minerals of which the most common are tourmaline, garnet, beryl and others. The granite is clearly of porphyritic nature and its form of occurrence is intrusive one.

On the descent to the Sutlej between Nachar and Wangtu the rocks are crushed and intruded by pegmatites. In the Wangtu *nala* there is an outcrop of greenish quartzite which rapidly assumes a gneissic structure. Extensive outcrops of "Granitoid gneiss" are seen beyond Wangtu along the Hindustan-Tibet road. To this rock type the name "Wangtu gneiss" is given. Short of Rogi a grey quartzitic suite of rocks comes in and continues up to near Chini. Beyond Chini only fallen masses of (a) schistose quartzites with large crystals of garnet and mica (b) blue Kyanite garnet-quartzmica schists (c) tourmaline-garnet-quartzite (d) biotite-muscovite-garnet-quartz-felspar gneiss, are met with along the road section. From near Pangti to some distance short of Jangi the rocks exposed are mainly biotite granulites with extensive intrusions of light coloured granite. These intrusions vary in size from thin stains of granitic material to large outcrops of tourmaline bearing granite. Included in this series are also hornblende granite and gneisses. The granitic and metamorphic rocks are well developed between 31° 15' and 31° 40' N latitudes and 78° 00' and 78° 50' E longitudes. These rocks are also exposed in the NE portion of the district.

Late-pre-Cambrian Cambrian—Between metamorphic and semi-metamorphic schists (Vaikritas) and the lower Silurians, we find a great thickness of strata known as Haimanta system, which form one of the most important features of the central Himalayan sections. Although almost entirely destitute of organic remains and partly altered by the granitic intrusions, this system is nevertheless so constant in lithological and structural characters, that it must be separated from the overlying lower silurians. The boundary between the schists and gneisses of the metamorphic zone and the distinctly sedimentary beds, which forms the Haimanta system is not very strongly marked; and passage is nearly everywhere gradual. The Haimanta system consists of quartzites, generally purple, with conglomerates, shales and silky phyllites and slates. Metamorphosed siltstones outcrop at places. These may well be part of the Haimanta system. Cambrians possibly outcrop near Koila, where certain dark (Carbonaceous?) beds outcrop, though the sequence right upto Kanum may still be Haimantas. They are well developed between 31° 41' ; 31° 52' N latitudes.

Silurian—The Haimanta system invariably passes upward into beds which have yielded fossils throughout. The lower Silurian is represented by greyish pink quartzite, with shaly calcareous partings, which again develop into a series of grey shaly quartzites, alternating with dark

blue to black coral limestone. Fossil remains are rare and generally consist of indistinct casts of *Orthis* and hardly preserved *Rellerophon* specimens. Upper Silurian beds are almost entirely quartzitic. The general character of the division may be said to be an alternation of evenly bedded pink to flesh coloured quartzites, with greyish green friable shales dividing them. These rocks are well exposed in the northern part of the district along $31^{\circ} 52' N$ latitudes.

Carboniferous—This system forms some of the most important features in all central Himalayan sections, alike on account of its thickness and uniform distribution and by reason of its characteristic lithological development. This system is represented by limestone and white quartzites. The brownish red earthy limestone remains lithologically the same over the whole area. The thickness of the white quartzite varies greatly and often suddenly. These rocks are well developed north of Silurian rock exposures and run parallel to the latter.

Triassic and Rhaetic—Triassic system is represented by dark shales with limestone partings, earthy limestone, black limestone flags with partings of splintery shales, limestone, greenish grey shales and dolomite. Rhaetic system is represented by dolomite and limestone. These rocks are exposed in the northern most part of the district and continue to the north into the adjoining areas. They are well exposed north of latitude $31^{\circ} 55'$.

Recent Sub-Recent—Soil forms merely a cap of varying thickness derived from the alternation of the rocks below, so that its nature depends upon those rocks. The granites and gneisses give rise to rather coarse and sandy soil, on quartzites there is little or no soil. The geological composition of the soil, however, is not an important factor in the plant ecology of the Sutlej compared with the physical conditions. Given equal moisture conditions, deodar will grow almost equally well on any clay loam of the shale formations. The sudden differences in growth so noticeable in clay zone deodar are due, not to any alteration in the underlying rock, but the influence of aspect and insolation, while the gradual diminution in tree growth towards the Tibetan border is primarily a question of moisture distribution.

ECONOMIC MINERALS

Copper—Occurrence of copper has been reported about 6.4 km to the north-west of Ropa near Rangbar. This consists mainly of malachite with some azurite found as coating along the joint planes and fissures of a fairly thick band of quartzite. The deposits are not regular or continuous; consequently it is not expected that large quantities occur. Another similar

occurrence was noticed higher up the nala adjoining the village Ropa. There are local reports that there is yet another similar deposit to the west of Susing Thach. All the three occurrences fall along the same strike, and further investigations may find some workable deposits.

China clay—Between Asrang and Lipa to the north of Titi Khad, the exposures are mainly granites, gneisses and pegmatites, all of which are very highly altered with the consequent formation of china clay. Two deposits of clay, one to the east of hill 14139, below the crest, and another very near Lipa are likely to prove valuable, both as regards quality and quantity.

Flourspar—Light green crystals of flourspar were detected among the minerals of albite-granite veins at Wangtu. They were, however, of very rare occurrence.

Gemstones—*Amethyst* is found at several localities in the valley of the Sutlej river. Crystals of *Kyanite*, often of beautiful blue colour, are plentiful in Kinnaur. The occurrence of small quantities of gold in the sands of the Himalayan rivers is a well known feature. The deposits are normally too poor to be worked. The reported occurrence of gold at Chargaon near Urni has been examined but it does not appear to be of much importance.

Mica—Mica is reported from Tangling Khad. The western slopes of the Kailas range have also been examined but occurrences of mica bearing pegmatites are not very encouraging. The pegmatites round about Wangtu do not contain mica except small and thin books which can not find much use.

Pyrites—Pyrite is found to occur at Chargaon, near Urni, at Shyasu and Purbani. The deposit at Purbani might prove to be considerable. About 3.2 km to the north-west of the forest rest-house at Purbani, there is a band of pyrite among the granite-gneiss and is likely to continue to considerable distance. About 4.8 km to the south-east along the same strike, north-north-west-south-south-east similar exposures of pyrites are said to occur. There is some evidence of old workings too. It may be mentioned here that the workings and the transport of the material are likely to be difficult and expensive.

Quartz—Occurrence of quartz crystals are reported from some localities. They can, however, be picked up only at very high altitudes in the vicinity of glaciers. At Anodan, higher up the snow-line certain pegmatites yield a few small crystals of quartz, but most of the bigger crystals have been removed. It is, however, unlikely that this would be an economic proposition.

Silver—It is reported that silver occurs about 3.2 km east of Chargaon in large pegmatite vein. There are also evidences of old workings here. The occurrence is, however, situated over most dangerous precipice at about altitude of 3,353 metres.

Talc—About 1.6 km to the west-north-west of Thakthow (sub-village of Asrang) the exposures consist of talc schists which continue right upto Lipa. Some of these are quite soft and useable. They, however, have a yellow colour due perhaps to the infiltration of ferruginous material, which is likely to disqualify it for more important purposes.

Rare minerals—There are many pegmatites in the rock formations of the area. They consist mainly of intergrowth of quartz and felspar with thin books of mica. Very frequently schorl rock makes its appearance. A few drystals of beryl were also noticed. No rare minerals have been recognised but specialised methods might result in locating them."

Earthquakes and earth tremors

The district lies in the seismically active area. The history of the past earthquakes shows that even though no major earthquake has been located with its origin in the district, earthquakes of large magnitudes occurring in other parts of the Himalayas are occasionally experienced there. The Kangra earthquake of April 4, 1905, was experienced in Kinnaur with maximum intensity. Although other reports of earthquakes actually felt in Kinnaur are not available, it is surmised that some other shocks might have been felt in Kinnaur because the district was well within the zone of perceptibility of about twenty-two earthquakes. The highest earthquake intensity experienced in the area due to past earthquakes was capable of causing moderate damage to buildings. Besides, the district also experiences smaller earthquakes of varying degrees.

FLORA OR BOTANY

No detailed and systematic botanical survey has yet been done in the district. Some tourists and travellers, either expert or otherwise, have, in the past, endeavoured to observe and collect certain details about the flora of this area. Mentionable among them are, Thomas Thomson, Henry Collet and J. Forbes Royle. The history of forest management is described in the Chapter of Agriculture and Irrigation.

After consultations with the authorities and collection from various present-day field officers a list of plants, growing in the district, presented in Appendix I, gives some rough and ready idea about the botanical features of the district. Obviously the list can not be regarded as exhaustive.

Various species of forest trees, of which the deodar is the most valuable and the most numerous, combine to form a broad belt along both sides of the Satluj valley between the cliffs of the gorge below and the Alpine pastures and eternal snows above. This feature continues to persist in the shelter of many side-streams joining Satluj in its upper parts even after growth has ceased to become sporadic in the main Satluj valley.

Forests

The forest types fall naturally into three main divisions as follows :—

- (i) The moist zone starts from Maneoti Dhar and deodar occurs on the well drained sites and on ridges and spurs generally forming an admixture with *kail*, spruce and fir. In the depressions broad-leaved species like horse chestnut, hazel-nut, maple, bird cherry and walnut are found. The moist zone extends from Maneoti Dhar to Nachar along twenty-five kilometres of the Satluj valley and covers some 12,140 hectares of forests.
- (ii) A dry zone is spread in middle Kinnaur where the deodar reaches its optimum development and forms large areas of pure forest. This extends to about thirty-two kilometres up the Satluj valley from Nachar to the Chini cliffs. This zone, including the Baspa valley with 25.6 kilometres of deodar-bearing forest, contains about 13,355 hectares.
- (iii) The arid zone includes the parts, adjoining the Tibetan border. In this zone the deodar develops well only on cool aspects and comparatively at higher elevations than elsewhere. The forest area of this zone is 11,331 hectares continuing for further forty-eight kilometres in the Satluj valley.

Moist zone forests comprise the Nachar and Pandra Bis range forests along the Satluj valley and along the Soldang stream to the south. Pandra Bis range falls along the Shorang stream on the north.

On the left side of the Satluj valley, with a northern exposure, the forests come much lower down towards the river than they do on the right side where the disolation of direct sun light restricts the spread of any kind of vegetation. The same species grow at a comparatively lower level on the cooler left side than on the hotter right side, where it grows but at higher elevation. Thus two sides of the valley present very dissimilar appearance. On the Taranda or the left side the forests are

practically continuous from the river bank at about 1,070 metres to the Alpine pastures at about 3,650 metres barring an intervention belt of village land occurring about 1,520 to 1,830 metres especially towards Nachar.

On the right side the main valley slopes comprising the area known as Pandra Bis consists largely of hot grass-land. It is only in the higher parts above the grass-lands that definite forest belts are formed. In the deep narrow glens of the side streams, however, forest growth is well developed as on the Taranda side, producing finer deodars. Towards the head of each glen where there is increased shelter from the hot blasts of the Satluj gorge, most species tend to drop to lower elevation near the main Satluj valley.

Generally on the lower slopes the hill pine (*Pinus longifolia* Roxb.) as a pure crop, occupies large areas of open hillsides giving way to *ban* oak (*Quercus incana*, Roxb.) and *Rhododendron arboreum* Sm. on more sheltered ravine banks. In the upper part of the *chil* belt, blue pine (*Pinus excelsa* Will) and deodar gradually replace the *chil*, and, on warm aspects, the blue pine forms extensive forests at about 1,520-2,130 metres in the Nachar and Pandra Bis ranges. On cooler aspects the spruce (*Picea smithiana*, Boiss) is the dominant species with an assorted mixture of broad-leaved species in the damper ravines, the spruce occupying the intermediate ground and forming the bulk of this belt. The deodar is found occasionally in patches of pure forest, at the level of the blue pine, extending upwards, as scattered trees, on the rockier ridges in the spruce ground and also spreading downwards, as individual trees, amongst the *ban* oak and the higher *chil* pine.

The upper forest consists of spruce and silver fir (*Abies pindrow*, Spach) which in Pandra Bis merges into a top belt of *kharsu* oak (*Quercus semicarpifolia*, Sm.), below the Alpine pastures. On Nachar side the *kharsu* oak does not form pure forest to the same extent as on the Pandra Bis side. The moist zone formation can thus be summarised as follows:—

	Left Bank		Right Bank	
	(Meters)			
(i) <i>Chil</i> pine	1,066	1,828	1,371	2,133
(ii) <i>Ban</i> oak and <i>Rhododendron</i>	1,676	2,133	1,828	2,133
(iii) Blue pine and deodar	1,524	2,133	2,133	2,590
(iv) Spruce	2,133	3,048	2,590	2,743
(v) Broad-leaved mixture	2,133	3,355	2,143	3,048
(vi) Silver fir and <i>kharsu</i> oak	3,048	3,657	2,895	3,352

Dry zone forests include the drier eastern ends of Pandra Bis and the Nachar ranges, and the western parts of the Kalpa, Kilba and Kailas ranges.

The forests on the southern or left bank of the Satluj form a continuous belt throughout this zone broken only by the stupendous cliffs of the Kailas group which are devoid of forest along a part of the right bank of the Baspa river. The belt of forest on the right bank of the Satluj is not by any means, a continuous feature as there are frequent gaps formed by rock scree and cliffs.

In this zone, generally, the low level forest comprises the *neoza* pine, forming a very open forest along both banks of the Satluj. *Neoza* pine, on the left bank, mingles with the ilex oak, which replaces the *ban* as a low level oak. Above these, the deodar forms pure forest throughout the greater part of this area. In the upper part of this belt of deodar it mingles up with the spruce and the blue pine. In that part of the zone where monsoon rains fall but little or what may be called the inner ranges, the blue pine alters its level to profit by the long-lying snow and retreats to 3,048-3,657 metres, replacing the silver fir as the typical sub-alpine species, on the right bank of the Satluj, and mingling with spruce and fir on the left bank. The blue pine only appears as a low level species round about Nachar and in some of the Baspa forests. Elsewhere it appears sporadically amongst the deodar.

The spruce gradually retreats to the more sheltered side-valleys. It also retires uphill from the lowest level of 2,133 metres to Panvi stream to the lowest level of 2,895 metres in the eastern end. The broad-leaved forest, apart from the belt of ilex oak and some scrub species associated with it at low levels, is restricted very closely to ravine banks and seldom occupies any appreciable area.

The dry zone forests, generally speaking, can be summarised as follows:—

Type	Left bank		Right bank	
	(Metres)			
i) Ilex oak- <i>neoza</i> pine	1524	2438	2132	2743
ii) Dry zone deodar	2133	3048	2438	3048
iii) Silver fir-blue pine	2743	3657	2895	3504

Arid zone forests include the remainder of Kalpa, Puh and Kailas ranges east of Kalpa and Shongtong villages up to the junction of the Spiti and the Satluj rivers, near which the last deodar occurs in two small forests on the left bank of the Dubling stream.

In this zone on the left bank of the Satluj the forest continues in an unbroken belt up to the Tirung stream and further for about eight kilometers up both side of the Satluj valley. Beyond this, there are some isolated patches of forest in the Nesang stream and at Dablung. On the right bank of the Satluj, in the Kalpa and Puh ranges, forests form a continuous belt much further up. There are areas of marketable deodar in the Taiti stream and quite extensive blocks of open forest of *neoza*, deodar and a little blue pine in the valley of the Ropa stream.

Near the bed of the Satluj at a level of about 2,133 metres and in intensely arid conditions, the *neoza* pine persists as a low level species. It also extends right up to alpine levels in certain places. The deodar on the contrary only reaches its best development at 2,743 to 3,048 meters in the Tidong-Purbani belt. The blue pine continues as a high level species above the deodar and covers extensive areas of the alpine uplands with a scattered tree crop mixed with juniper cushion-scrub.

The differences in forest growth between the two sides of the Satluj valley are not constant in this arid zone. Various species occur at approximately equal levels on both sides. The northern aspect, however, is frequently devoid of tree growth.

The forests of this zone can be summarised as follows :—

Type	Metres
i) <i>Neoza</i> pine	2,085 3,355
ii) Deodar	2,530 3,200
iii) Blue pine	3,048 3,657

The rare types of species found in Kinnaur forests include *shamshed* i. e. box wood (*Buxus sempervirens* syn. *B wallichiana*), *neoza* i. e. pine, *bhojpatra* i. e. birch (*Betula alnoides*, *Butilis*) and *thum* i. e. ash (*Fraxinus micranth*).

Area of six territorial forest ranges, covering Kinnaur district is as under :—

Sl. No.	Range	Area in hectares		
		DPF	UPF	Alpine pastures and unlisted UPF
i)	Nachar	4,959	1,324	40,545
ii)	Pandra Bis	3,443	4,516	47,222
iii)	Kilba	4,139	1,147	1,04,604
iv)	Kailas	3,088	—	1,68,532
v)	Puh	1,485	—	1,20,906
vi)	Kalpa	3,727	380	91,380
Total :—		20,841	7,367	5,73,139
				=6,01,397, hectares

While the areas of the demarcated protected forests had almost remained constant there has been a negligible decrease in the undemarcated protected forests due to the sanction of *nautor* in these forests. To schemes, namely, soil conservation scheme Urni landslip, covering about eighteen hectares and panchayat afforestation scheme Baturi landslip, covering about ten hectares to check the soil erosion, are being implemented. The forests are usually subject to injuries by fires, men, animals, plants, insects, fungus parasites, climate and landslides. Forest fires are of common occurrence sometimes causing heavy damage. In the wet zone the fires mostly occur during April-June and also during October-November. In the dry zone these may occur between March-December. The causes of forest fires include smoking, stubble burning, cooking and carrying of torches* by the human beings. The Forest Department employs Fire Watchers, one in each block, during the fire seasons. During the last few years the recurrence of forest fires has increased owing to the ease and increase in traffic due to opening of the tract.

The low level miscellaneous species like *jhingan* (*lannea coromandelica*), siris, ficus, celtis and oak forests suffer heavily by heavy and irregular lopping, especially near the habitation and along the Satluj river where large flocks of sheep and goats are grazed during the winters. A considerable damage is done to the standing trees by cutting deeply and scooping out the resinuous torchwood from the basal portion of the stem of *chil*, *kail*, *neoza* and occasionally deodar. All along the National Highway No. 22, *chil* trees have been frequently debarked at the base for use as charcoal ignition material in the smithy shops on the roads. This kind of damage is new to the area. The extraction of logs through pole crops damages the base of standing trees and ultimately results in the production of shakes in the timber.

Out of the domestic animals, the harm caused due to grazing of sheep and goats is incalculable particularly in the dry zone where grass and herb growth is scanty. As the herds pass through the forests they break up the friable soil with their feet causing it to slide down, exposing the roots of deodar seedlings to the sun's heat causing them to dry up and die. The seedlings that escape death are subsequently browsed down continuously. Out of the wild animals bears debark young deodar and *kail* trees as a result of which many trees die. They also twist or break branches of *ban* oak to secure acorns. Porcupines gnaw off the bark round the bases of deodar and *kail* poles, often girdling them. Monkeys damage the *neoza* cones for the sake of the edible seeds. Birds too add to the

*Torch here means cinder.

damage by eating away the *neoza* seeds. When sown directly in the nursery beds, the rodents do heavy damage by making burrows in the beds and devouring the seeds of trees. Apart from the seeds, the young seedlings are nipped off by birds and lizards.

Climbers such as *Rosa*, *ivy*, *vitis*, *Schizandra* etc. are found in deodar, *kail* and fir forests in the wet zone, but never so gregarious as to cause any heavy damage. In the wet zone and at elevations over, 2,590 metres in the Kailas range, weeds form a serious obstacle to regeneration. Amongst the worst weeds are coarse grasses, *brambles*, *strobilanthes*, *sniresa*, *Viburnum* and *balaam*. While broken fern, *indigofera* and *Desmodium* are often useful on hot aspects and protect young seedlings against insolation, these are liable to choke the ground completely if not kept in check. In the dry zone, weeds are often desirable and even essential for deodar regeneration.

The only insect known to do serious damage is the deodar cone moth (*Euzophera cedrela*), the larvae of which are most destructive to deodar seeds when cones are plentiful. The cut worm kills young deodar seedlings in the nurseries. A noticeable pest on the silver fir is *Brachyxytus subsignatus* which causes the yearly new shoots to wither up, turn yellow or orange and drop off. Bark-boring beetles are frequently met with and cause the death of young saplings which are also victimised by *Peridermium cedrii* or *Fomea annosus*.

Among the plant parasites, members of the family named *Loranthaceae*, especially *Arceuthobium minutissimum*, bring about heavy damage. *Viscum* and *Loranthus* also do but insignificant damage to the apricots etc. These two are, however, also occasionally met with on broad-leaved species like *ban oak*, *populus* and *Albizia* etc. in the forests. *Arceuthobium* attack has reached an epidemic stage in dry zone and in the transitional zone between the wet and dry zones, such as in Salaring stream. Trees are attacked from the sapling stage upwards. Witches-broom are frequent. Due to the heavy incidence of attack by this parasite the mortality rate in *kail* forest is fairly high. *Fomes annosus* has also appeared in a few young deodar forests. *Trameta pinii* is prevalent on *kail* and has done damage to the forests in the wet zone. Young plantation of deodar above Taranda was badly attacked by the fungus *peridermium cedrii* until the over-wood of *kail* forests was completely removed. *Barclavella deformans* is sporadically found on the current year's shoot of spruce. This fungus, however, does not do much harm.

June and even October, are often sufficiently hot and dry to cause the death of saplings on warm aspects and where there is insufficient overwood to protect the saplings from the sun. The eastern aspects of the

dry zone is, however, normally in a state of perpetual drought except during the winter and early spring. The natural regeneration of deodar has been defied in the dry zone largely by the severe drought.

Poles and saplings are bent, broken and uprooted, every year, by the weight of snow, the damage being greater in unthinned crops.

Avalanches descend from the heights above the forest-belt clearing strips of tree-growth in their passage. When they follow the course of nullahs, the terrific winds which accompany them, break and uproot trees to a considerable distance on either side of their track. The worst avalanch localities are in Kashang, Barua, and Baturi streams.

Snow-burn is characterised by a peculiar browning and dying off of the needles of deodar and, less frequently, of *kail* and spruce seedlings and saplings. This cause of injury appears to be due to suffocation of the young plant by deep and late-lying snow. The damage is worse on cold aspects and flat ground particularly more severe in the Kailas range than in other localities.

Land slips and land-slides have occasionally caused heavy damage to the forest growth by physically removing the tree cover and often burying it under debris. Some slips of recent origin are near Rarang and Rupi. In Chhot, Chonda and Malgad catchments, big slips have occurred during the last few years.

Effects of government policy on the flora

The forests are classified as protected, demarcated and undemarcated. This classification legally permits the right of users to timber and other domestic requirements including extensive rights of grazing. There is no reserved forest at all. This factor has a detrimental effect on the principles of forest management and eventually on the flora. The local people are primarily pastoral/agriculturists and their land utilisation practices are primitive resulting in serious erosion, sometimes threatening the very existence of habitation. In the dry zone the forests are on their last legs on account of the vagaries of nature and excessive abuse of rights admitted. The high grazing incidence is unavoidable as the people rear large herds of sheep and goats as well as useless poor breed of cattle. The socio-economic condition of the local people, which is intimately bound with the preservation of forests, is being carefully studied.

According to the national forest policy total forest area in hilly places should be upward of sixty per cent of the total area. As against this Kinnaur has below five per cent of wooded area. Extensive areas of

Kinnaur are unable to support trees by virtue of such factors as climate, altitude, rocky cliffs and extreme aridity which factor accounts for the coverage of very large area of this district. If this is taken into consideration, which it deserves to, then the percentage will be considerably narrowed.

The forests are being managed under the approved scheme of management generally known as working plan drawn and revised after suitable intervals. The private forests, as envisaged in the national forest policy, are managed under *the Himachal Forest Act, 1954*. Forest utilization by exploitation is subject to and in accordance with the working plan. The latest working plan, still in operation, was drawn up for fifteen years commencing from 1961-62 and ending in 1975-76. The central theme of government policy with regard to the forests has been and still continues to be, conservation of forests by protection of the existing wooded area, extension of forests by regeneration of blanks and denuded patches by plantation and by adoption of various soil conservation measures. Other aspect of the forest policy is to exploit forest wealth as much on scientific lines as possible in order to set the maximum sustained revenue without serious depletion of the forests. The exploitation of forests, however, presents peculiar problems. The terrain supporting the forests is generally steep and difficult.

Forest management, for proper utilization and economic and scientific exploitation at the government level, has also to be so regulated as to satisfy the genuine local and domestic demands of people who have certain rights in the forests and forest produce. A balance has to be struck between the overall interest of the government and the genuine needs of the people. Unless deep interest is taken, supported by generous resources in the mass afforestation of the district it is difficult to expect in the foreseeable future any great hope which would eliminate the perpetual scarcity of timber and fuel wood nor would it be possible without very great efforts to provide coverage to the eroding soil. Plans are though afoot for evolving the forest policy aiming at the rehabilitation degraded forests and arresting deterioration of the forest produce but these are likely to fall short of the magnitude of the actual requirement of the area.

The centrally sponsored scheme of soil conservation in river valleys is finding favour in Satluj catchment area to reduce the silt load carried down by it to the Gobind Sagar. For carrying out soil conservation at places which are seriously threatened by soil erosion, the land is being tackled.

It is also proposed to improve existing pastures by introducing grasses and fodder trees of high nutritive value to improve the cattle wealth of the tract. The forests are rich in medicinal herbs but sufficient efforts have not been made in the past to systematically grow, collect and export them. But now increasing attention is being paid.

Trees and plants raised by men in orchards and cultivated fields, are not commonly recognised as a part of flora of a locality in the strict sense in which the word flora is understood. The area under fruit is, however, increasing. Fruit trees benefit not only the growers but also they augment the area under tree growth.

Two main Acts for the protection and preservation of the wild life of the tract are in force. One is *the Indian Forest Act, 1927* and the rules framed thereunder for preservation of fauna, in the reserved and protected forests. The other is *the Punjab Wild Birds and Wild Animals Protection Act II of 1933* and the rules framed thereunder extending to non-forest areas. In the privately owned lands also the protection of the wild life is secured under this Act. Rules regarding hunting, shooting, setting of traps or snares in the reserved and protected forests of Himachal Pradesh, are also applicable.

Forests have been carved out into certain manageable blocks varying in size. A shooting licence, for a period of fifteen days only is granted in a block, commencing in each season on the first or the sixteenth of a month so as to allow fifteen days rest to the wild life of it after each shooting period.

Shooting is prohibited without a shooting licence obtainable from a competent authority. An authorised person carrying a gun or a rifle for sports under *the Indian Arms Act XI of 1878* or a person exempted from the operation of that Act can, on application be granted a shooting licence either by the Chief Conservator of Forests, or the Wild Life Warden, Simla, or by the Conservator of Forests, Simla or the Divisional Forest Officer, Nachar. Applications for reservation of a block are also entertained by the same officers. Applications for reservation of a block as well as for the issue of shooting licence should be made within a period from which an applicant desires to have licence. Two open shooting periods commonly known as winter and summer seasons, for general game, commence from the first day of December to the 28/29th day of February (both days inclusive) and, from the first day of June to the thirty-first day of August (both days inclusive) during each year respectively.

As there are two different types of shooting areas, so also there are two kinds of licences with varying rate of licence fees. The fee for a shooting licence under the block system, prescribed for a reserved and protected forests, is twenty rupees for a fortnight chargeable from an Indian national and double that amount from a foreigner, besides a refundable security of ten rupees. Such a licence is valid for shooting only in the block for which it has been issued. The shooting licence fee for areas other than the reserved and protected forests is twenty rupees for the entire season of three months from an Indian national and double the amount from a non-Indian, together with a refundable security of ten rupees, in each case. The validity of this shooting licence extends to the limits of a district for which it has been issued.

Hunting with dogs and hawks during the open shooting period is also permissible under the rules with a valid licence. Persons desirous of hunting with dogs are required to pay a fee of five rupees up to six dogs and fifty paise each dog, exceeding that number. Reserved and protected forests are not open for hunting with dogs. The licence fee for hawks is a sum of five rupees up to two hawks, except for goshawks (*bar* or *zoora*) for a season. Those employing goshawks are required to pay a sum of ten rupees per goshawk up to the limit of three and an additional fee of twenty rupees for each goshawk exceeding this limit. The licence for hawking is valid only for the areas other than the reserved and protected forests in the district for which it is issued. The procedure as well as authorities for the issue of licence are the same as for issuing a shooting licence. The licence fee is required to be paid in advance and is deposited in any of the Himachal Pradesh government treasuries.

The specially protected species among the animals found in the area are the snow-leopard, the clouded-leopard and the musk deer; and, among the birds, the monal and the tragopan. No licensee, whether an Indian national or a foreigner, is permitted to shoot them, notwithstanding the possession of a shooting permit. The animals and birds, not specifically mentioned in the schedules to the shooting rules, stand automatically protected throughout the year.

Beside these rules and regulations there is a number of general restrictions required to be observed by a sportsman in order to save himself from an infringement of the rules.

Two areas within protected forests of the tract stand declared by the government as sanctuaries. The sanctuaries are altogether

closed against hunting and shooting for a specific period by all persons irrespective of the fact whether they are exempted or not. Hunting or shooting of any bird or animal within 1.6 km of the demarcated boundaries of a game sanctuary is prohibited. Even on entry in a game sanctuary for purposes of investigation and study of wild life, photography and scientific research, and to transact lawful business with any person residing within the sanctuary is subject to a permit to be issued by the Chief Conservator of Forests under such conditions as he may prescribe.

Two game sanctuaries are known as the Rakchham-Chhitkul sanctuary and the Lippa-Asrang sanctuary. The Rakchham-Chhitkul sanctuary is situated in the upper catchment of river Baspa in the Kilba forest range having a difficult terrain. Its area is about 2,486 hectares and elevation ranges between 2,743 and 5,486 metres. From Sangla, it is about nineteen kilometres towards east; approachable by the Karchham-Sangla-Chhitkul road. In the near future it will be possible to reach the game sanctuary by means of a light vehicle through this road. A nineteen kilometres long forest bridle path along the left bank of the Baspa also leads from Karchham to Sangla. The foot of the sanctuary is approached, at present, from Batseri (Bosering), about 4.8 km onwards from Sangla, by a bridle path. Within the sanctuary area there are goat tracks and shepherd paths only but no camping huts of any kind. This game sanctuary is known primarily for *bharal* or blue sheep and snow-cock and generally for black and brown bears, musk deer, snow leopard, weasles, monal, chukors, snow pigeon etc.

The Lippa-Asrang sanctuary is situated in the upper catchment of an important tributary of the Satluj river namely the Taiti stream, in Kalpa forest range. The area of the sanctuary is about 3,745 hectares and elevation ranges between 3,657 to 5,486 m. Within it are only goat tracks but no camping huts, the prominent species available in this game sanctuary include *bharal*, ibex and snow-cock as also black and brown bears, musk deer, snow leopard, weasles, monal, koklas, chukors, snow-pigeon etc.

FAUNA OR ZOOLOGY

No systematic survey of the local fauna has ever been conducted. On account of considerable variation in the elevation and climate, nature had endowed the tract with varied fauna. In the past many travellers like Alexander Gerard, S. H. Prater, J. Forbes Royle, and Van Der Sleen etc.

visited the tract and have left accounts of its fauna in their works. A list, by no means exhaustive, of zoological types including mammals, birds, reptiles, amphibians and the fish, showing scientific, English/local names, is given in Appendix II to give a broad idea about the wild life. Certain species deserve detailed description.

Wild sheep (*Ovis hodgsoni*)

Locally called *pho*, it is confined to the snowy peaks adjoining Neelung pastures near the Indo-Tibetan border. In winters, it descends down to about 3,650 metres but in summer with the receding snow line, it goes up and seldom comes below 4,460 metres. It is one of the largest known sheep. It is very speedy and roams about in open grounds. Its colour is greyish brown above and pale and whitish below. Its average height is about 1.2 metres at shoulder and the length from nose to rump is approximately 1.8 metres. Horns of an adult male are up to about 1.04 metres round the curve. The massive size of horns is sometimes the cause of its death due to starvation as the horns are too long to let the animal's mouth reach the ground to get its food.

Himalayan blue sheep (*Pseudois nahoar*)

This is another wild sheep of high altitude commonly met with all over inner parts particularly in the valleys of Sangnam, Hangrang, Taiti, Upper Baspa, Tidong and Nesang. It is found in herds of ten to eighty. It is seldom seen below 3,048 metres and is generally found from 4,270 metres upwards in summer. It is killed for its flesh as well as skin. It has short ears and a tail but no mane or ruff. Horns are rounded at the base and fairly smooth towards the tips. In colour, it is brownish grey above and, white below. It prefers undulating ground and is a splendid climber and very speedy. It lies down during the day on its feeding ground and seldom enters scrub or bushes. The average height of full grown male at shoulder is about .88 metre. The horns are on an average .55 metre long.

Goat antelope or ibex (*Capra Sibirica*)

Askin, as it is locally called, is common above the tree line. In the spring, these animals may be found below the snow line and are attracted by the new grass-sprouting in patches on the steep slopes of the nullahs. It lives in herds of twelve to fifty. Above the grazing grounds it enjoys the shelter and security of precipitous cliffs and ridges. It is a large goat and heavily built. Goat with no long hair except the full chin beard is confined to the male which has also a coarse mane on the spine. Its colour is dark brown diversified with whitish patches in summer and gets dirty white in winter. Under the winter coat it bears a thick growth of soft wool.

Buck's height is 1.01 metres at shoulder. Its horns are about .3 metre long, rough and oval in section, broad in front, knobbed at intervals and narrow behind. They curve backward resembling a scimitar. Its habitat extends only up to the right bank of the Satluj from Kashmir.

Serow (*Nemorheodus bubalinus*)

Local people call it *emu*. It is an ungainly creature with its large head, donkey-like ears, thick neck and short limbs. Male and female are similar in build. Its height is about .91 metre at the shoulder, has a gland pit under the eye and a coarse coat developed into a slight mane down the back of the neck. Horns in males are short, sharp, slightly curved back and ringed except at the end and are usually less than .3 metre in length. It frequents thick forests or rocky hill sides between elevation of 1,828 and 3,048 metres, more commonly in wet zone. It generally remains solitary. Its flesh is coarse and because its horns and skin are poor trophies, it offers less inducement to the shikari.

Goral (*Nemorhaedus goral* or *cemes goral*)

It is found all over the tract between elevations of about 1,220-2,438 metres. It is one of the commonest and most fearless of the Himalayan animals. It resembles a goat in form with stout limbs and coarse hair. The colour is brown and pale below. The face is pale and darkening towards the horns. It lies in groups of four to eight, haunts, grassy hills or rocky ground in the midst of forest and as a rule feeds in the morning and evening. Older males generally remain solitary. Its height at the shoulder is about .68 metre and the length from snout to the root of tail is about 1.27 metres. Its horns are .15-20 metre in length.

Owing to its meat value, goral, once abounding all over, has suffered considerably at the hands of poachers. Good grounds are Salarang, Bhabha valley and in Dublang catchment.

Musk deer (*Moschus moschiferous*)

Kinauras call it *kyo rock* or *bena*. It is found in rocky area generally above 2,743 metres. It frequents woody slopes and steep places. It is, however, much less common, or rather less plentiful, than it used to be, for its value is well known, and no animal is more persecuted. On account of its great value, the princely rulers used to give regular contracts for killing it and for collecting musk pod resulting in a large scale destruction of the animal. It is now a protected animal.

It has long, coarse, brittle and wavy hair. Its hind legs are much longer than forelegs, ears are large and tail is very small. The canine teeth of the male are abnormally developed sometimes reaching up to

.076 metre. Its colour is dark brown which becomes almost white during the winters. Its height is about .5 metre at the shoulder and length from nose to rump is about .91 metre. It remains generally solitary. The musk pod is an abdominal gland about 28.3 grams. It is found in male animal and the quantity varies according to the season and the age of the animal.

Tahr (*Hemitragus jemlahicus*)

Tahr is a forest loving animal and prefers steep tree-covered slopes. Old males are generally found in thick evergreen forests while female is occasionally found in the open. It finds a footing in the most inaccessible places. It has a long, narrow and straight head. The hair on the head is short but much longer on the body. Old male has a shaggy mane reaching to the knees which is dark brown in colour on top, shading to pale-brown at the base. Males are much darker than females. Males weigh up to about ninety-one kilograms with a height up to one metre at shoulder and a length of 1.3 metres. Its horns are small ranging between .30 to .38 metre round the curve. Tahr is found on suitable elevations in Pandra Bis and Athara Bis areas.

Black bear (*Selenarctos thibetanus*)

Known as *rikha*, the black bear commonly inhabits oak forests from 1,828 to 2,048 metres elevation. It often comes down to the village fields during harvesting seasons and causes considerable damage to the standing crops. It is a savage animal and sometimes attacks human beings even without provocation. It is prized for its skin, fat and gall-bladder.

Snow leopard or ounce (*Uncia uncia*, Schreber)

Snow leopard or *pho thar* is a protected animal and is found near the snow line from 3,048 to 5,486 metres elevation in the upper reaches, rocky ground and pastures of Baspa, Tirung, Taiti (Lippa-Asrang) and Sangnam streams. It preys upon the sheep and goats, *thar*, *bharal*, hares and rodents. Its body is yellowish-grey while the head, cheeks and the back of the neck are covered with small dark spots. It also has dark rings all over the body. It has a long bushy tail, ringed and spotted dense fur and a well marked short mane.

Tibetan wolf

Locally this animal is known as *chanku* and is found in the areas adjoining the Spiti. It is very harmful to *bharal* ibex and even to the domestic animals like goat, sheep and donkey. This dog like

carnivorous animal kills as many animals as it finds irrespective of what it can eat. It is more common in Hangrang valley.

Leopard or panther (*Panthera pardus*)

Leopard or *thar* occurs all over the lower elevations, usually below 1,828 metres, in the forests as well as in open country-side and also among rocks and scrubs. In winter it gets round the habitation and preys upon the sheep and goats of the herdsmen. It also attempts upon the cattle tied in the cattlesheds. Average length of a male is about 1.5-1.8 metres and a female is about .3 metre shorter than a male. It is sleek short-haired and agile with a fulvous or bright fulvous coat marked with close-set rosettes.

Leopard cat (*Prionailurus bengalensis*)

Bon nishi (leopard cat) is commonly found in the wet zone. It is about the size of a domestic cat but rather longer in the leg. Its colour and markings give it the look of a miniature panther. The prevailing colour of the body is yellowish above, white below, ornamented throughout with black or brownish spots. Both colour and pattern are very variable in the species. It preys upon small birds and animals. It is nocturnal in habit and seldom seen during the day. A hollow in a tree is its favourite abode.

Monal (*Lophophorus impejanus*)

Dang monal is found at elevations from about 2,438 to 3,657 metres all along the tract but is noticeable in abundance in the wet zone. It is a dweller of forest and scrub along the upper limits of forests of oak, rhododendron, fir, spruce and birch, and, is also seen near the open grazing slopes and precipitous hill sides with grass and weeds growing on the narrow ledges. Such places are safer and more suitable for laying eggs. It digs with its powerful bill and depends upon tubers, seeds, berries, and tender shoots of alpine flora, besides eating small insects. It is a silent bird, with apparently no regular crow save for an occasional whistling chuckle.

It is a large, dumpy bird, rather ungainly for a pheasant, with a short, broad and square cut tail. The brilliant metallic head and crest, the glistening purple upper parts, white patch on back, cinnamon coloured tail and velvety black breast, render the cock unmistakable. The hen is plain-looking brown bird, mottled and streaked dark and pale, with a white throat and short crest of normal feathers. It breeds during May and June.

Himalayan snow cock (*Tetrao gallus himalayensis*)

Local people call it *leepva*. It inhabits the alpine pastures and rocky hill-sides above the limit of tree growth (between 2,743-5,486 metres).

It is a good table bird and is rich in fat towards the autumn, though less so in the spring. It looks like an enormous chukor being about the size of a turkey. Its colour is ashy grey with fine vermiculations above and the plumage below is creamy white with heavily streaked flank feathers. It lives on tubers, tender shoots and grass at the margin of the melting snow. It is a noisy bird and its call uttered from an exposed mound or ridge, is a loud, prolonged penetrating whistle of several notes with a cadence approximating to that of the common green pigeon.

Tragopan (*Tragopan melanocephala*)

Horned pheasant is the most beautiful bird found in high lying scrub above the limit of tree-growth. It is said to be found in Hansbeshan and Pandra Bis area. The plumage of the male is vermiculated black and buff, while the feathers of the head and throat are black, each feather having a central white spot. The horns and bare skin about the face are lavender blue. The hen is inconspicuously adorned in brown pencilled with black. It is a rare and protected bird.

White-bellied or snow-pigeon (*Columba leuconota*)

It is essentially a bird of the high elevation. In summer it keeps mostly between 3,048 and 4,267 metres up. It lives in colonies on cliffs and flies out to feed in the terraced cultivation. A bevy comprises about fifty to one hundred. Both the sexes are alike in appearance.

Common hill partridge (*Aphorophila torqueola*)

Common hill partridge is found between 1,524–3,048 metres elevations in abundance all over the area generally in broad-leaved forests of oak and other species which it prefers over the conifers. It roosts at night and lives in small family parties of six or seven. The bird is dumpy, short-tailed, olive brown above, mottled with black and chestnut, and with a bright chestnut cap. It has a patch of bare crimson skin round the eye, chin and throat are black and has a white moustachial streak. Its breast is grey with a white band separating it from the black throat. In the hen crown is brown, streaked with black; chin and throat rufous spotted with black and breast brownish. It breeds in April-June.

Chukor (*Alectoris graeca*)

Tig (chukor) is found at elevations from 1,219 to 3,657 metres on barren slopes and in ravines sparsely dotted with stunted grass and bushes. Generally it likes to keep itself in the neighbourhood of terraced fields in parties of four or five members but sometimes in winter this number in one party rises up to forty.

It is a strong flier and in point of size it is larger than the partridge. It is large, plump, pinkish grey-brown with conspicuous rib-like bars on flanks in buff, black and chest-nut. It has a black band running across forehead through the eyes and down sides of neck to meet in a groove or necklace on the upper breast. This black necklace, combined with the prominent white chin and throat enclosed within it, are unmistakable pointers to its identity. Its bill and legs are crimson. Female is somewhat smaller and lacks the blunt leg-spurs of the cock.

White-crested kaleej pheasant (*Gennacus hamiltoni*)

It is a bird of heavy forest quite common in thick growth, and lives in pairs or small family flocks of five or six up to about 3,048 metres. Its size is about that of a domestic fowl. In colour, male is black above, glossed with steel-blue, with a whitish rump, long white lying-down crest and bare scarlet patch round the eyes. Its underparts are chiefly brownish-grey. It has a long tail of glossy black sickle-shaped pointed feathers. Female is chiefly reddish-brown with pale scaly markings, brown crest and scarlet eye patch.

Koklas pheasant (*Cerionnis macrolophus*)

Koklas occurs between about 1,830-4,270 m elevation on steep wooded hill-sides. In size it almost equals a domestic fowl. The cock is grey above and streaked blackish chestnut below. A brown lying-down crest between two long metallic green horn-like tufts jutting out behind its metallic green head are its most outstanding features. A white patch on either side of the head is also prominent. The tail is reddish-brown and pointed, but not curved and dropping as that of a *kaleej*. The hen is mottled black and brown with buff streaks above, buff with black streaks below and has a conspicuous white throat. It lacks the metallic green face of the cock and also the horns. The crest is short and pale in colour.

Fish

Among the prominent species of fish, that are found in the rivers and streams of the district, two families of *salmo-fario* and *oreius-sinuatus* are prominent. The indigenous fish fauna, which is very poor, is uniformly distributed in the waters of the district. The exotic fish species, brown trout (*salmo-fario*) was introduced in the Baspa river in 1926. Within a decade the river was abounding with the species. But later on, during the onset of sixth decade, poachers attacked it from all sides and soon it was almost extinct. Whatever little number remained, was washed away by the excessive floods. In 1961-62 the Himachal Pradesh Fisheries Department established a Trout Farm at Sangla incubating the trout eggs,

which were brought here from Barot Fish Farm in Mandi district. Now the farm is producing its own trout ova and by the beginning of 1971 about 1.50 lacs of 'swim up fries' of trout were released in the Baspa river and its tributaries.

Reptiles

Snakes of various kinds are found. Common reptile species are the spotted agama, Indian chameleon, common krait and other harmless lingering creatures. In the amphibia family, frogs are found. Among the lizards, monitor lizard, common house gecko and garden lizard are seen occasionally.

CLIMATE

The climate of Kinnaur is largely governed by two main factors, viz., its geographical position and by its topography. The geography and the topography of the district inevitably determine the climate of the district which varies considerably with varying elevations, and from the lower parts to the upper portions of the main Satluj valley. By virtue of its elevation, the district may be said to have a temperate zone climate with a long winter from October to May, during which period snowfalls occur, and a short summer from June to September. The transition periods from April to May and from September to October correspond to the spring and autumn seasons of the temperate zone.

Only the lower reaches of the Satluj valley and its subsidiary, the Baspa valley, the area south of the Great Himalaya receives monsoon rains, while in the upper areas the monsoon showers progressively decrease, with Kalpa situated almost at the point where the Great Himalaya obstructs the march of the monsoon. Thus the area in the Satluj and its subsidiary valleys upstream of Kalpa area increasingly in the arid zone with vegetation becoming rapidly sparser.

Most of the precipitation in the district, especially in the areas north of the Great Himalaya, is received from the winter snows from October to May, when a succession of western disturbances produce the maximum snow from late December to March all over the district. The frequency and intensity of these disturbances varies from year to year, with negligible snow some years and much more in other years. At Kalpa light snowfalls have often been recorded during the latter half of October and in the end of May.

Climatic conditions, in the valleys vary not only with the altitude, but with such factors as the direction of the valley-faces, their width, the well-known winter phenomenon in the mountains when inversion of temperature occurs with colder air settling in the bottom of valleys.

As no meteorological stations exist as yet in Kinnaur, no records are available to provide an accurate picture of the weather in all its aspects over the entire district, such as humidity, direction and velocity of prevailing winds, temperature etc. Rainfall and snowfall have, however, been recorded in five stations for some years from which averages can be fairly accurately deduced.

Rainfall

Records of rainfall are meagre. The data of rainfall are available for sixty years for Kilba and for thirty years for Nachar. The data for three more stations are available for only ten years. Table I annexed to this chapter gives the details of rainfall at these stations. All these stations are in the south-western sector of the district. On account of the mountainous terrain there are likely to be sharp contrasts in the amount of rainfall even between stations only a few kilometres apart. But broadly speaking the rainfall decreases rapidly from the south-west to the north-west in the district. The eastern regions bordering on Tibet are almost semi arid. There are two wet seasons in a year in the district. About fifty per cent of the annual rainfall is received, mostly as snow, during the period from December to March. The second wet season is from July to September and the rainfall during this period amounts to about twenty-five per cent of the annual. In the extreme south-western parts of the district the rainfall in the south-west monsoon season is heavier than in the cold weather season. But over the rest of the district the rainfall in the cold season is heavier. The variation in the rainfall from year to year is very large. For example at Kilba the highest annual rainfall which was 238 per cent of the normal occurred during 1958 while in 1930 it was only twenty-seven per cent of the normal. At Kilba it was less than eighty per cent of the normal twice in two consecutive years and once in three consecutive years in the sixty year period, 1901-1960. Considering the rainfall at the other stations, three to four consecutive years of rainfall less than eighty per cent of the normal occurred once at Sangla, Purbani and Chini in the ten year period, 1951-60. At Nachar such low rainfall occurred in one spell of four consecutive years in the thirty year period 1931-60.

The average of three years monthwise rainfall and snowfall in the five stations of Nachar, Kilba, Sangla, Kalpa and Purbani is appended below, for the years 1962-64.

	Nachar		Kilba		Sangla		Kalpa		Purbani	
	Rain- fall (mm)	Snow- fall (inch)	Rain- fall (mm)	Snow- fall (inch)	Rain- fall (mm)	Snow- fall (inch)	Rain- fall (mm)	Snow- fall (inch)	Rain- fall (mm)	Snow- fall (inch)
January	—	17	—	5	—	18	—	15	—	11½
February	—	22	—	10	—	35½	—	32½	—	34
March	—	14½	153.8	5	—	44½	—	46	—	27
April	62.0	—	68.6	—	65.9	2	83.9	4½	39.8	4
May	93.0	—	42.6	—	47.7	6	52.2	5½	63.3	8
June	76.5	—	35.4	—	40.3	—	37.5	—	43.2	—
July	201.9	—	66.0	—	54.1	—	43.1	—	26.4	—
August	234.9	—	67.3	—	73.0	—	62.4	—	25.4	—
September	47.2	—	142.5	—	141.8	—	123.1	—	87.6	—
October	126.7	—	—	—	0.8	—	2.7	—	0.5	—
November	34.4	—	48.0	—	46.8	10½	15.7	10	11.5	8
December	—	3½	—	2½	—	24½	—	12	—	12
Total :—	876.6	57	624.2	22½	470.4	140½	420.6	125½	297.7	104½

The average number of rainy days including snow days (i.e. days with rainfall of 2.5 mm 10 cents or more) in a year in the district varies from fifty-four to eighty in the south-western parts of the district. In other parts the number is likely to be much less.

The heaviest precipitation in twenty-four hours recorded at any station in the district was 609.6 mm at Kilba on December 27, 1958.

Temperature

There is no meteorological observatory in the district. However the records of the observatories in the neighbouring districts can be taken as fairly representative of the conditions prevailing in this district in general. The temperatures in the different parts of the district vary according to the elevation. Temperatures begin to rise rapidly from about the end of February, till June, which is the warmest month in the lower part of the district. In the upper arid zone the warmest months are July and August because it lies beyond the range of the monsoon. The weather is cool and pleasant in the summer season except perhaps in the deep valleys. With the onset of the south-west monsoon by about the third week of the June, the temperatures begin to decrease gradually. However the drop is rapid only after October. January is the coldest

month. In association with the passage of western disturbances in the cold season, the district experiences spells of cold weather when the temperatures often go down several degrees below the freezing point in the inhabited area like Kalpa. Frost occurs from October to May.

Humidity

The relative humidities begin to increase from May. They are the highest during the south-west monsoon season when they are between eighty and ninety per cent. In the rest of the year they are low and are generally between thirty-five and forty-five per cent.

Cloudiness

The clouding in Kinnaur is more heavy, persistent and prolonged in the long winter season with the passage of western disturbances which bring snow to the district. There is considerable cloudiness in the summer in the lower Satluj valley up to about Karchham, and the Baspa valley, which are affected by the south-west monsoon. In the upper arid zone north of the Great Himalaya, which acts as a barrier to the monsoon, clouding is sporadic and insignificant, occurring only with a very strong burst of the monsoon.

Winds

The main Satluj valley with towering snow peaks of the Great Himalaya flanking it, forms, as it were, a *venturi* between the broad Tibetan plateau in the north and the broader valleys flanked by lower hills of the Outer Himalayas, causing high northerly winds in the winter months that rush down the valley with biting cold intensity. These winds are strongest, up to an estimated 30 knots, during December to March, and bring down the temperature to several degrees below zero. During the summer monsoon months southerly winds are not so strong and generally an average estimated 10 to 15 knots. Spring and autumn periods are relatively calm, with diurnal variations in winds velocity and direction being caused throughout the year by local convection currents. In the arid zone in the upper valleys beyond Kalpa, the semi-desert country causes large diurnal temperature variation resulting in strong convectional winds of 15 to 25 knots that daily whip up a lot of dust and sand causing considerable discomfort to the inhabitants.

Special weather phenomenon

This area is free from storms of great intensity, such as cyclones. Thunderstorms occur very rarely in Kinnaur, possibly due to its uniformly high elevation giving it a temperate climate, which is not conducive to the sharp instability of the atmosphere that causes the development

of thunder and hail-producing cumulo-nimbus clouds. Large cumulus and occasional cumulo-nimbus do, however, occur over mountain-tops mainly in the spring and autumn seasons, corresponding to pre and post-monsoon periods respectively, due to the orographic effect of the mountains, which may produce muffled thunder and only very tiny hail-stones. Dust-storms never occur in Kinnaur. Even the occasional thunderstorms are mild, rarely producing hail-stones. In the winter, at the tail-end of Western disturbances mild blizzards do, however, occur. The elements are generally calm, as in the temperate zone, with none of the ferocity of tropical storms. Thunderstorms largely occur during spring and autumn and in the monsoon season.

Visibility drops to almost nil during actual snowfalls in the winter, and three to six metres with low clouds and rain during the monsoons in the lower areas. At all other times the air is pure in this high-altitude zone and visibility is limitless, obstructed only by the mountain-scape. Fog rarely occurs even at the bottom of valleys, except when precipitation occurs. The number of cloudy/foggy days is not available as no record has been maintained, but the following average record of rainy and snowy days for the years 1962-64 may be useful :—

	Nachar		Kilba		Kalpa		Sangla		Purbani	
	Rainy	Snowy	Rainy	Snowy	Rainy	Snowy	Rainy	Snowy	Rainy	Snowy
January	—	8	—	4	—	6	—	7	—	5
February	—	6	—	6	—	10	—	10	—	8
March	—	11	7	2	—	8	—	9	—	7
April	6	—	5	—	8	1	6	2	5	2
May	6	—	5	—	5	2	3	3	3	2
June	6	—	3	—	3	—	3	—	2	—
July	15	—	8	—	8	—	6	—	4	—
August	16	—	9	—	7	—	8	—	5	—
September	11	—	8	—	8	—	7	—	7	—
October	2	—	—	—	—	—	—	—	—	—
November	2	—	3	—	4	3	2	3	2	3
December	—	2	—	3	—	3	—	3	—	3
Total:—	64	27	48	15	43	33	35	37	28	30

TABLE I
NORMALS AND EXTREMES OF RAINFALL

Station.	No. of years of data	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual rainfall as % of normal and year ²	Highest annual rainfall	Lowest annual rainfall	Heaviest rain-fall in 24 hrs ¹ . Amount Date (mm)
Kilba	60 a	69.6	73.4	112.0	77.5	53.9	30.0	69.6	60.2	75.4	29.5	14.2	49.5	714.8	238 (1958)	27 (1930)	609.6 Dec. 27 1958
	b	5.3	4.9	8.7	5.6	4.9	3.2	7.6	7.1	5.6	2.2	1.1	2.9	59.1			
Sangla	a	184.7	177.5	98.0	73.4	73.4	33.0	69.3	55.9	69.9	76.5	16.3	142.5	1070.4	212 (1959)	59 (1952)	558.8 Dec. 21. 1958
	b	9.4	5.8	8.0	6.0	5.2	3.2	8.2	6.9	6.3	3.6	1.0	3.8	67.4			
Purbani	10 a	146.8	123.2	104.1	54.4	63.0	11.4	35.1	26.4	44.2	56.6	15.2	99.3	779.7	143 (1958)	62 (1951)	355.6 Dec. 21 1958
	b	8.5	3.8	8.4	5.5	5.1	1.4	4.8	3.2	4.9	3.6	0.9	3.6	53.7			
Chini	10 a	22.5	65.0	74.4	81.3	81.5	20.3	55.1	36.8	61.5	74.2	10.9	54.6	708.1	198 (1957)	55 (1951)	77.7 1956 Oct. 9
	b	8.4	5.4	7.5	6.6	5.9	2.0	6.7	4.9	5.3	3.4	0.9	3.9	60.9			
Nachar	30 a	105.9	87.6	112.8	66.3	61.5	60.7	145.0	141.2	117.3	51.3	11.7	41.7	1003.0	171 (1955)	53 (1941)	268.2 1956 Oct. 10
	b	6.1	5.1	7.6	5.9	6.2	6.7	13.1	13.3	8.7	3.2	0.9	3.1	79.0			
Kinnaur	a	119.9	105.3	121.3	70.6	66.7	31.1	74.8	64.1	73.7	57.6	13.7	77.5	885.3			
District	b	7.5	5.0	8.0	5.9	5.5	3.3	8.1	7.1	6.2	3.2	1.0	3.5	64.3			

(a) Normal rainfall in mm (b) Average number of rainy days (days with rain of 2.5 mm or more).

1. Based on all available data up to 1960.

2. Years given in bracket.

CHAPTER II

HISTORY

It may be mentioned at the outset that historically, as far as we know, Kinnaur had not been a separate unit and therefore did not play its part as an independent kingdom with its neighbouring Hill States. It was a small part of Bushahr State all through. As about the pre-historical period much of the narrative is and has to be inescapably based on legends and mythology. How far these legends fit into history will require immense research which is beyond the scope of this gazetteer, as that research alone will occupy scholars for years together. It is encouraging to see that some scholars are working on this subject to day. It may be possible for these historians, anthropologists and social scientists to throw more light on the elusive history of this interesting area.

Quite a number of races and tribes derive their origin from divine sources. Whether it was the inventive genius of the Hindus which created these races or whether they were once a reality is still controversial. We do, however, come across names such as, Vidyadharas, Apsarases, Yaksas, Raksases, Gandharvas, Kinners, Pisacas, Guhyakas, Siddhas and Bhutas in the famous Sanskrit classic *Amarkosa*. Leaving aside the Raksas, Pisacas and Bhutas all the remaining races are supposed to be disposed towards good¹.

Legends and mythology consider Kinners as a distinct race, somewhere between human beings and Gods. They have been variously described by a host of authors of Indian Art, Mythology, culture and History as fabulous beings half human, half bird, with bird's legs and wings and human head and at other places with human body mounted upon by the head of horse or even with the horse's body and the head of a human being². These have been called Kimpurushas, meaning 'what kind' (*kim*) of human beings (*nara* or *purushas*). The epics describe them as heavenly musicians or celestial choristers. "Such creatures are supposed to inhabit a semi celestial region high in the Himalaya where earthly saints who have attained perfection (*siddha*) consort with super-human beings³". Whether the present inhabitants of Kinnaur may or may not be, most likely they are not, the descendents of the mythical Kinners but from the point of view of living in the high Himalaya they can claim to have that aura around them.

Mythical Kinners apart, enough evidence is available to show that the races of Kinners and Kirats did exist.

What exactly was the distinction between Kinners and Kirats has not so far been cleared or at any rate students of pre-Aryan history have not been able to draw out the distinction. It is also a settled point that both these races lived as contemporaries inhabiting the area in the high Himalaya mountains. Inhabitants of the present district of Kinnaur are normally called Kinners or Kanauras and, as has been mentioned above, whether they are the direct descendants of those celestial choristers is an open question. Satyaketu Vidyalkar mentions that the area of mountains of the Satluj river where the erstwhile Bushahr and other states near the Simla Hills exist was anciently known as Kinnerdesh. "The Kinnerdesh is situated between the mountains of the Satluj and the Yamuna". Another scholar, Dr. Budh Prakash² is of the view that the southern part of Kashmir, known as Kinnaur is reminiscent of the ancient Kinnerdesh. The region lies along the upper valley of the Jhelum between the Dhaola Dhar and the Zaskar mountains. The valley of Spiti starts from there. Likewise in tracing Raghu's line of conquest along India's northern border, Professor Jay Chandra Vidyalkar³ discloses, "Raghu's next encounter was against the mountaineer Ganas, the Utsava Sanketas and the Kinnaras." Dr. Radha Kamal Mukherji⁴ has defined Utsava Sanketas to literally mean people of loose affection, and Kinnaras as the polyandrous tribe of the Tibeto-Himalaya region and Nepal. Having defeated them and made the Kinnaras sing the story of victorious arms, he descended upon the Himalaya without having gone to the Kailas mountain. The last information is important. In⁵ the northern conquests of Arjuna also it is described as we find after the country of Kimpurusas the Hatkadesa of the Guhyakas and then lake Manasa. Thus the country of Kinnauras or Kimpurusas was positively to the west of Kailas and lake Manasa. It can be identified with the modern Kinnaur in the upper valley of the Satluj where the headquarters of Chandrabhaga approach very near it. Kinnaur is full of folk lores which go back to the Mahabharata period. Kinnaur seems to be the district where the Pandavas, the famous five brothers of the epic, passed the best part of their life. Kinners however find mention in every book on religion of Hindus, scriptures, hymns and mantras from time immemorial. Countless sculptures have immortalised them. The frescoes of Ajanta have done them the honour. The great poet Kalidas remembers them in the following term in his famous book *Kumarsambhava*.

"उदगास्यता मिच्छति किन्नराणां तान प्रयाचित्व मियोशान्तुम"

1. Mukherji, R. K., *The Original Inhabitants of India*, p. 514.
2. Alain, Danielou, *Hindu polytheism*, p. 307.
3. Heinrich, Zimmer, *Myths and Legends*, p. 120.

1. Satyaketu Vidyalkar, *Bhattiya Sanskriti aur uska Itihas*, p. 29.
2. Budh Prakash, Dr., *Studies in Indian History and Civilization*, pp. 355-56.
3. *Proceedings and Translation of the Sixth All India Oriental Conference*.
4. Radha Kamal Mukherji, Dr., *The History of Indian Civilization*, p. 69.
5. *Mahabharata* (Sabha Parovam, ch. IX verses 1-5).

Rahul Sankrityayan in his book *Kinnerdesh* is also of the view that once upon a time the country of Kinners occupied a vast area in the Himalaya from the eastern bank of the Ganga to that of the Satluj and Chandrabhaga in the west. The Kirats occupied the area from the eastern bank of the Ganga to the whole of Nepal. The book entitled *Vimanyathu* written in the second century B. C. by Sutpitak contains a Sanskrit verse.

“चन्द्र भागा नदी तीरे चहोसि किन्नरी तरा”

We thus generally, and perhaps safely, can say that there did exist a race called Kinners and that that race inhabited the area now comprising Kinnaur district in addition to the other areas in the Himalaya region. In course of time and centuries of change and upheaval the Kinners, probably along with the Kirats in the adjoining region, were gradually pushed towards higher hills and thence to almost extinction or assimilation with the usurpers beyond recognition. This was done in a two pronged attack, one by the Vedic Aryans of the plains going upwards and another by the Khash, sister branch of the Aryans, who penetrated into the region gradually marching through the hills of Khashgir (Kashmir)¹. It is also understandable that during this strife and struggle the stronger race dominated and swallowed the weak changing the course of history in which the Khashas became the undisputed masters in these regions. The Khash tribe finds mention in the *Mahabharata* as well as in many a work of the writers of ancient history. It is believed that after the extinction of the races of Kinners, Kirats and Nags, the Khash settled themselves to the cultivation of the land in addition to their patent occupation of rearing and raising cattle. Khashas were a virile and well-knit race between whom there were no caste distinction. The subjugated tribes became their inferiors. Among the Khash the affairs of the community were carried out with common consent and the family deities were the guiding hands. An elder of the house was considered a representative of the family deity who spoke for the family in the assembly of the elders of the community. With the passage of time a few strong leaders must have emerged from amongst the representatives of the individual households and must have found it difficult to obey and yield to a single individual. These few leaders thus carved out areas of influence over their own separate holds. The foundations of separate hill states were thus laid down. Those who were nearer the plains were influenced more by the Aryan customs and languages strongly prevalent in the Indo-Gangetic plain. The others remaining in the higher hills understandably got

1. Sankrityayan, Rahul, *Himalaya Parichaya* (1), 1953, p. 42.

influenced by the impact of the Bhot culture. The Indo-Tibetan border residents called the Tibetans as Bhoteas who influenced also their culture. It was natural for the residents of this region to be so influenced because their interests and the very means of livelihood laid in the trade with the Bhoteas as also because they shared common pastures with them. With the spread of Buddhism in Tibet the inhabitants of the area of present Kinnaur particularly those nearer the Tibet border were also influenced by Buddhism and this became another abiding link between them. Thus the history of Kinnaur can broadly be divided up to fourteenth century into three periods, (1) pre-Aryan or pre-Khash period (copper age), (2) pre-Bhot period up to seventh century and (3) Bhot period up to thirteenth/fourteenth century.

Pre-Aryan period—The Aryans came to India in the copper age. At that time Kinners, Kirats and Nags were the sole inhabitants in the Himalayan region. The Khash were pastoral and so were the Kinners and Kirats. There were bound to be disputes and the Khash being stronger became masters. Due to this inter-mixing, however, certain customs, manners, and beliefs were evolved and these differed to a good extent from the manners, customs, and beliefs of the Aryans from the plains who after coming into contact with the Kinner-Kirats of the lower region kept their ancient traditions intact forcing the vanquished race to adjure their own customs and traditions. They made them adopt their language just as some centuries later the Bhoteas made theirs to be adopted by the residents in the higher regions.

Pre-Bhot period—During this period there must have been the rule of the Khash. No written account is available but it can be presumed that people had settled to peaceful life, were intensely religious and had established their trade contacts across the border (Himalayan) on the one side and with the plains on the other. The people of this area had come to acquire the epithet of being called as Kinnauras. Their social and cultural life was not much different from what it is today, though their religious beliefs were still elemental. Rahul is of the opinion that more light could be thrown on the history of this period if proper excavations of the graves in the few villages were carried out.

Bhot period—Emperor Shorchen Gambo or Song-Tsen-Gampo (630-50 A. D.) was the founder of the Bhot empire. His descendants ruled powerfully till 908 A. D. when during the regime of Emperor Ayod Srungus (908-65 A. D.) signs of disintegration of the empire became discernible. During the middle of the thirteenth century Gras-Pa-De was the king of Guge. Ajitmal, Kalanmal and Partapmal were said to be his successors.

Thus the Bhot period can be divided into further two broad parts. First from seventh to tenth century and the second from tenth to fourteenth century. During the first three hundred years Bhots held intercourse distantly from Lhasa and the Kinnauras got acquainted with Bhot language as well as with Buddhism. That there was some intermixing of blood also can not be ruled out yet it was mostly in the span of these three hundred years when the old speeches of Mansarovar, Ladakh, Baltistan and Spiti were lost for ever and were replaced by the Bhot language. It was again in this period that perceptible changes came into the social, cultural and religious spheres of the Kinnauras. Still it was a foreign rule based on the exploitation of the people. The people of Kinnaur always resented this rule of the Bhots who did not and could not belong to this stock.

After the tenth century when Bhot empire started tottering and when Dapalkhore fled to the west we enter into the second period of the Bhot empire. It has been called Guge period, from tenth to thirteenth century. During this period Kinnaur was no more a principedom to be exploited from distance. The Bhot ruler could not afford to let loose his men to satisfy their lust for women and power and remain a cold and indifferent spectator. Now the ruler was not a detached spectator sitting at an unmeasurable distance at Lhasa. He had come to establish his kingdom at the border of Kinnaur and could not afford to let go the advantages accruing from the higher standards of Kinnauri culture and civilization. He had to have their co-operation and sympathies. The strength of the Bhot ruler lay, not in the hands of his Generals and soldiers moved from Lhasa, but was completely dependant upon the new relationship created and contacted in Kinnaur through social, friendly and even matrimonial alliances. A new nobility and ruling class had come to stay in Kinnaur, called Thakurs. An age of prosperity was ushered in. Trade was developed and agriculture progressed.

One of the last kings among the Bhots was said to be named Partapmal. This was however the time, nearing the thirteenth century when the Bhot empire started falling to pieces. The rulers became weak and it was a signal for the nobles and chiefs to assert independence. In the process the Guge empire was split up into a number of Thakurshahis. Every glen, every group of a few villages had a Thakur.

By the beginning of the fourteenth century the entire area of Kinnaur was divided in seven parts, locally called *sat khund*. The process of disintegration did not stop here. There was further splitting up and the area came to be covered with, many small hegemonies, which were constantly warring against, or allying with, each other as conditions warranted. The neighbouring tottering Bhots also found time to jump

into the fray and did not desist from creating trouble. For defensive and offensive purposes, the power enclaves of Thakurases built their own forts on commanding sites. We can still see the Labrang, Morang and Kamru forts telling the story of that age. It would be impossible to construct the history of that period but fact remains that out of this chaos some forces emerged which in time destroyed each other until all were destroyed or subdued and the strongest ruler survived. The first such ruler at Kamru thus was one Parduman. Once the independent Thakurais became feudatories, excuses were found, from time to time, to reduce their powers and territories until at last the suzerain state assumed full control. Small fights for existence, however, also cropped up. A few legends may also be narrated.

In Kinnaur district a peculiar and centuries old institution of *grokch* has come to this day through generations. There are various deities all over the place and every deity has a *pujari* and a *grokch* or a mouthpiece of the diety. It appears that both these institutions are hereditary. The descendants learn by the word of the mouth of *grokch* the history of the deity usually related at the time of fairs and festivals surrounding the deity. These utterances are called *chironings*.* In course of their intensive and extensive touring the Gazetteers Unit has collected the *chironings* of almost all the important deities of Kinnaur. Here the *chironing* uttered by the *grokch* of the Badri Nath at Kamru may be related because it was Kamru that the line of the rulers of Bushahr is said to have sprung and come down from. The *grokch* of the deity utters a *chironing* which is given in original along with its translation in Appendix III. Generally it says that one Dev Purna went to Kamru and after killing the ruling Thakur of the village and that of the adjoining village of Sangla proceeded to Tangling. The Tangling Thakur was also liquidated after which Dev Purna went further on to Chini (near Kalpa, the present district headquarters). The Chini Thakur, named, Amurch was liquidated and his fort captured by Dev Purna. Having achieved thus, the remaining Thakur at Choling was also done away with by Dev Purna and after subjugating the whole area he proceeded to Sarhan. In Sarhan Banasur was the ruling chief with whom Dev Purna waged a great battle in which Banasur was defeated and vanquished. Thereafter Dev Purna was alleged to have gone to Kashi Nagar (probably Varanasi of today) and brought from there a man, named, Parduman who belonged

*With the spread of education this hereditary institution of *grokch* is disappearing. The newly educated generation does not want to learn *chironings* and there is a great fear that these may be lost for ever.

to Chandervanshi dynasty and installed him as king at Sarhan. What happened to Dev Purna thereafter has not been related in the *chironing* but it can be presumed that he also was deified in course of time and became one of the godlings.

In another legend Dev Purna is said to have come from Badri Nath in Garhwal through the Himalayas and first halted at Tholing Muth, a place in Tibet. There Dev Purna did not feel at home and is said to have escaped to reach Kamru. His battles with the Thakurs who were occupying different parts of the area have been described in detail and the legend ends at a place where after ridding the whole area from the hated rule of the merciless Thakurs, Dev Purna set Parduman on the throne at Kamru and himself assumed the role of a deity. Thus the rule of Parduman commenced in Kinnaur with his capital at Kamru which, with the passage of time, grew into the erstwhile state of Bushahr. It is said also that along with Parduman his brother Dasrath was settled as a royal priest.

Yet in another legend it is said that these brothers while roaming about in Sarhan visiting the temple of Kali, happened to enter the palace gate at a certain time; the younger one, that is, Parduman was the first to enter the gate and was proudly hailed by the people as their sovereign as the throne was at that time lying vacant. His elder brother had to be content with the office of the priest of the royal family.

According to yet another story Parduman came to Sarhan in order to marry the daughter of Raja Bavasa Dev (or Banasur). It is not known whether the marriage took place but Parduman is said to have killed his prospective father-in-law and usurped his powers at Kamru.

It will be, perhaps, of interest to give yet another version about the ancient history of Kinnaur. The *Settlement Report* of 1928, contains a legend that this part was under the *devtas* (gods and semi-gods) and last in the line was one Banasur who had become very powerful all over Bushahr. A battle was fought some six thousand years ago between Lord Krishna and Banasur in which Raja Banasur, along with his three sons, was killed. Lord Krishna then made Parduman Singh, his (Lord Krishna's) grandson, the ruler of the place. Apparently there are serious discrepancies in this story. According to the story given in the epics, Banasur was not killed as he was a descendant of Prahlad to whom Vishnu, of whom Lord Krishna was the incarnate, had held a promise (boon) that he would not exterminate the race of Prahlad. What actually could have happened was that Banasur's pride was humbled and on his recognising the Almighty Vishnu in Lord Krishna, Banasur surrendered, and, leaving the kingdom to Parduman Singh, took to saintly life.

From all these accounts the only common name we come across repeatedly is of Parduman or Parduman Singh. If this were indeed the grandson of Lord Krishna then the suffix 'Singh' could not have been there. During the time of the Mahabharata no name ended with the suffix 'Singh'. Most likely the rulers adopted this name much later to show their descent from Rajputs, the higher class, who prided themselves in being called a 'Singh'. The affix 'Singh' among Rajputs appeared to have come into use in the sixteenth century. This name, however, heads the genealogy of the rulers of Bushahr¹. The *grokch* (mouthpiece) of Kamru temple of Badri Nath utters the name of Banasur and Parduman in the *chironing* (history of the deity).

Historians have not so far been able to find out how the Thakur of Kamru was able to bring the whole area under his rule. It is, however, clear that particular Thakur of Kamru was responsible for destroying the Thakurais of the various *khunds*. Even up to the day of the last ruler of erstwhile Bushahr State, before the state merged, it used to be considered essential for the raja to be enthroned in Kamru fort also as without that ceremony the enthronement was considered to be incomplete. In course of time, the ruler of Bushahr State, according to Rahul, perhaps felt embarrassed to be associated with the dynasty of some unknown Thakur and, therefore, connected their genealogy with the well-known Chandervanshi Rajputs of the plains. The Thakur of Kamru threw away the title of Thakur and became a raja.

Given in Appendix IV is the lengthy genealogy of the rulers headed by Parduman and coming down to Raja Vir Bhadra Singh, the 122nd descendant. The two genealogical tables differ in some details². In one table Chubal Singh is shown as the son of Parduman, while in the other Anurudh is mentioned as the son of Parduman and Jamal as the son of Anurudh. In Rahul's opinion, Chubal Singh was a historical figure and Jamal seemed to be his surname. Probably Chubal Singh, the undisputed monarch of the Kinnaur area, shifted his capital from Kamru to Sarhan and subsequently the descendants to the chief of Kamru namely, the rulers of the erstwhile Bushahr State cast off their Kinner heritage and connected their affiliation to the Chandervanshi dynasty as has been stated above.

Unfortunately, however, neither Rahul nor any other historian has been able to give a connected history of Kinnaur till very late in the

1. *The Glossary of the Tribes and Castes of Punjab*, (vol-III, page 420).

2. There are two genealogical tables, one kept by the ruling family and another at Kamru. The former does not add 'Singh' as affix to Parduman.

sixteenth century. The legends and the various *chironings* by the *grokch* of the deity also do not fit in and dovetail with the history of this part. Till sixteenth century, therefore, we will still have to grope in the dark and to carry out intensive research work to get the connected history of this interesting area.

The racial origin of the Kinnauras are also little known. Systematic study has been restricted by the inaccessibility of the country, the reserved nature and inability or unwillingness of many Kinnauras to submit to anthropometric examination, the lack of ancient skeleton material due to the virtual impossibility of conducting archaeological excavation. Rahul Sankrityayan is of the opinion that some significant facts may be revealed if the old graves in the Kinnaur area are excavated. He feels that these graves called *khacherokhang* contain some earthen utensils which may throw light on the history of pre-Bhot or Bhot period,

It is fairly correct chronologically to presume that by the sixteenth century the Thakur of Kamru did complete the great feat of conquering a large number of Thakurais. Not only that but the ruler, whoever he was in this very century, continued to expand his empire towards the west and the south of the Baspa valley. So much so that a time came when the ruler thought that Kamru was no more a central place from which he could govern and supervise his extended empire. He must have also foreseen that if he remained confined in Kamru his successors would be learning only the local dialect and if they did so they were liable to alienate the loyalty of the people of the newly conquered areas of Rampur and Rohru. The capital was, therefore, shifted from Kamru to Sarhan.

It may be relevant at this stage to point out that there is a strong difference of opinion in what Rahul Sankrityayan affirms about Sarhan being the same as Shonitpur the capital of Raja Banasur. There is also a belief that Tezpur of Assam was also claimed as Shonitpur. Lord Krishna seems to have operated in Kinnaur as well as in Assam. And yet there is another evidence¹ that it was a place called Sui, in Almora district which was real Shonitpur. "Sui" near Lohughat-Sonitpur. The learned pundits of Kumaon affirm that Sui is no other than Sonitpur, the red city of Shastras, the abode of Banasur. The peculiarities of the soil at and around Lohughat explain the mystery. At removing the sod in some places, the blue but far more general deep red ferruginous clay is found to form the ground and to this the people appeal as ocular demonstration of the legend. It owes its colour to

1. Punjab Notes and Queries, p. 36.

2. Johri Sita Ram, *Our Borderlands*, Lucknow, 1964, p. 71.

nothing else than the blood of giants. During the rainy season the Lohu or the 'bloody river' is similarly discoloured". Apart from this uncertainty about Shonitpur one is also led to doubt if the battle between Banasur and Lord Krishna, in which Lord Siva also took part on behalf of his disciple Banasur, could have been fought in the hills with chariots running like mad and elephants charging. Unless some great earthquake and great upheaval had raised these mountains in place of the plains after the battle, it was impossible for chariots and elephants to partake in a combat at Sarhan. This confusion remains. The fact is however that the capital was shifted to Sarhan from Kamru in the line of rulers of Bushahr State. The two genealogical tables are reproduced in Appendix IV.

The difference in details can perhaps be explained away in two ways. Firstly, the pronunciation of the names in Indo-Tibetan languages spoken at Kamru were different from the local dialect pronunciation of Rampur. Secondly, some of the rulers went through the enthronement ceremony at Kamru and kept on ruling from there, particularly in the beginning. Since they did not come down to Rampur their names did not appear in the Rampur list. This discrepancy was more pronounced in the list in the later period when Rampur became the capital. According to tradition the ruler had to visit Kamru for his second enthronement ceremony but some of the rulers who were perhaps not the direct descendants of the family and were placed at the throne at Rampur as stop-gap arrangement were not taken to Kamru for the second ceremony. That explains the greater number of rulers in the Rampur table as compared to the one in the Kamru table. Except for the last eleven names the two genealogies given above do not fully agree. Much reliance cannot, therefore, be placed on their correctness. Some historic account about these last rulers may be relevant here.

Raja Chatar Singh is said to have been the first ruler to bring under his sway the whole of the area of the erstwhile Bushahr State including Kinnaur. Seemingly there were three paramount powers in the Simla Hill States about this period. These were the rajas of Bushahr, Bilaspur and Sirmur. Tribute was levied upon the other smaller states or *thakarais* by these powerful states within their areas of influence. Raja Chatar Singh apart from being supreme in his own time was to have been counted as a virtuous ruler also.

Raja Kehri Singh son of Raja Chatar Singh, is described as the highest skilled warrior of the line. Many stories and anecdotes are current even up to this day about him. He was an *ajanuyaku* (*ajanu vhay*) like the divine Ram Chandra i.e. he could touch his knees with his hands when standing upright.

One of the Moghul emperors once held a great durbar of the hill chieftains which Raja Kehri Singh also attended. When he appeared at Delhi, it was observed with surprise and wonder, that wherever, he went he was sheltered from the sun's rays by a small cloud shading him from above in the shape of a *chhatra* (umbrella). The Moghul emperor heard of this phenomenon and summoned the raja to the *diwan-i-khas*. When the raja appeared the cloud was seen accompanying him into the imperial presence. The emperor asked for an explanation, and the raja answered that it was the favour of the gods and goddesses of his country, who wished to protect a hillman from the unaccustomed heat of the plains. Emperor greatly pleased said, "*O Raja Sahib ap ko khuda ke ghar se chhatra mila hua hai, is liye ap ko chhatrapati khatib diya jata hai*". (Raja Sahib, God has been pleased to bestow a *chhatra* over your head and, therefore, I confer the title of *chhatrapati* upon you). At the same time a robe of honour was also bestowed upon him. Raja Kehri Singh is said to have reduced to tribute the rajas of Sirmur, Garhwal, Mandi and Suket, and to have subdued the Thakurs of Keonthal, Kotkhai, Kumharsain, Balsan, Theog, Darkoti etc., now all forming parts of Mahasu district. Besides, he entered into a commercial treaty with the ruler of Tibet.

Kehri Singh ruled during the sixteenth century and was a contemporary of Grajayadoke, the ruler of Tibet. During this time the then raja of Ladakh annexed a part of Tibetan territory. A Tibetan commander, Guldenchhen, started preparations to take back the territory. Kehri Singh learnt about it and concluded a treaty with Tibet. Guldenchhen was subdued. According¹ to another view Mirza Haider invaded Ladakh in 1523 from the north. Tibet saw the danger and thought it wise to maintain peace on the Indo-Tibetan frontier. He therefore concluded an agreement of friendship with the king of Kinnaur.

Professor Lo Petech² gives the best available information about this battle in his valuable article on 'The Tibetan-Ladakhi-Moghul War of 1681-1683'. At the time of that war there was an alliance and a brief general agreement about friendly relations and the exchange of envoys between Raja Kehri Singh of Bushahr and the government of the VI Dalai Lama. According to the language of treaty the Kailas would remain the boundary line of Bushahr with Tibet; Tibet and Bushahr would remain friends and the traders from both sides would enjoy all facilities without payment of any tax. Subsequently the army of Kinnaur, under the command of Chhodas marched towards Ladakh. Army of Ladakh including the armed Pathans picked up the gauntlet. Chhodas played a trick and bought over the Pathan forces. Thus deserted by Pathans, the Ladakh army suffered a severe defeat. Leh was subdued. The Kinnaur commander was triumphant.

1. Johri, Sita Ram, *Our Borderlands*, pp. 24-26.

2. *The Indian Historical Quarterly*, vol. XIII, September, 1947

Nothing is known about Raja Vijay Singh and Udai Singh who followed Kehri Singh. Raja Ram Singh who came after Udai Singh made Rampur his capital. In his time began a series of disastrous contests with the raja of Kulu. About this time Raja Bidhi Singh was ruler of Kulu who invaded Bushahr and annexed the *kothies* of Dhaul and Koth Kandi and Balramgarh in outer Seraj. Raja Bidhi Singh died in 1688 and was succeeded by Man Singh during whose time the Kulu State reached the zenith of its power. He ruled from 1688 to 1719 and completed a taluka of outer Seraj which to-date forms part of Kulu. He was able to add to the previous conquests of Bidhi Singh the Kulu *kothi* of Pandra-Bis and built forts at Pandra-Bis, Dab Kopochka and Tangusta. Evidently, the Kulu rulers were powerful and were able to subjugate the rajas of Bushahr. It was thus during the reign of Kehri Singh that Bushahr for ever gave away outer Seraj. Reign of Raja Rudar Singh was perhaps a normal one without any mentionable event. Raja Ugar Singh is said to have taken by force of arms the pargana of Suhel, which he handed over as a gift to the raja of Kumharsain, to have maintained at the same time his suzerainty over that principality as well as over Keonthal, Kotkhai and Theog. There always had been a long standing hostility between the houses of Sirmur and Bushahr till Raja Ugar Singh married a daughter of Sirmur house when a friendly understanding took place. The raja on his death left two ranis; one, the daughter of the house of Sirmur, by whom he had no issue; the other was a relation of the Thakur of Dhami, by whom he had a son, Mahinder Singh, and a daughter.

During the minority of Raja Mahinder Singh who was about eight years of age at the time of his father's death in 1811, the state was administered by the rani, his mother, and the hereditary wiziers. The rani had no actual power or influence in the government. Bushahr had the disadvantage of having a weak army. Any one could wriggle out military service if he made pecuniary contributions. When a soldiers' supply of provision exhausted he returned home without asking for any leave and in some cases sent his relative in his stead. The only trustworthy soldiers were the inhabitants of Kinnaur and of the northern parts. The arms used by Kinnauras were chiefly matchlocks and hatchets.

The numerical strength of the army was estimated to be 3,000 strong out of which 1,000 were armed with matchlocks. This distracted and disorganised army was too easy to be run over by any compact body of soldiers even if the latter was numerically small. The raja had recently expired and the sudden and unexpected arrival of the Gurkha force came

to the subjects as a bolt from the blue. The minor raja who could not withstand the invasion fled away along with his mother, to Kinnaur, leaving the accumulated riches of the capital behind as a prey to the conquerors. The Gurkhas looted the treasuries and completely destroyed the archives and the records of the state, leaving behind nothing but rubble. Valuable records which could have provided a clue in tracing out the history of the state were also lost. Many families had fled across the Satluj on the approach of the Gurkha army and the country presented a picture of devastation and depopulation.

An attempt was made by the Gurkhas to reach the state treasure of Kamru, whither the young raja had fled, but the Gurkha force was surprised by the Kinnaura guerilla force at Sholtu bridge and severely mauled in the night attack. This reverse and the difficulty of obtaining supplies compelled them to retreat. There is also a story that the then Pawari wazier named Fateh Ram handed over to the Gurkhas several strong boxes securely locked and filled with stones, claiming that they contained the state treasure. He maintained that he had not been able to get the keys. The Gurkhas readily believed him and carried away the boxes without breaking them open. They did not discover the trick played upon them until they had left the country.

From 1803 to 1815 most part of the erstwhile Bushahr State was held by Gurkhas. The invaders were, however, not successful in occupying Kinnaur. After the British declaration of war against the Gurkhas at the end of 1814, the hill people got the encouragement and joined in an attempt to drive out the Gurkhas. The Bushahr troops were led by waziers Tikkam Dass and Badri Dass, and were reinforced at the beginning of 1815 by a contingent from Kulu. The raja, his mother and the rani returned to Sarhan after the discomfiture of the Gurkha force in 1815 by the British forces. The British Government granted a *sanad*, dated 6th November, 1815 to Raja Mahinder Singh restoring to him all his former territories except Rawin and Kotgarh which were kept as British possessions, and later transferred to Keonthal in exchange for Simla. The state became yet another British protectorate. The *sanad* further required the Government of Bushahr to contribute towards defraying the expenses of the force maintained by the British Government for the preservation of safety and tranquillity of the Hill States; to co-operate with the British force on due requisition in the event of war; and to furnish *begarees* when called upon for the construction of roads. Raja Mahinder Singh died in 1850 leaving Raja Shamsher Singh a minor.

Next to that of the raja the most noteworthy families in the state were the three Kanait hereditary wazier families, named Pawari, Kohal and Shua. The Pawaris being the oldest family were descended from an able head called Nargu, who came from Kulu in attendance on a rani belonging to that country, and was made wazier by the raja. The Kohals came from Garhwal seven generations ago. The Shua waziers were natives of the state. The members of these families rose to more importance during the time of Raja Mahinder Singh, due to latter's incapacities and their own work. Their influence was paramount in the state until the administration was entrusted to Tikka Raghunath Singh. Previous to the Gurkha War the rajas had kept a firm personal grip upon the state affairs, and the waziers had occupied their legitimate positions as counsellors. There was one wazier, who was invested with considerable independent authority but his post was not hereditary. This was the *sarhaddi* wazier, who was in charge of the frontier. In selecting an ablest man obtainable in parganas Shua or Tukpa was appointed, and he was practically given a free hand as long as he maintained order. No member of the above mentioned three families ever held the frontier *wizarat*. The post was not revived after the expulsion of the Gurkhas.

In the Pawari family of Kinnaur the best known names are Manohar Das and Ran Bahadur Singh. The former appears to have been a man of some ability, who was all-powerful previous to the administration of Tikka Raghunath Singh. Ran Bahadur Singh was at one time a most influential man and was held in great esteem in Kinnaur. It is said that any one with a letter from him was sure of being well treated and freely furnished with coolies and supplies. He claimed independence of Dodra Kwar which was turned down by Tikka Raghunath Singh. As a matter of fact, there was revolt by the locals in Dodra Kwar in favour of Wazier Ran Bahadur Singh and against the Bushahr State. He not only defied raja of Bushahr but also withstood the pressure which was brought to bear upon him by the British in favour of the raja. He was a nationalist of those early days known even outside the state and refused to submit to the deft manipulation of Tikka Raghunath Singh and the British in favour of the raja. The account given about him in the old gazetteer written during British time is patently biased.

In 1850 Raja Shamsher Singh succeeded as a minor to the gadi. An arrangement was then made by the British Government, which consisted of three hereditary ministers of equal rank, having subordinate to them a number of local Magistrates. The state was first administered by Mansukh Das, as Regent, and then by Sham Lal, Tahsildar of Nurpur, as Manager under the Agent for the Hill States.

During the great revolt of 1857 the raja kept back his tribute, offered no aid, treated officials travelling through his territory with discourtesy, and refused the ordinary supplies. Lord William Hay, the Deputy Commissioner Simla and also the Agent for the Hill States, proposed to send a force to Rampur to coerce him, but there were no troops available. Consequently nothing was done until after the great revolt, when Lord William Hay recommended that the raja be deposed and the state taken under the direct management of the Superintendent, Simla Hill States. This was not, however, deemed advisable by Sir John Lawrence the then Chief Commissioner of the Punjab and the raja's behaviour during the great revolt was overlooked.

In 1859 there was an insurrection in the state headed by Fateh Singh, an illegitimate brother of raja. It is generally alluded to as the *dum*. *Dum* is a name given to any popular combination raised for the redress of special grievances, or for enforcing claims to certain rights. It was thus a public demonstration of discontent against the ruler. The method followed for action appeared to be for the malcontents to leave their fields uncultivated till their grievances were redressed. They seldom resorted to violence, being content with the assurance that the apprehension of loss of revenue owing to the general abandonment of cultivation would induce the state officials to come to terms with them as soon as possible.

In this instance the chief subject of protest was the cash assessment, which had been introduced by Munshi Sham Lal in 1854. This was unpopular because of the scarcity of coins in the state. Mr. G. Barnes, the Superintendent, Simla Hill States, was obliged to proceed to Bushahr to settle matters, and, as a result, the old system of payment of revenue in kind was restored. Two other demands of the *dum* acceded to were, the removal of Paras Ram, Vakil, who had been nominated as Superintendent of the State although he was not a member of one of the hereditary wazier families, and the restoration of the old rule under which only three waziers could be appointed. This ended the movement which passed off without bloodshed, although the houses of a few unpopular officials were plundered.

Since then the raja for many years showed a preference for easy living to the cares of state management, and the administration was practically left in the hands of the hereditary waziers, with anything but good-results.

Thus the unsatisfactory regime of the raja was ended in 1887 when he was induced to delegate his full powers to his only legitimate son Tikka Raghunath Singh who administered the state with some

degree of success until his death in 1898. During this period the power of the hereditary waziers was practically reduced.

There is a folk song which describes the escape of Tikka Raghunath Singh from Bushahr to Sirmur in 1883, owing to his dislike of the proposed matrimonial alliance with Mandi, which he was afterwards induced to accept, Wazier Ran Bahadur Singh being then his trusted adviser.

By 1893-94 the administration of the erstwhile Bushahr State was particularly satisfactory and an excellent land settlement had been concluded under the supervision of Tikka Raghunath Singh.

Tikka Raghunath Singh died in February, 1898, leaving an infant son, who died eleven months later. After his death the old raja made an attempt to regain the administration but the British Government intervened and appointed Rai Sahib Mangat Ram formerly Manager of the Kumharsain State, as chief wazier with the same powers as had been wielded by Tikka Raghunath Singh. The raja had then practically nothing to do with the administration of the state. The direct line was feared to become extinct, for the than Raja Shamsheer Singh was seventy years old. But he adopted Surendra Shah, brother of the raja of Garhwal, as his son. The only survivor, son from a concubine, Padam Singh was illegitimate. The adoption which was recognised by the British Government was subsequently cancelled and Surendra Shah was expelled from the state in consequence of his complicity in an attempt to murder a forest officer, Mr. Gibson.

In 1899-1900 the management of Bushahr continued satisfactorily under Lala Mangat Rai, and by the exercise of rigid economy the debts of the state were reduced to Rs. 50,000. The raja was incompetent and occasionally obstructive. He neglected to meet the Superintendent Simla Hill States, on his visit to the state in the autumn of 1898-99 and was fined Rs. 1,000 as a punishment for this mark of disrespect to the representative of the paramount power.

The tract of Dodra Kwar of Rohru formed a part of the zail of Ran Bahadur Singh a Pawari wazier, who during the administration of Tikka Raghunath Singh had revolted, made another attempt in 1906 to constitute Dodra Kwar an independent principality under himself. Ran Bahadur Singh arrested during Tikka Raghunath's rule and released after latter's death, was later restored to office. At the instance of the Superintendent of Hill States he was again arrested in 1906 and lodged in Simla jail for two months until he undertook to pay to the state the revenue which

he had appropriated for himself. He was coerced by the British and ultimately died in the jail without having paid in full. The zamindars of Dodra Kwar were solidly behind Ran Bahadur Singh.

Raja Shamsher Singh was eventually succeeded by his second son Raja Padam Singh. At the beginning of October, 1914, orders of government were received confirming the succession of Mian Padam Singh, the natural son of the late raja. This succession was exceedingly popular with the people. There was a widespread impression that government would take the opportunity of the failure of the regular line to incorporate the state in the British dominions. The orders of government laid down that the British Manager would be retained for two years until the new raja had acquired some further experience. A copy of the orders of government is given in annexure 'A' to this Chapter.

At the same time as the orders of succession were received the Manager was informed that the installation of Raja Padam Singh would take place as soon as possible in order to put an end to intrigues by disappointed candidates. Finally, 13th November was selected as the date for the installation ceremony which was carried out by the Superintendent Simla Hill States. The raja of Bilaspur performed the *raj tilak* ceremony placing the *tilak* mark on Raja Padam Singh's forehead. The ceremony thus set the seal on the recognition of Raja Padam Singh by the fraternity of Rajput chiefs in the hills. Other ruling chiefs who attended the ceremony were the rana of Kumharsain and the raja of Sangri. The Thakur of Khaneti and the Thakur of Delath, the two chiefs who were feudatory to Bushahr, also attended and the rana of Jubbal was presented by his brother Kanwar Isri Singh.

Raja Padam Singh was connected by marriage, with the house of Dhadi and Lambagraon (Kangra district). He was still holding the reins of government when in 1947 the country attained Independence. The state of Bushahr became a component part of the Mahasu district of Himachal Pradesh and subsequently a separate district of Kinnaur was carved out of the Mahasu district. Raja Padam Singh has left two sons, Raja Vir Bhadra Singh the present ruler, and Raj Kumar Devindra Singh.

(Please see page 64)

ANNEXURE A

I am directed to refer to the correspondence ending with your letter No. 151 dated the 4th September 1914, on the subject of the succession to the chiefship of Bushahr.

2. In reply I am to say that the Lieutenant-Governor is pleased to confirm the succession of Mian Padam Singh as Chief of the Bushahr State. As, however, Mian Padam Singh is quite inexperienced in administration, and it is desirable that he should be trained in his important duties, the State will remain under the administrative control of a Manager appointed by the Government, as hitherto, for a further period of two years.

3. During that period Mian Padam Singh will be trained in the duties of a ruling chief by the Manager and gradually invested with wider administrative and judicial powers. He should receive from the State revenues an allowance equal to that of his predecessor. He will, as a matter of course, enjoy all the outward honours and recognition incidental to his position as Rajah of Bushahr.

After two years if Mian Padam Singh proves his capacity the Lieutenant-Governor proposes to remove the Manager and invest the Rajah with full powers, subject only to the appointment of a wazir approved by Government, the maintenance of the land revenue settlement now being carried out and such control over the state budget by the Superintendent, Hill States as circumstances seem to warrant. Meantime it should be one of the Manager's main objects to fit the chief to take charge of the administration by the time that the two years have expired.

4. I am to request you to make arrangements for the formal installation of the new chief and for his investiture with the limited powers indicated above at an early date, and to submit a programme of the ceremony for the previous approval of Government.

CHAPTER III

PEOPLE

POPULATION

Total population

The earliest population of Kinnaur was estimated to be 9,853 according to Gerard* in about 1822.

The figures given below indicate the growth of population during the last seventy years :—

Year	Persons	Variation	Percentage
1901	27,232	—	—
1911	28,470	+1,238	+ 4.55
1921	28,191	— 279	— 0.98
1931	30,445	+2,254	+ 8.00
1941	33,238	+2,793	+ 9.17
1951	34,475	+1,237	+ 3.72
1961	40,980	+6,505	+18.87
1971	49,673	+8,693	+21.21

Sub-divisionwise details of the census of 1961 are as under. The figures for 1971 have not yet been compiled.

Sub-division	Total population	Males	Females
Kalpa	15,612	7,908	7,704
Nachar	12,120	6,417	5,703
Puh	13,248	6,483	6,765
Total	40,980	20,808	20,172

It will be observed that during a period of 149 years, reckoned from 1822 to 1971, the population went up by more than five and a half times. During 1901 and 1971 the estimated population of the district increased by 22,441 persons. There has been an increase in all the decades excepting during 1911-1921, when the population decreased by 279 persons. This can presumably be ascribed to influenza epidemic of 1918, which is said to have taken a heavy toll of lives. During the decade 1941 to 1951 the population increased by 1,237 persons, while during the decade 1901 to 1911 the increase was 1,238. As a matter of fact, the increase is more pronounced during the decade 1961 to 1971 when the population from 40,980 in 1961 jumped to 49,673 in 1971.

*Gerard, Capt., *An Account of Koonawur*, p. 7.

The table below shows the estimated changes in the proportion of sexes from 1901 to 1971 :—

Year	Females per thousand males
1901	911
1911	935
1921	922
1931	910
1941	940
1951	1,070
1961	969
1971	893

In 1971 census, the district has 893 females per 1,000 males, while in 1901 the ratio was 911 females to 1,000 males and in 1941 the ratio was only 940. In 1951 the number of females was more than the males, the ratio being 1,070 females to 1,000 males.

The percentages of population living in villages of various population sizes with reference to the total population in the district in 1961 are given below. The figures for 1971 have not yet been tabulated for this purpose.

Villages with population	Percentage of district population
Less than 200	4.4
200 to 499	29.9
500 to 999	32.9
1,000 to 1,999	32.8
2,000 and above	—

According to Gerard the density of the tract was only 4.68 persons per square mile in 1822. In 1971 the density of population of the district is 18 persons per square kilometre. The district is sparsely populated and has the second lowest density of population in the Pradesh after Lahul and Spiti. This is due to peculiar hill topography of this region.

Immigration

A large proportion of the present population does not belong to the aboriginal stock. Over the generations, outsiders have entered Kinnaur and got absorbed here. Besides occasional waves of considerable size of immigration, that must have taken place at different stages of the history

of this district, individuals have in stray cases, few and far between, been staying down in Kinnaur. No immigration in bodies has taken place for permanent settlement within the living memory or recorded history. Such large-scale immigrations must have taken place during the pre-historic period. The main pressure driving such bands of permanent settlers into this tract of inhospitable terrain and rigours of winter climate was, most probably, invaders and conquerors who occupied the areas from which these immigrants came. The stray settlers came to Kinnaur mostly for professional pursuits and, in course of time, acquired matrimonial attachments and never returned to their original homes, or found the circumstances in Kinnaur more peaceful than they once left behind and chose to stay on permanently. This process of stray immigration still continues though the pace in the known past has been extremely slow and the recurrence equally sporadic. Inaccessibility, the greatest deterrent in the past has already been broken down to an extent never dreamt of a couple of decades before, and the means and facilities of communications continue to improve. With this development, the scenic beauty of the place and some of its natural potential, as for example, its suitability for the production of certain things, have grown much more strongly attractive and there is far greater possibility of many more individual immigrants taking roots here within a much shorter period. The permanent population of the district has already grown so much that Kinnaur, which has the bulk of its land in the shape of rocks, hills and mountains and its climate not congenial for the produce of the land for a large part of the year, cannot afford to receive any more immigrants without causing certain disturbances and dislocation in the local economy. This border district is, in this respect, very different from the regions of the North East Frontier.

Temporary immigration, in the sense of the floating population of people living within the bounds of the district for short periods of some years or some months or less, has increased tremendously during the last five or six years. Mostly this floating population consists of government servants; next come labourers; and third in order of size is the element of businessmen. This floating population is almost equal in size to the permanent one.

This meteoric spurt in the number of people living within the area has started straining such resources as housing, fuel, grass etc., and the matter is engaging the attention of the authorities concerned.

Emigration

Many out of the local population usually leave their hearths and homes during the winter along with their flocks of sheep,

goats, ponies and donkeys in search of food and fodder and to avoid the extremes of winter conditions. They migrate mainly to the lower parts of Himachal Pradesh and a few to places even outside. These migratory graziers are energetic and tough. With the start of summer season they return to their homes. Many students, trainees and public servants also leave the district for longer or shorter periods.

Emigration for permanent settlement outside Kinnaur has not been unknown, but, like the individual immigrants of the past, such emigrants have been few and far between. The Chamba and the Kulu districts contain the largest number of such emigrants.

Distribution between urban and rural areas

So far there are no urban areas and therefore, there is no urban population. Many people, especially out of the educated class, do move out of the district to seek better employment in the towns or cities within, as well as outside Himachal Pradesh. The position in future is likely to undergo a substantial change in as much as, with the greater development of district headquarters, sub-divisional headquarters and tahsil headquarters certain places are likely to acquire urban or sub-urban complexions and compositions. And there is bound to be some movement of population from the villages to these places.

LANGUAGE

Fraser¹ wrote in 1820 that the language of Kinnauras radically differed from that of the Bhoteas and was also distinct from Hindi of the plains. Fraser was, however, not able to make any satisfactory discovery on the subject.

Gerard² and Edward Thornton³ were able to discover only five different dialects spoken there. *Simla Hill States Gazetteer* 1910, mentions about the three dialects, spoken in Kinnaur. We have now about ten dialects spoken in various parts of Kinnaur district. They are:—

- A. Standard Kinnauri dialect spoken in Kalpa tahsil, Nachar tahsil and Sangla tahsil (except Rakchham and Chhitkul) and Rarang, Ribba, Akpa, Rispa, Thangi, Morang, Giabong and Ropa villages ;

1. Fraser, James Baillie, *Journal of a Tour through part of the Snowy Range of the Himala Mountains, and to the sources of the river Jumna and Ganges*, p. 350.
2. Gerard, Capt. Alexander, *An Account of Koonawur in the Himalya etc. etc.* pp. 87-88, 155.
3. Thornton, Edward, *A Gazetteer of the Territories under the Government of the East India Company, and of the Native States on the continent of India*, p. 518.
4. *Punjab States Gazetteer*, vol. VIII *Simla Hill States* 1910, p. 7.

- B. Standard Harijan Kinnauri dialect spoken in Kalpa and nearby villages ;
 C. Kinnauri sub-dialect spoken in village Chhitkul and Rakchham ;
 D. Kinnauri sub-dialect spoken in village Kuno and Charang ;
 E. Kinnauri sub-dialect spoken in village Nesang ;
 F. Kinnauri sub-dialect spoken in village Lippa, Asrang and Jangi ;
 G. Kinnauri sub-dialect spoken in village Spilo, Labrang, Kanam and Shyaso ;
 H. Kinnauri sub-dialect spoken in village Sangnam ;
 I. Kinnauri sub-dialect spoken in village Rushkalang and Taling ; and
 J. Kinnauri sub-dialect spoken in village Puh, Dabbling, Dubling ; Khabo, Namgya and Hangrang valley.

Note :—No separate sub-dialects are spoken by Harijans in villages mentioned from C to J above.

The following table prepared on the basis of Family-wise Socio Economic Survey of 1965 will give an accurate picture of the dialect spoken in Kinnaur. Six broad divisions have been made :—

Sl. No.	Name of dialect/language	Tahsil/village where spoken	Total population involved
1.	Kinnauri	(a) Nachar tahsil (b) Kalpa tahsil (c) Sangla tahsil (except Rakchham and Chhitkul) (d) Rarang, Riba, Akpa, Rispa, Thangi and Morang of Morang tahsil and Giabong and Ropa villages of Puh tahsil	32,033
2.	Jangram	Jangi, Lippa and Asrang villages of Morang tahsil	1,844
3.	Kinnauri-Jangram mixture	Rakchham and Chhitkul villages of Sangla tahsil	842
4.	Shumcho	Kanam, Labrang, Spilo, Shyaso, Taling and Rushkalang of Puh tahsil	2,020
5.	Sangnam	Sangnam village of Puh tahsil	588
6.	Tibetan language	(a) All villages of Hangrang sub-tahsil (b) Puh, Dubling, Khabo and Namgya villages of Puh tahsil (c) Kuno, Charang and Nesang villages of Morang tahsil	4,470

From the foregoing table it is noticed that the Tibetan language i. e. the same as spoken in Western Tibet is widely spoken in the villages bordering Tibet upstream of Puh and in the Nesang, Kuno and Charang villages adjoining Tibet. In addition to the dialects mentioned above, most men-folk in Kinnaur speak Hindi, and some educated ones among the women also speak Hindi, especially in the lower parts of Kinnaur. Among the educated, Hindi and English are known, but it is not possible to incorporate exact figures of such subordinate language.

To give a more vivid idea of the different dialects spoken in various parts of Kinnaur ten sentences of each dialect with English rendering are given below :—

1. What is this ?
2. I will now make a complaint of this.
3. Give that to me.
4. My father lives in that small house.
5. He is seated on a horse.
6. He is grazing cattle on the hill-top.
7. They went away each to his own house.
8. I might have eaten with pleasure.
9. I dwell in the village of Kothi.
10. Whose boy comes behind you ?

Standard Kinnauri dialect spoken in Kalpa and nearby villages.

१. जु ठ हू ?
२. गम्र हुन जू शकेत लानतोक ।
३. नु अगू कोई ।
४. अगं बीबा हुनु गाटोच किमो तोशद (नीच) ।
५. नुमी नु रंगुदेन तोशिस (शोबिसस) हू ।
६. नु सैमचैनीनु रगं बालोनदेन रोगो हू ।
७. दोगो चे अगु अगु किमोनो व्यो ।
८. गम्र खुसीस (तोमासिस) खाऊ जाचोक ।
९. गम्र कोशटेम्पी देशगों नीच (तोशद) ।
१०. किन नियुम्स हातु छाँग बढो हू ?

Standard Harijan Kinnauri dialect spoken in Kalpa and nearby villages.

१. यू कि आ ।
२. हाऊं हला शिकायत टन्मु ।
३. यू मला दे ।
४. मेरे बोबा होई लोको गोरे बेशदो ।

५. होसो गोरो गाश बेशिस ।
६. सो सेमचेना कन्डो गाश चारिनस ।
७. तेनोरि सेव अफनरो गोरे नाठो ।
८. हाऊ बडो खुशिय खऊ खासु ।
९. हाऊ कोठी देशके थकदोसु ।
१०. ताऊ पिछायें कासरो छेल्हू अछिन्स ।

Kinnauri sub-dialect spoken in villages Chhitkul and Rakchham.

१. ह्यू खे ।
२. था था यो शिकायत लवा ।
३. होयों गा दासी ।
४. आ आऊ होयों अची किमो होना तो ।
५. होयों राग देन छोवशी ता ।
६. होयों नर चक रंग देन रोवचा ता ।
७. होयों चे ऐ-२ किमों शेदे ।
८. गा खुशी ची कोन जागा ।
९. गा कोशटगंरी देशगों होना तोक ।
१०. कि नेचो सु अची तवा तो ?

Standard Kinnauri sub-dialect spoken in villages Kuno and Charang.

१. दो चो नोगा ?
२. डा खोए ताय दूगेन ।
३. दो डा ला कीर ।
४. डाए आक खेयों खागंवा चुगुन रो डोकेद ।
५. खो ताए ताय रो देशा दूग ।
६. खो सेमचेन ला लागंयो ला छोयोग ।
७. खो थागचेग राग रागें खागंवा ला लोग सोग ।
८. डा गारी राग सापतूगं सो सोग ।
९. डा कोठी थूल दो दोकेद ।
१०. खोए सीगें ला सुइ हकू डोऐरा ।

Kinnauri sub-dialect spoken in village Nesang.

१. दो ची ?
२. डा दा दिला कुन दुकन ।
३. दो मागंला गारे ।
४. डोयं श्री दो खगंवा चुउनला दत्कन ।
५. खो ताला खीन दुक ।
६. खो सेमचेन लाये गोला ची दुक ।

७. खो ताकपो रागं रंगं खागंवाला लो सोग ।
८. डा बाक थुक साया ।
९. डा कोठी थुल्ला दन्त दुक ।
१०. डिये गावला सुई दुगु लेवदुग ?

Kinnauri sub-dialect spoken in villages Lippa, Asrang and Jangi.

१. दी खे तास ?
२. गा था यवीके चुगली पीन नोक ।
३. अनो गानगं खेसाम ।
४. आई आपा अनो चकद वयोमर पोसी तोनी ।
५. दोमी रांगेडे थोरिंग पोसी तोनी ।
६. दोमी बेये पीशारिंग छुमा र वानिच तोनी ।
७. दोरमागं चो ऐमेर २ वयोमर देरेनी ।
८. गा गारीश सेर जावेन्त तोर ।
९. गा कोठी दंशांगर पोसी तोग ।
१०. ये योवांक सुके सुके छागं दैनिक तो ।

Kinnauri sub-dialect spoken in villages Spilo, Labrang and Kanam.

१. जि खे ?
२. छगं गु जि क्षति ।
३. द अगंरा खेना ।
४. अगं अपा अनो हयमचेव वयुमु नागुं पोसि ।
५. नोमी धगुं थोरिंग तोश ।
६. नोमी झगंखगुं थोरिंग तेत हवाऊ तोश ।
७. दोपगं अटगं अगं अगु वयुमु जेरे ।
८. गु गरीस जामा तोरे ।
९. गु कोष्टगंरी देशगुं पोसी तोक ।
१०. गिरोऊ ग्यावर्तिग उइ छइ तु तोश ।

Kinnauri sub-dialect spoken in village Sangnam.

१. हई खा ?
२. गी दा हईये शिकायत लेनदी ।
३. हकू गयो खे ।
४. ग्ये अपा उरु चिगित वयुमुन पोहनि नी ।
५. हा शमों थोकचो पोहका नी ।
६. हा कुमा पंग लो वे पिशाठन थाका नी ।
७. हतेपंग अटख रंग रंग सइ वयु-मुन वेह ।
८. गी गरिबु थकतु तंग मंग निह ।
९. गी कोठी देशगुन पोहनि निगिह ।
१०. हुनि वयपचि सीइ छगं रगा नि ।

Kinnauri sub-dialect spoken in villages Rushkalang and Taling.

१. जि छे ।
२. हंग गि बिरा शत तोख ।
३. अगरा खेना ।
४. अगं आया ओ नो मोत चेख वयुम पोसी ।
५. दो मी सगूं थोरिंग पोसू तोख ।
६. दो सेमचन पंग रा बयेगुपिथिरिंग शवागू तोख ।
७. दो पंग आटंख रंग रगूं बयूम जेरे ।
८. गि खुसीस यगू तुंग रोख ।
९. गि कोशठगंपी दशागू पोसी तोख ।
१०. गिरो ग्यबतिगं उगं छंख तुगोतो ।

Kinnauri sub-dialect spoken in villages Puh, Dabbling, Dubling, Khabo, Namgya, and Hangrang valley.

१. दी चि नुकपा ?
२. मगं दा दीयी (शिकायत) बेतकन ।
३. फी दे मगं ला नगं ।
४. माइ आपा फी खगंवा चुन देरू दोत तेत ।
५. खो ता ला जोन दोक ।
६. खो रियाय गो न गलछक छोप्रोक ।
७. खो शक सिगं रगं रगंसे खगंवा ला बुत सोगं ।
८. मगं गारी शीशा जाया होत ।
९. मगं कोठी युल दु दोत तेत ।
१०. येयी गपला होगं डोन दु दे सु नुकपा ।

No exhaustive and systematic survey of the languages and dialects of Kinnaur, however, has so far been made. Some sporadic efforts to build up a vocabulary of dialects of Kinnaur were made by person like Tikka Ram Joshi and Rahul Sankrityayan. The available literature on the Kinnauri dialects comprises "A¹ Dictionary of Kinnauri Dialects" in English, "A² Primer of the Kinnauri Dialects" in Hindi and a list of words contained in Rahul Sankrityayan's "Kinner Desh³".

Rahul has given the following list of words of Kinnauri language which according to him is a mixture of Tibetan, Kirat or Shu and Sanskrit.

1. Joshi, Tikka Ram.
2. Negi, W. C.
3. Sankrityayan, Rahul, *Kinner Desh*, pp. 292-94.

(१) सब से पहिले भोटभाषा के शब्दोंको लीजिये :— मे (भाग), शिङ् (काष्ठ), सेमचन (प्राणी), चङ्कू (भेड़िया), शा (मांस), का (केश), मिक् (ग्रांथ), मिक्पू (भौं), कद या स्कद् (भाषा), निश् (दो), शुम् (तीन), डः (पांच), दुग (छ), किम् (घर), लान् (उत्तर), शीमिक् (मृत्यु), तोङ् मिक् (मारना), ताङ्मिक् (देखना दिखाई देना), जल्मिक् (भेंट करना), फ्रम्मिक् (हराना), शीमिक् (मारना), तुङ-मिक् (पीना-पिलाना) ।

(२) और संस्कृत के तत्सम, तद्भव शब्द हैं, (इनका प्रयोग करते समय अन्तमें बहुधा इङ्-या अङ्-जोड़ दिया जाता है)—मडिङ् (मिट्टी), दुवङ् (धुआँ), अङ्गारङ् (अंधार), सोगंङ् (स्वग, आकाश), रतिङ् (रात), रितङ् (ऋतु), भारङ् (भार), खेरङ् (खीर), दुबारङ् (द्वार), मजङ् (मध्य), कुलिङ् (कुक्षि) । कभी-कभी संस्कृत शब्दों के अन्त में अस् भी होजाता है, जैसे—चोरस् (चोर), परमेशरस् (परमेश्वर), जेपालस् (अजपाल) । संस्कृतके शब्द कनौरी भाषा में काफी मिलते हैं और सभी तरह के—काठो (काष्ठ), कोहर (कुहरा), बिजुल (बिजली), रिखा (रीछ), खड (खाद्य), छोप (सूप, मांसरस), रंङोलस् (रंहुवा), भोगवान् (भगवान्), पुजा (पूजा), बोदी (बहुत), बया (भैया) । संस्कृत धातुओं में निक्, मिक् लगा कर प्रयोग किया जाता है—लोनिक (लाना), भगेनिक (भागना), हटेमिक् (हटाना), विचारेमिक् (विचारना), भ्यङ्मिक् (भय करना), पुजा लनिक (पूजा करना), पक्यामिक् (पकाना), फेक्यामिक् (फेंकना), पोलटेमिक् (पलटना), जोडेमिक् (जोड़ना), लटक्यामिक् (लटकाना), भूज्यामिक् (भूजना), बसन्निक (बसना), बजमिक् (बजाना), छर्यामिक् (छोड़ देना), रंङ्-यमिक् (रंगना), सज्यामिक् (सजाना), लजाशेमिक् (लजाना), सुचन्निक (सोचना), कट्यामिक् (काटना), गोल्यामिक् (गलाना) ।

(३) "शू" (किरात) भाषा वस्तुतः कनौरी भाषाका मूल अंश है । अब कुछ उसके शब्दों को लीजिये—शू (देवता), ओम् (पथ), रङ् (गिरि), टी (पानी), शुप् (फेन्), पोम् (हिम), ठङ्(बर्फ), ठो (अंगार), राक्(ताप), लान्(वायु), जू (बादल), युनेक् (सूर्य), लाइ(दिन), गोल् (मांस), रुद (सींग), कुइ (कुत्ता), फी (हरिन), होम (भालू), ऐरङ् (आखेट), खस् (भेड़ी), दमस् (बैल), रो (तस्ता), पोलाब (सधिर), वस् (मधु), टालङ् (चमड़ा), शोक् (कण्ठ), ताकुस् (नाक), गार् (दांत), बङ् (चरण), लिङ् (हृदय), रिङ्स् (बहिन), छङ् (पुत्र), चिमेत् (बेटी), छद् (जामाता), तेम् (पुत्रवधु), र (ससुर), तेते (दादा), कोतेते (परदादा), कोणस् (मित्र), जङ् (सोना), ठोम् (सफेद), सै (दस), रा (सो), लोनिक (बहुत), कुस्क्या (बहुत ज्यादा), केन् (तुम), कोमो (भोतर), रेनम् (बसन्त), य्वा (नीचे), ईमिक् (प्रश्न करना), रोमिक् (बोलना), ह्वेमिक् (होना), स्कुन्निक (उबालना), छुन्निक (बांधना), रन्निक (देना), रेन्निक (बेचना), युन्निक (चलना, चूर्ण करना), लन्निक (करना), कन्निक (बुलाना), बुन्निक (आना), शन्निक (निकलना, प्रकट होना), लोनिक (कहना), ग्वान्निक (खोदना, काटना), कस् मिक् (मिलाना), लन्निक (बनाना, पकाना), उन्निक (सेना, मांगना) तोशेमिक् (बैठना), बन्निक (परिहास करना, हंसना), छिवमिक् (चूसना), पन्निक (उबालना पोछना), हुन्निक (सीखना), नार्मिक् (गिनना), चेनमिक् (सीना), सक्नुबमिक् (लादना, उठाना) ।

For details, the readers are referred to study pages 127, 128, 292-294, 321-323 and from 376-391 of *Kinner Desh* by Rahul Sankrityayan.

By and large the script used by the educated people is *Devnagari* though a few business class living in the lower part of the area use *Tankri* also. In some villages adjoining the Tibet border the lamas use Tibetan script but this is limited mostly to the expression of religious rituals. The area being under Bushahr, most of the Kinnaur students received generous help from the raja and on that account got their education in modern colleges and schools. The spoken language is Kinnauri in its various forms.

RELIGION AND CASTE

During 1951 census castewise figures were not collected. According to 1961 census out of 40,980 souls which was the total population, 37,384 or about 91 per cent were Hindus, 3,569 or about 9 per cent Buddhists and only 27 Sikhs.

All indigenous inhabitants numbering 36,800 belong to the Scheduled Tribes of which 11,133 persons fall in the category of Scheduled Castes and 25,667 to Jad, Lamba, Khampa, Bhot or Bodhi; Kanaura or Kinnara; and Pangwal Scheduled Tribes constituting a percentage of about 27 and 63 respectively. Out of 36,800 indigenous tribal population 4,429 Scheduled Castes and 6,584 Scheduled Tribes reside in Nachar sub-division, 4,365 Scheduled Castes and 9,146 Scheduled Tribes in Kalpa sub-division and 2,339 Scheduled Castes and 9,937 Scheduled Tribes in Puh sub-division.

The population of tribal-inhabited Kinnaur falls into two broad categories namely *Khashia* (non-Scheduled Castes) and *Beru* (Scheduled Castes). The non-Scheduled Castes are primarily what were called previously Kanaitis and Jads. The Jads now prefer to be called Rajputs or simply Kanauras. The Scheduled Castes include what are locally called as Chamang and Domang. Chamangs make and mend shoes and weave woollen cloth. The Domangs are primarily blacksmiths. Carpentry is the main-stay of people known as Ores who are equal in social scale to the Domangs.

There are numerous septs of Kanaitis or Rajputs, so staggered in the district that a broad geographical distribution is not possible. These are akin to the sub-castes among Brahmans or Rajputs or Hindus as a whole in the hills. There may be a number of septs in one and the same village. For example, in a Rajput village of say some families five or ten may belong to Chetha sept and ten or fifteen to another and so on. Inter-marriage within the sept is not allowed but intra-sept marriages often take place. There is a term in vogue in Kinnaur locally pronounced as *orung*. It is on account of social stratification that exists

amongst *Khashias*/Kanaitis. People belonging to same *orung* (social status), though they may come from different septs, can eat together in the same utensils which is not permissible in case they belong to different *orungs*. In the absence of servants, when a man of lesser status or who lacks *orung*, eats in the house of one who has it, the former has to wash his own utensils etc. How this concept of *orung* came into existence is difficult to explain- may be people who came from outside and settled in Kinnaur from time to time always asserted their superiority over the local inhabitants. However, there is a redeeming feature in this and, that is, if a family manages to marry continuously for three generations in the families belonging to higher *orung* then the off-springs of that family in the third generation attain the same status as that of the family in which they have married. Many a time families have lost their *orung* on account of their having married in families having lesser *orung*. The normal tendency is never to get a girl from the family which has lesser *orung*. *Orungs* have also been lost on account of families indulging in certain taboos such as eating chicken which was considered as a dirty animal.

Things were not so clear in the past as they are at present. Certain observations, made by European travellers, are reproduced below to give an idea of how they felt about the faith followed by Kanauras in the nineteenth century. "Although the Kunawurrees are recognised as Hindoos by descent and general profession, they most generally follow the Lama religion. No Brahmans have ever settled in this district, nor will they go there; perhaps the poverty of the country, and the privations necessarily to be suffered during a residence there, have deterred these holy men, who usually seem to prefer those places which afford them all the comforts of life. The Lama priests are scattered about the country, and the people carry about their persons small idols purchased at Lahassa, or such as are brought for sale by the Lamas."

There is a small division in Kunawur district from the rest, containing four or five villages, and called Seolkhur, inhabited by Bhoteas or Tartars alone."

".....²The religion of Koonawur is Brahminism in the south; in the north, Lamaic Buddhism; in the middle, a mixture of the two systems. There prevails a regularly graduated transition from one to the other. Thus, Brahmans are not met with beyond Saharun, near the southern boundary, where they officiate at the shrine of the sanguinary female divinity Bhima Kali, to whom, at no remote period, they offered human sacrifices. At Kanum, about half-way between the northern and

1. Fraser, James Baillie, *Journal of a tour through part of the snowy range of the Himala mountains, and to the source of the rivers Jumna and Ganges*, pp. 255-266.
2. Thornton, Edward, *A Gazetteer of the Territories under the Government of the East India Company, and of the Native States on the continent of India*, p. 518.

southern frontiers, the sacred books are in Tibet, and lamas are there first met with; but kine are venerated, and some attention paid to the distinction of castes; thus partially amalgamating the two creeds. At Hungrung, on the northern frontier, the religion is pure Lamaic Buddhism.....".

¹Andrew Wilson passed through Kinnaur in 1875 found a Hindu as well as a lama temple at Jangi, the former religion hardly extending any further into the Himalaya, though one or two outlying villages beyond belonged to it.....The temple at Jangi, with its Tibetan inscriptions and paintings of Chinese devils, told him that he (Wilson) was leaving the region of Hinduism. At Lippa, where he stopped next day, all the people appeared to be Tibetan; and beyond that he found only two small isolated communities of Hindu Kanait, the one at Shyasu and the other at Namgya.

Buddhism

"²The Lamas in Koonawur are the three sects, Geloopa, Dookpa, and Neengma.....The Geloopas or Gelookpas are reckoned the highest; since the heads of their religion at Teshoo Loomboo and Lahassa are of the same sect. They wear yellow cloth garments, and caps of the same of various shapes. The Dookpas are dressed indifferently, but have red caps; and the Neengmas wear the same or go bare headed; the two former do not marry, but there is no restriction on the Neengmas.....The Gelongs, monks, and Chomos, or Anees, nuns, are the heads of the Lamas, and have nothing to do with worldly concerns, but employ themselves in chanting hymns, and writing and printing sacred sentences from blocks of wood. The nuns pass most of their time in reading and do not write so much as the Gelongs. The Lamas and Gelongs, who profess celibacy, reside in a monastery called Ghonpa or Goomba, and the nuns in a convent named Chomoling; these usually form distinct divisions, and are apart from the other houses of a village. In Tibet, the chief of a monastery is called Lama, which is the highest title, and the inferior orders are styled Gelong. Here it is different, for most of the clergy are named Lama, or, as it is more commonly pronounced, Lamba; and the heads of the convents of Kanum, Lubrung, and Shealkhur, whom I have seen, are denominated Gelong and Gooroo. In Koonawur, Gelongs are not common; there is seldom more than one in the largest villages, except Shealkhur, where there are eight or ten Geloopas, improperly called Gelongs, but not entitled to such a distinction. The Gelongs wear white trousers, a long red and yellow cloth garment, and either go bare headed or have head dresses, commonly yellow, higher than the rest, and shaped like a cone.....The nuns are clothed in red, and have hats... ..of yellow, trimmed with red.

1. Wilson, Andrew, *Abode of Snow*, p. 111.

2. Gerard, A., *An Account of Koonawur in the Himalaya etc. etc.*, p. 117.

Neither the Gelongs nor nuns smoke tobacco, though the Lamas do; neither of them drink spirituous liquors."

The above description by Gerard was believed to be still accurate at the time of compilation of *Simla Hill States Gazetteer* 1910. The said gazetteer contains the following further remarks. "Most of the people, from whom enquiries have been made, distinguish only two classes of Lamas in Kanawar, the Gyolangs, or celibate monks, who wear yellow clothes, and the ordinary Lamas, who marry and wear red. The two chief monasteries are at Kanum and Sunam, and each of these places has a nunnery too. These latter are called Zammo Gompha, and the monasteries Lamba Gompha. The head of a monastery is the Rimbochhi Lamba. The Kanawar monasteries are said to be subordinate to one at Gartok, and two high Tibetan Lamas are stated to visit them at intervals.....the Ushak Lama and the Dwariki Lama."

Various religious practices and customs bearing a complex of Buddhism will be mentioned under the appropriate sub-headings in the following pages of this volume. Here a brief description of the monasticism is given to convey a broad idea of the Buddhism as prevalent in the district.

²Kanait girls, who do not marry, but devote their time to the study of the Tibetan scriptures are called *zomos* or *jamos*. They live in nunneries. The two principal nunneries are at Kanam and Sangnam, and in these a great number of *zomos* live. Besides this, every village has a few *zomos*.

Kanait boys, who learn the Tibetan scriptures, and are well versed in the Buddhist doctrines, are called lamas. They live in monasteries and are looked upon as holy. In fact they are the priests of all of the Kanait. There are several monasteries of these lamas in Kanam, Sangnam and other villages. Lamas are either *gyolang* (celibate), like the *brahmachari* or *dugpu*, who marry but never shave the head.

Sacred buildings and temples

There are many kinds of buildings and temples peculiar to the lamas; the most common are *mane*. *Manes* are small walls of stones, constructed of loose stones without cement, and upon their tops are numerous pieces of slate of all shapes and sizes, with the inscription *om mane padme houn*. These are usually constructed at the village entrances. Generally *mane*

1. *Simla Hill States Gazetteer*, vol. VIII, p. 40.

2. *A Glossary of the Tribes and Castes*, vol. II, p. 453.

is erected at a place wherefrom largest number of people enter or leave. While passing the *mane* one has to keep it always on the right hand. Next is *chosten* which is built to supposedly ward off the evil effects of devils. Similar other construction is called *donktens* in the northern part of the district. The *labrangs* are places of worship of various sizes, and there is one in almost every village. Then there is what may be called *lagang* which is a square flat-roofed house containing a statue of Mahadeo. *Lapchas* are square piles of stones raised on the tops of the houses adorned with juniper branches. These are similarly constructed on the road sides, marked sometimes with poles or flags. *Darchhot* is a pole, erected at each of the corner facing the front on top of the houses, especially in upper Kinnaur, to which a flag, printed with *om mane padme houn*, is attached, with a tuft of black yak's hair. The *darchhots* and *lapchas* are considered effective against the dread of ghosts, hobgoblins, and evil spirits, which are universally believed in. *Dumgyur*, a large praying-wheel, is installed either inside of an independent structure or in a *lagang*. The hollow of the wheel contains thousands of pieces of paper over which the mantra *om mane padme houn*, is written. The wheel is then covered with some metal plates duly decorated. In fact *dumgyur* is said to be a Tibetan word denoting a certain number, namely, ten crores, signifying that a *dumgyur* should contain that number of the aforesaid mantra.

At Sangnam there are three cylinders kept constantly in motion through water, on the same principle as the wheels of a water-mill. At Nesang several such cylinders are rotated by the wind. These are used for the purposes of devotion, and a person while passing by generally gives it a twirl, whispering *om mane padme houn*. *Kankani* resembles what may be called an arch or a gate erected on a common path in a village and is decorated with paintings. It is built on two side walls topped by a cupola. Below the cupola, in the ceiling, are elegantly painted numerous figures of Buddhist deities. The idea behind erecting a *kankani* seems to be that anyone passing underneath it should feel the omnipresence of Lord Buddha. One who causes to build a *kankani* cherishes the hope that the passerby being reminded of Lord Buddha will acquire *pun* (a good-will) in which the builder will automatically get a share. A believer in Buddhism while passing under a *kankani* takes off his headgear in token of veneration to the Lord.

The following Buddhist temples are some of the main ones in the district. *Lagang* at Yula in Nachar tahsil, at Pangl in Kalpa tahsil, at Kamru and Sangla in Sangla tahsil, at Chango, Maling, Nako, Sumra and Tashigang in Hangrang sub-tahsil, at Giabong, Namgya, Puh and Ropa in Puh tahsil and at Jangi, Lippa, Morang, Nesang, Rangreeto, Rarang, Ribba, Rispa and Thangi in Morang tahsil. *Chosten* at Miru in Nachar

tahsil and at Pangl in Kalpa tahsil. *Gonfa* at Chango, Leo and Shyalkhar in Hangrang sub-tahsil and at Spilo in Puh tahsil. *Dumgyur* at Change and Leo in Hangrang sub-tahsil, at Pulu (Spilo) and Sangnam in Puh tahsil and at Morang and Nesang in Morang tahsil. *Labrang* at Kanam and *labrang* in Puh tahsil and at Nesang in Morang tahsil. A Buddhist temple at Hango in Hangrang sub-tahsil, a Kargyud Chhering temple at Asrang, a Buddhist *kangyur* (sort of *lagang*) at Lippa and a *galdan chhoikar* (similar to *lagang*) at Lippa in Morang tahsil.

The following is the list of Tibetan gods popularly believed and accepted in Kinnaur.

1. Nam-chhra, similar to Narayan.
2. Langan darze or Chhog-dak, like the deity Ganesha, the remover of obstacles.
3. Tarema or Chheringma, the goddess of wealth or long life, equivalent to Lakshmi or Mahalakshmi.
4. Dukar, just as the Indian Trinity, equivalent to Dattatreya-muni.
5. Paldan-lamo, the supreme goddess, equivalent to Mahakali.
6. Dolma, as a Hindu goddess or *devi*.
7. Ningmet-cheebe, the deity of health and long life.
8. Ganbo chhag-du-gba, like the goddess Tara, or Taradevi.

Divination, by a series of fifty picture cards, is practised in Kinnaur. The full description of it is too long to be detailed here. The cards contain pictures of gods, devils, birds, etc. etc., which are capable of being variously interpreted, for example; Fak-pa-jam-pal: The deity Dharmaraj or Dharamaraja means, 'You will succeed by worshipping your deity; Chung mong-bu-thong-ma padminip: a lady with her son, 'You will get many sons and be successful in your affairs; any trouble can be averted by adoration of your deity.'

The ruling family of Bushahr was held to be of divine origin, and the lamaic theory has been that each raja of Bushahr is at his death re-incarnated as the guru lama, who is understood to be the Dalai Lama of Tibet.

Locharimbochhe is one of the most important incarnations among the followers of the Buddhism. The existence of Locharimbochhe is supposed to be divinely foreseen by the Dalai Lama. When a particular Locharimbochhe dies, another is similarly identified by the Dalai Lama. Kinnaur district, especially the Hangrang valley has had the good fortune of a Locharimbochhe born at Sumra who died some years back. He used

to live at Kee *gunfa* in the Spiti valley of Lahul and Spiti district. After his death, according to the custom, his deputy called Changjad, went to the Dalai Lama and requested him to identify the new Locharimbochhe. The Dalai Lama revealed that a boy born in a Rajput family of village Shyalkhar was the new Locharimbochhe. The newly discovered Locharimbochhe lived only for four years. Again the Changjad went to the Dalai Lama to find out the next Locharimbochhe. The Dalai Lama informed the deputy that the next Locharimbochhe will be born in the same house, and of the same parents from whom the former Locharimbochhe had been born. After three days of the death of the previous Locharimbochhe a boy was born to the same parents. The Changjad located the child and deputed a person to look after him in his parents house, and himself went back to the Kee *gunfa*. The man appointed to look after the young lama continues to tutor for being ordained as the next Locharimbochhe. This young Locharimbochhe was visited in that village by the Sub-Editor and staff of the district gazetteers in 1964. As soon as the staff bowed their heads before the child, he gracefully placed his tiny hand over their heads as a mark of blessing them. The child appeared to be a promising and of uncommon intelligence among the children of that age in Shyalkhar. He has a golden complexion, large impressive eyes and flawless limbs. He had not till then been named and was generally not allowed to mix up with the boys of his age probably to keep him neat and clean, as the teacher said. He is provided with food cooked exclusively for him. Although the menu happens to be the same as that for his parents.

The religion of the mass of the inhabitants is Hinduism, but they have no minute distinctions of caste. There are only two main castes, the Rajputs or the non-Scheduled Caste and, Chamangs and Domangs, the scheduled ones. Broadly speaking, religious life here is very much what it is in the adjoining parts of the Mahasu district, except that the influence of the lamas (more pronounced in upper parts), is greater than, that of the Brahmins. The most notable of the Kinnaur deities out of the pale of lamaism is Chandika.

As regards the Buddhism or the lamaism as is prevalent in Tibet, the cardinal tenet is the endless reincarnation of the divine leader in a series of deified men or lamas. The number of Tibetan gods is said to be a legion. In Kinnaur too every village and every pargana has its own *devta*. A lama acts as the family priest like the Brahmin elsewhere, and even more. Like the Brahmins elsewhere he too is consulted in times of trouble and asked to diagnose the origin of any misfortune which may occur in a family. If, as is usual, he traces this to any *bhut* (spirit) or *devta* suitable means of propitiation are adopted.

Hinduism

Kinnaur is a meeting place of Hinduism and Buddhism. “*The more intelligent hillman wishes to be considered a Hindu of approximate orthodoxy. He will tell you that before the spread of Buddhism the people of these hills worshipped according to the Vedas and afterwards returned to true Hinduism. But the view usually taken by independent authorities is that the popular religion of these hills is a primitive form of animism or demon worship, which has been overlaid with a thin veneer of Hinduism. Every village has a *deota* (deity) of its own, and many have more than one. Some of these are superior; some rich and others poor. We usually find that there is a principal god or goddess for each pargana who is identified with some form or incarnation of one of the regular Hindu deities. One of the commonest types of legend attaching to the origin of a *deota* is that he was a man of divine origin or attributes, whose mission was to free the earth of a certain demon, and that having accomplished his task he was deified by the people, who had suffered from the existence of the demon. It is possible that the significance of such stories is that the deities of an earlier heathenism have been dressed out in a new guise by the Brahmins.”

“The ordinary peasant appears to look upon his own village *deota* as a spirit, if not actually malignant, still capable of inflicting considerable harm, when so minded, and one, who must be placated on every suitable occasion by offerings and sacrifices. Some of these *deotas* are stated to have been originally men, who died by violence, or in such a manner as to render the propitiation of their ghosts necessary, and to have gradually reached the status of gods by means of the terror which they inspire.

It is nevertheless correct in all probability to describe the religion of the hill folk as a branch of Hinduism, and, taking it as such, it will be found that the great majority are Saktaks, or worshippers of *sakti*, the female principal, which is usually embodied in the form of Kali. Shaivas are represented by the worshippers of Mahadeo or Mahasu,.....etc., and are less numerous.....The average hillman joins with cheerful impartiality in all religious festivals in honour of any of the Hindu deities.....But his own little village *deota* is the one which he really fears and respects.”

Hindu temples in the district are enumerated in appendix V.

Sita Ram Johri in his book “*Our Borderlands*” has quoted Dr. Franke who visited Kinnaur in 1944. According to him human sacrifice

*Simla Hill States Gazetteer 1910, Bushahr, p. 25.

used to be offered to the goddess in the Kali temple at Kalpa (Chini). This information has been found to be incorrect because there is no temple to the goddess at Chini or Kalpa and there has been none in the past also where human sacrifice was offered. It appears that Dr. Franke has mixed up the account with that of the the Bhima Kali of Kamru before whom such sacrifices were made.

Miscellaneous faiths, beliefs and superstitions

The Kanauras like other hill people are very superstitious. Many hills, caves, mountains, inaccessible places like lofty passes, and weird and dangerous spots are tenanted, in their belief, by spirits and beings of supernatural order. Every village has its particular deity, as said before, to whom they pay respect wrung from them by a sense of fear or devotion. Spirits and ghosts are also commonly dreaded.

At all lofty passes, there are piles of stones erected to propitiate the spirits of the mountains. These heaps of stones are said to have no religious significance. It is customary, however, for everyone, who goes over the pass to add a stone to the heap as a record of his journey. Generally speaking, he writes his name and the year on the stone, and on some of the passes this is invariably done. Elsewhere the stone is thrown on a heap as a mere matter of habit.

People attach somewhat of a sacred and mysterious virtue to horns of some domestic animal and many wild animals hanging them at the doors and in the ante-chambers of the temples and sometimes at the doors of their houses. They do not, however, confine this sanctity to any particular animal's horns; their temples are adorned by many pairs of various kinds, and even of ram's horns holding a conspicuous hanging place in their holiest places.

The tops of hills are usually sacred to Kali, and on many of them too are found piles of stones in her honour, where sacrifices are performed at intervals.

It is believed that if a person makes a complete circuit round Raldang Kailas, he obtains the realisation of a wish. The journey is rather a difficult one, and can only be attempted in July or August.

The scene of Raldang Kailas is indeed forbidding but superbly grand. It is not unusual for the pious and simple hill-men to consider this inaccessible, menacing and yet enchanting Kailas as the home of Lord Siva and His spouse Parvati, the daughter of Himalayas. Siva in supreme bliss for eternity and Parvati veiled by the vesture of eternal snow. Looking up to that mysterious world of whiteness, one cannot but share

the awe with which the Kanauras gaze on those pathless snows, where human foot may never hope to tread.

Superstitions—*Darohi* originally was perhaps a kind of royal taboo, a kind of oath taken in the name of supernatural to bind people to jobs. It was invested with semi-divine attributes of the personage from whom it issued. In its development it proved a source of power in the days when rajas were concerned for their own safety to fence themselves around with supernatural safeguards. The oath is occasionally still employed for private purposes. In its public aspect it was once a useful method of insuring obedience to executive orders with a minimum of dispute or delay, and as such was used by certain village officers invested with authority to impose it. In the vast majority of cases, the person so drafted used to go; but should he prove recalcitrant, a headman could bring him before a magistrate who imposed a trifling fine upon the culprit. But superstitious qualms rather than fear of civil punishment supplied the sanctions by which the system worked. Again, resort was often made to this expedient in private disputes.

Dreams—People attach some importance to dreams and try to interpret them in their own way. To eat food or to kill a tiger in a dream means success in work. To see water, a river or a nullah in summer indicates that the next day would be rainy or cloudy. To see sheep and goats ascending a hill in winter means no rain but their descending a hill would bring a snowfall the next day. Killing of rams or goats, playing of musical instruments, perching of a crow in the verandah of a house or falling of teeth are indicators of death. A person seen wearing ornaments of purchasing silver and gold ornaments indicates his death. So also wearing new garments and riding a horse portend a death somewhere. Eating green vegetables and fruits indicates happiness but eating meat is bad. Weeping is a lucky omen, while falling from a wall or tree, laughing or ploughing are unlucky omens. If one sees dog following him, he should be aware of the ghosts and the evil spirits.

Other superstitions—To come across an empty *koting* or an empty *zom* while proceeding on some business means failure. To see a drum, or a *koting* full of something, indicates success. Braying of an ass at the time of ones setting out for some work is a good omen. To see a snake catching a *chhemer* (lizard) is a very bad omen. But to kill the snake and to rescue *chhemer* can save from bad luck. Shivering of a horse at the time of its taking out for a ride is a bad omen.

for the rider who should avoid the journey. If at the time of setting out on a long journey a person discovers his packed food without salt, the journey should be avoided. If *melup* (a shooting light in the sky) is seen a fire is sure to break in the direction to which the light has proceeded.

Belief in ghosts and evil spirits is common. Here in the dim *primaeval* forests of deodar and pine spirits dwell, who since immemorial time, have brought fear and dread to the simple Kanauras. Through the ages their names have been told by whispering mothers at smoky firesides to quieten their naughty children. Ghosts are believed to haunt people. *Bakhar-shuna* is a ghost believed to be found in dense forests or on hill tops. In shape it resembles a goat and makes bleating sound. It can change itself into many shapes. It persecutes its victim by throwing stones on him. A person affected by *bakhar-shuna* is likely to be taken ill. *Banshir*, is another ghost supposed to live in the forests on a deodar or *kail* tree. It can assume, at will, various shapes, becoming sometimes a huge man, sometimes monkey or a jackal and, makes a great noise to menace his victim. But it is not considered very harmful. Usually it comes out at night. If the tree on which it lives is used as timber in a house, the house is haunted by it. *Chon*, a highway ghost, is supposed to cause sickness to whom it meets during odd hours at night. There is a general belief that one must not speak to ghosts when accosted. Whenever some sudden voice calls a person in odd hours he or she must not answer at the first three calls because the ghosts are supposed to call only thrice and thereafter the person is left unmolested. *Ruksas* is the ghost of a person who led a sinful life. It generally prefers to live at the confluence of two streams, on a huge rock, cave or a tree. It may come across a person at night and sometimes even at noon. Its frightful appearance is said to comprise long teeth and nails and it often assumes huge shapes. It wrestles with its victim. Should the person be in possession of a sharp weapon, the ghost is ineffective. *Khunkch* is an evil spirit, supposed to reside in certain houses. If a marriage is contracted in or some cattle are purchased from such a house, this evil spirit may also accompany the bride or the cattle to the new house. In its new abode it torments the family members and the cattle. In the Baspa valley evil spirits are generally supposed to haunt and overpower the innocent young girls. Peculiar devices are adopted to ward them off. The middle fingers of both the hands of the affected girls are tied together with hair. Chillies are burnt on ambers and smoke applied to the girl. She is repeatedly asked to disclose the identity of the spirit. Then the spirit speaks through the affected girl and answers the questions. Strangely enough, the girl provides answers in Hindustani of which she has no knowledge. Sometimes a big loaf made of ash covered with the leaves of pumpkin is placed where four paths converge.

To ward off evil spirits the well-to-do people perform *thatha* ceremony every year. Poor ones perform it once in four to five years. In this ceremony about 108 earthen lamps are lit in the hope that the year ahead will be free of the terror of night. Sometimes a lama, on invitation, visits each house and offers elaborate worship to *kimshu* (the household god).

Burning grounds are popularly supposed to be haunted by supernatural beings which are variously termed *mashan*, *rakshas*, *shyuna* and *kharshuna* or *khershuna*. The two former names are applied to goblins or demons, and the latter to casual ghosts.

Cultivators get their lama to fix an auspicious day and hour for commencing ploughing and sowing. The lama fixes the time and when it arrives, recites suitable chants such as *om akani nikani ambila mandale mantale swaha*, the purport of which is 'May the gods bestow on us abundant crops.'

Manners and customs

Fraser who came up to Sarhan described the people of this area somewhat in the following manner. The inhabitants have traditionally an openness of countenance and a frankness of conduct and manner, with some exceptions, that quite distinguishes them from the other hill people. They are active, generous, hospitable, brave, hardy, independent, courteous, sincere and honourable in their dealings. A person's word may be relied upon particularly regarding money matters. They have pride in their country and their moral is high. During the princely regime, most of the officers of court, and nearly all the personal attendants of the raja were from Kinnaur. They could be safely entrusted with money or message of importance. About the people of Hangrang area, Captain Alexander Gerard observed as follows. "At first I thought less of the Tartars than their neighbours, but they improved on further acquaintance, and I now am of opinion that they are the frankest and most honest race of people I have seen in India. They possess neither craft nor ingratitude, and they may be trusted to the world's end. Thieves and robbers, the indigenous inhabitants of mountain-regions, are unknown; and the same character belongs to the interior tracts of Busahir, or to that portion of the interior called Koonawur lying within the snowy mountains."

They are fond of enterprise and travel far and wide in pursuit of trade and commerce and have acquired valuable standards of honesty in their dealings.

The people have few pursuits at home. Agricultural operations being uneconomic, the people naturally take to trading and for that matter

*Gerard, Lloyd William Alexander, *Narrative of a journey from Campoor to the Boorendo Pass in the Himala Mountains*, vol. II, p. 206.

have to remain away for months. Mainly they used to visit Tibet when trade was open. An unbounded confidence was placed in them by the people of Ladakh, Kashmir and Tartary who found them strictly honest, punctual, liberal and unsuspecting. The food of the people is simple. The women work very hard, and from constant exposure to the strain of physical work and weather, soon become haggard and look much older in appearance than in years. They do all the laborious work; for instance, they carry the loads, weed and cut the crops, carry water, cook, whilst the men are generally traders or labourers. Their habits of people are simple and their wants are limited. They lead a hard life. The only relaxation to forget in hardships is one, occasional indulgence in locally distilled liquor. Usually at their festivals, which take place almost every month, the liquor is freely used. In these festivals they have all sorts of amusements, such as, horse races, foot-races, performance of all manner of buffoonery, feats of agility, dancing and singing.

The Kanauras, mostly of the upper parts are Buddhists and are priest ridden to a great extent by their lamas.

Birth customs—When a woman is pregnant the lama hangs round her neck a charm written on paper or birch bark, and recites a chant in the Tibetan language, which begins *om tare tutare tare swaha*. When a son is born, adoration is made to the goddess Dolma and a chant, called *bhum chung*, is read by the lama, which runs *om tayatha gate gate para gate swaha*, and means 'May God bless the child.' The child is then made over to the care of the old woman of the family. The child's horoscope is cast at the time of his birth by the lama, who is paid a fee permitted by the means of the parents. For a fortnight the mother is segregated and not allowed to touch anything. At the end of that period she and everything that she used during the period following delivery are sanctified by the sprinkling of *charnamrat*. The naming ceremony is performed by the lama. He prepares at the same time some charms designed to secure the child a long life. The child is brought out often after a month or two, on an auspicious day or on the full moon day.

When a boy is a year old his head is shaved and the lama performs ceremonies of *hom*, puja or *path*. The Kanauras do not, as a rule, wear the sacred thread. A *kanthu* or *kanthi* i. e. an ordinary necklace is put round the neck of a child at eight years of age. The birth ceremonies observed in Asrang village are given below.

Here there are no restrictions during the confinement period. The mother is attended upon by the indigenous dai who looks after the cutting of the naval cord and the disposal of placenta. The mother usually remains segregated for eight days after which the lama is called for purification ceremony and casting of nativity. He usually receives one rupee, some grains and his meals. The family members and near relations are forbidden to visit the village temple for fifteen days. On the first *ukhyang* falling after the birth of a male child, the parents in some cases, have to provide five bottles of *rakh*, to the temple of the local deity. In the past a goat was sacrificed but this custom is dying out. A feast is also held at the time of the hair cutting ceremony when *khura*, *luchi* and *chhoma* is cooked and distributed.

Death customs—As the trade and wealth of Kinnaur increases and its people come more in contact with other parts of India, they are rapidly abandoning the old customs, such as *dubant* (drowning), *phukant* (burning), *bhakhant* (eating by vultures and birds) etc. This last method of disposing of a dead body was formerly observed only by the inhabitants of Hangrang. The people now mostly burn the dead bodies.

The lamas used to consult the scriptures and advise about the method to be followed for the disposal of the dead, but now the common Hindu system of cremation is followed. The only old custom which survives is the annual *shradh* called *ukhyang* in which, in some cases a he-goat, reared in the dead man's name, is dressed in clothes, sacrificed and eaten by the members of his kindred.

At the time of death religious scriptures are read, grains are distributed. The dead body is accompanied by drums and musical instruments to the burning place. After the body is consumed by fire ashes are collected. These used to be taken either to Manasarowar in Tibet, or to Riwalser in Mandi, or to the Ganga. Now these are taken to Mandi and mostly to Hardwar. For seven days a lamp is kept alight in the room where the death occurred, and incense is burnt. Three days after the death a ceremony called *chholpa* is performed.

On the 13th day, a ceremony locally called *damkochung*, something like *kirya* which literally means good and bad, takes place. On this day a puja is offered either by a Brahman or by a Lama whosoever is available. This puja depends upon the family inclination towards Hinduism or Lamaism. After this ceremony, taboos with regard to food etc. are no longer adhered to and the family leads a normal life.

Fifteen days after the death the lama performs some rituals like

hom along with the chanting of mantras. This ends the first period of mourning, and the lama once more receives a fee. A year later the lama receives food and clothes in the name of the deceased, at the *ukhyang* or *phulech* festival. This finally ends the period of mourning, during which no new clothes or ornaments are worn in the family of the deceased. The lama also performs a ritual called *dujang* which corresponds to the *shradh*.

Local death ceremonies are not uniform. Sometimes the variations are quite marked. Here is a description of the death ceremonies observed in Mallang hamlet in Hangrang. Immediately after the death, a head lama is called in, and he comes along with three or four lamas, equipped with a *pothee*. All the lamas sit near the head of the dead body and start reading and reciting from the *pothee*. A lama calls out the name of the dead person. This ceremony is called *phua gyabcha*. This follows recitation by lamas what is called *molam*, purporting bestowal of peace on the departed soul in the other world. The clothes worn by the dead are taken off, the dead body is given a bath, oil is applied and the corpse is brought into a sitting posture by means of a rope. It is decked with new clothes and a new *shew* (cap) decorated with *chambaka* flower is put on its head. The body in sitting position is taken to the burning ground on the back of a man by means of a *bergi* (a woollen shawl) wrapped round it. Sometimes a bier i. e. a seat of wood, is prepared and carried by the close kiths and kins. In the forefront walk two lamas, holding at the two ends a white cloth, supposed to show the way to the soul of the deceased and followed in turn by men, women, lamas and relatives. Cooked victuals are staggered in the way to the burning ghat. The lamas also carry with them musical instruments including *bugjal*, *tungjang* and *dung*. Of these instruments the *dung* is sounded occasionally. Some of the mourners carry with them the fire-wood. When they have reached about half the way the women, lamas and others (except those persons who are carrying the dead body, the white cloth and the fire-wood), return to their houses. A burning place is not necessarily at a fixed point. The lamas decide the direction towards which the corpse is to be taken. At a burning place the body is placed on the *dursa* (pyre) and fire is lit. Two persons stay there till the dead body is completely consumed by the fire. The ashes are picked up and sent to be immersed into the sacred Ganga. If the ashes cannot be sent for immersion into the Ganga a *kunda* (an idol) is made representing, according to the directions of the lama, either Shakyathuba or Guru Rimboche, or Changrajang and the ashes are inserted in the hollow of the *kunda* which is kept then in a *chhatkang* (a house temple).

Within ten days of the death a ceremony called *shaptuk* is held.

All the village lamas are invited who recite from their *pothees* throughout the day. The clothes and utensils belonging to the departed soul are given to lamas. This offering is called *pulja*. Mourning period lasts for ten days. Women are required to put off their jewellery, to shun coloured garments and to avoid singing, dancing and participating in such parties. A widow is required to observe these restrictions till the *namgan* festival when villagers offer her some flowers to end the mourning.

In the vicinity of Spilo as soon as it is perceived that the light of life is about to depart from the dying person, *panchrattan* (five precious things or gems viz., gold, diamond, ruby, pearl and amethyst) is put in his mouth. A pill called *jinlup* secured from a renowned lama is also put into the mouth. The belief is that the pill secures peace and salvation in the after life. The bathed and oiled dead body is put inside a sack of *masru* cloth. Until recently it was customary to take the dead body on the back of a man but it is now generally carried on a wooden *dandi* (bier) covered by *chone gahba* (five pieces of cloth of different colours). The funeral procession is headed by musicians playing their instruments followed by persons at least one from each house carrying a log of wood. The dead body is then carried for cremation on the bank of Satluj. Here a *dungskhang* (pyre) is built and the corpse is laid on it. The lamas then light a lamp, seat themselves beside the pyre and perform a sacrificial fire called *jinsrekch*. Then the body is put on fire by the nearest relative. The *menthok* (ashes) are picked up and sent to Hardwar to be immersed in the Ganga river. Generally the mourning period lasts for a fortnight. During this period simple diet is taken, taking of meat etc. is forbidden. The last rite, *chhosilma*, is performed on the fifteenth day after the death. Singing and dancing do not take place in the house of the deceased for one year.

During *panchaka*, it is considered extremely unlucky for the family to have a death. If a person dies during *panchaka* his relatives make idols or images of *yud* and burn these with the body, chanting special mantras.

In certain villages, there is a tradition to build some sort of structure at the top of the mountain in memory of the persons that have died during the year. This is normally done at the time of *phulech* when the people go to the mountain tops to collect wild flowers. When one looks towards mountain tops, these structures locally known as *kotangchos* are visible.

Some of the customs connected with births, deaths and marriages have been narrated at length to enable the reader to see how and to what extent the ceremonies or rituals have been influenced by Lamaism or Hinduism.

Inter-caste relations

The Chamangs whose main occupation was connected with the skins of dead animals still remain lower in the social rung as compared to Kanaitis and Rajputs. The Chamangs who used to look after the disposal of the carcasses of domestic animals and flay them, have of late, withdrawn themselves from this occupation though they still plough the fields or prepare shoes from imported leather. Their unwillingness to dispose of the dead animals has caused quite a problem as the other Scheduled Castes also do not undertake even to touch the dead animals and as for the higher castes it is a big taboo. In spite of a legislation preventing untouchability the social customs have retained the rigidity and they, the Chamangs and Domangs cannot freely mix with the other castes. There are differences even among the lower classes themselves as also there are among some sects of the higher classes, Kanaitis and Rajputs. It will take a long time before caste distinctions are effectively eradicated by the force of public opinion, legislation apart.

SOCIAL LIFE

Property and inheritance

Joint family system—The joint family system is still largely in vogue among the Kanauras. Father, sons, brothers and even uncles and nephews of the same descent generally live together under the same roof and own property in common. Of late, there has been developing a tendency among some, wanting to live separately as reflected by the number of partitions sought year after year. There were thirty-nine partition cases in 1952, sixteen in 1953, thirty-seven in 1954, nineteen in 1955, thirteen in 1956, eleven in 1957, sixteen in 1958, nine in 1959 and twelve in 1960.

Forms of inheritance—Matriarchy having never existed inheritance goes by patriarchy. In a polyandrous family when one of the husbands dies his share is inherited by the surviving cohusbands. When all the husbands die the sons begotten by them inherit the patrimony in equal shares. Actually a person dying, so long as his brother(s) is/are living, is recorded in the revenue papers as issueless and the property is mutated in favour of his surviving brother(s). Sometimes a man may have two kinds of children namely, by a formally married wife; and by a purely adulterous connection with a widow or with an uncommitted woman. Such children are called *poltu*. In some parts a child from an unmarried girl is called *puglang* and has no right to anything by way of inheritance. Such

children marry with some one of their own class i.e., with a *poltu* or *puglang*. It is only the children born out of the legally married women that inherit the whole property of the deceased father(s). The second class i.e., the *poltu*, as a rule and if accommodated by other members of the family, become servants to the rest of the household, and are supported by them or sometimes given a field or two and a small sum of money by the head of the family according to his own sweet will and means. Such an illegitimate child has no right to property.

The *poltus* have, however, now started asserting their rights through the law courts. Instances are not wanting wherein after the death of the father *poltus* successfully proved their legitimacy and got their share from the brothers on equal footing. In fact instances of *poltus* are not many. They are rather rare. In case the illegitimate issue happens to be a *poltee* (female) there are no adverse consequences. Her mother or her maternal uncle brings her up.

Division of property among the polyandric group follows the rule of *jathong* and *kanchong*. *Jathong* means the right of the eldest and *kanchong* the right of the youngest in the family. Before the partition takes place a good field is given to the eldest brother and the ancestral house to the youngest. The rest of the property is then divided in equal shares. The idea behind the custom is probably a realisation that the youngest son being just a starter or not an earning hand should be given a new home for himself, and that the eldest son should get the best field in recognition of his seniority.

As the *Hindu Succession Act 1956* is not applicable to Kinnaur, the daughters do not inherit any property legally and the mutations continue to be attested in the old manner.

Transfer of property through wills

It has been found that no will has been presented before any Registrar or come to notice of the public since the creation of the district. A very few transactions by way of gifts, however, have been reported which generally have been set aside by the Civil Courts on the basis of the prevailing customs in the district, or on the basis that whenever a particular custom is in vogue and is proved as such, that custom shall be the rule governing the decision. The custom prevailing in this tribal area is as recorded in the *wajib-ul-araz* which restricts the powers of the member in the joint family to alienate or otherwise transfer any property against the interests of his reversioners.

Marriage and morals

Monogamy—Monogamy had until recently been an exception

rather than the rule but there are now increasing monogamous marriages. Developing social contacts outside the district has already greatly popularised monogamy in this tribal-inhabited tract. Instances of polygamy are not altogether wanting. In Kothi village of tahsil Kalpa seven polygamous families were recorded in 1961. In Thangi village, tahsil Morang, there were only two men who kept more than one wife in 1964. There is a custom that at the time of marriage some land, and, a house or a room, called *bitho pono* are allotted to the bride by the parents of the bridegroom. In case of a second marriage or differences arising with the husband or with the parents of the husband, which may compel a wife to quit the family, she can fall back upon this property by living separately.

Polyandry—Polyandry prevails in most of the Kinnaur areas but is rapidly losing ground to monogamy. The usual practice is for several brothers to share one wife. Sometimes, if a joint wife is barren, her sister is brought in as a second wife. Sometimes, a younger brother in a polyandrous marriage prefers to bring another wife for himself because of the common wife being older. A love-affair ending up in marriage may also result in separation of one of the husbands in a polyandrous family. In this case the joint property must be partitioned, unless the new wife consents to be shared by all the brothers. If she refuses, she and her husband must go away and live in a separate house. The latter husband does not, however, lose his share in the original joint wife, although as a matter of practice, she usually refuses to have anything to do with him. This system has stood the test of time in Kinnaur and has contributed to keep the families and their holdings intact. At present the local opinion is not unanimous as to the usefulness or otherwise of the system. Some completely disapprove of it and hold the view that one should follow monogamy as polyandry has out-lived its utility.

Polyandry is, however, still vehemently defended by the older generation who practise it, on the grounds of its usefulness in keeping the family closely knit and preventing both, over-population and sub-division or fragmentation of the already small agricultural holdings. It enables a family, where joint labour is required to eke out a precarious living from the inhospitable land, to get full benefit from several resources for their livelihood by way of pooling them together. Polyandry was, in former days, directly encouraged by the state through penalties exacted on partitions. When a set of brothers divided movable property one-half share of the whole was appropriated by the state, and divisions of immovable property were refused official recognition.

Usually all the husbands are recognised as the fathers of each child, the eldest brother being called *teg-boba* (elder father) and the

others *gato boba* (younger father). For practical purposes, in everyday life, the eldest living brother is spoken of as the father of all the children born of the common wife. If the joint family is broken up for any reason the wife then names the fathers of the various children.

In the marriage of a girl to a number of brothers a special marriage ceremony is observed according to which each brother is required to put on a turban called, locally, *pag likshimu* in order to get the status of a husband. The arrangement of marital relations in a polyandrous family is not as difficult as it may seem as all the brothers do not remain at home all at once. The resourcefulness and tact of the woman also helps maintain harmony. She may develop fondness for anyone of her husbands but does neither express it nor neglect the remaining husbands. The surplus female population left unmarried from this system may take refuge in the monastic convents, becoming nuns.

Traditional restrictions on marriage alliances

Marriage alliances have been in the past, and still continue to be, subject to certain traditional restrictions based either on caste considerations or on the degree of relationship or the socio-economic conditions of the parties. The upper strata of the Kinnaur community comprising Rajputs or Kanaitis contract marriages in their own communities. The usual restrictions observed by them are that no marriage can take place within the same sub-sect. The lower layer of the community comprises primarily Chamang, Domang and Ores. Among them Chamang are endogamous. Domang and Ores inter-marry freely.

Dents have started appearing in these once rigid restrictions and there are a few instances when caste barriers have been broken and disregarded in matters of matrimony. For matrimonial alliance mother's side falls within the prohibited limit for two generations. Inter-caste marriages are not altogether unknown but may be regarded merely rare exceptions so far.

Marriage customs and rituals

The nuptial rites in Hangrang sub-tahsil differ. Marriages seem here, as in many other places, mere contracts of convenience, and matters of mere bargain, than the result of a preference founded on affection or esteem. The fathers of the parties propose and conclude the bargain. The marriage here is called *rejha*. In this type of marriage engagement takes place when the boy and the girl are still of tender age. Engagement ceremony is performed by offering of *khatak* (a piece of cloth), a bottle of liquor and if the parents of the prospective bride accept the presents the matter is settled. On the attainment of marital age, the bridegroom's father, along with some other persons, goes to the house of the parents of the

bride and settles the day of marriage and *rinchot* i.e. the amount which the bridegroom's side has to provide to the bride's family. *Rinchot* may vary from fifty to one thousand rupees, according to the financial capability of the bridegroom and his family. *Rinchot* is to be paid earlier to the date of marriage as the money is supposed to be utilised for the purchase of ornaments for the bride. This expenditure is taken into account and is made refundable if the wife leaves her husband and goes off with another man.

There are four different forms of marriage in Kinnaur, namely, the *janetang* or the *janekang* (wedding), the *dam tangshis* or the *bennang hachis* or the *jushis* (love marriage), the *darosh* or the *dab-dab* or the *khuchis* (marriage by capture), and the *har* (enticing away some one's wife).

Janetang or *Janekang* is the only legal form of marriage. A suitable bride is looked for and found by the parents of the boy and then the negotiations are opened with the girl's parents generally through a relative. If the bride's parents seem agreeable to the proposed matrimonial alliance, two persons called *majomi* (go-between), with a bottle of liquor and some cash, generally five rupees, as a token of present, go to girl's parents and settle the bargain. A gold ornament is also deposited with the parents of the bride. The acceptance of this ornament, called *burni*, binds the parents into marital bond. Subsequently, the marriage date is fixed in consultation with a lama or the village deity. The marriage generally takes place in the month of *Agrahayana*.

If, however, a marriage ceremony has to be postponed which is possible only for a few days and has to take place during the other months, due to very exceptional circumstances, a ritual known as *jinsi* is performed by sending an ornament from the bride to the groom's house by the middlemen within the days of the said months so as to dispel any evil influence.

On the night of the fixed date, the bridegroom, with some of his friends, relatives, go-between and others (about ten in number) visits the house of the bride to bring her. In a polyandrous marriage, one of the brothers, usually the one who is nearly the bride's equal in age, goes as bridegroom attired generally in *chhuba*, *gachhang*, *tapru-se-chhanli*, *tapru-se-sutan* and *tapru-se-balzanuspona* with a dagger. A well-to-do bridegroom usually goes on horse back, accompanied by an additional adorned horse for the bride too. On the arrival of the party at the bride's house, a *grokch* of the local deity gets into a sort of trance and in the frenzied condition, pretends to ward off evil spirits that might have come with the party. To welcome the party incense is burnt at the entrance of the main room and a lamp is lit and placed on a vessel filled with grain.

Then the party is feasted, the meal consisting usually of meat, rice, *rote* (bread), ghee and liquor. After the feast the relatives of the bride assemble in a room. Each of them is garlanded and offered some cash by the bridegroom. This ceremony known as *sening kunnu* is meant to serve as an introduction of the bridegroom to the hitherto unknown relatives. The bridegroom also offers five to fifty rupees to his mother-in-law as *nazarana* (a mark of respect) and greets her with folded hands. This is called *yume dalyangmig*.

Before the departure of the marriage party, a group dance, named *manchhang frolshimu*, accompanied by a special song, is performed inside the room. The dance is headed by the senior go-between, holding high in his right hand a vessel full of liquor, followed by the bride and then others. At the end of this short dance the bride is led out of the house to depart with the groom.

The bride is dressed and adorned with care. Parents of the boy provide to the bride all the ornaments except *daglo* which is to be given by her parents. Her dress comprises *tapru-se-dhori*, *tapru-se-chhanli*, *tapru-se-spona*, *gachhang*, *choli* and *prethepang*. The participants in the bridal procession also put on their best attire. The procession is headed by the musicians. It is customary to stop playing of the musical instruments while passing by a temple on the way, and a goat has to be sacrificed on every bridge falling on the way to appease the spirits supposed to be residing there. This custom is, however, dying out and in place of a goat a coconut and some liquor is offered. If night overtakes the party on the way, boarding and lodging arrangements are made by the groom's father. The bride's father brings with him some utensils in a *koting*. Usually the utensils include *lamthu* (a huge vessel of brass or copper), *arbo* (a vessel for washing hands), few *nango* (platters), a *lotri*, an iron tripod, a hoe, a sickle and a *parat*.

Near the groom's village the bride and the procession is welcomed by the women hailing from the bride's village and married in the groom's village. Then the party proceeds to the groom's house. Ceremonies almost identical to those observed at the house of the bride are also gone through here to welcome the bride, by her mother-in-law, before the couple enters the house. A big he-goat is then carefully decapitated so that its limbs, except the neck are not injured, because such an injury is regarded as a bad omen. In the upper part of the district where the people generally follow the tenets of Buddhism, some lamas stand at the door and as soon as the marriage party arrives, one of them starts chanting mantras, when the bridegroom returns with bride. This observance is called *gyashtok*. A feast is then held. The menu of the dinner comprises meat, rice, *rote* and ghee. Drinks are served. Dinner is followed by a dance.

Next morning at the breakfast time saltish tea with *yud* is served. In the day a rite locally called *u-pagey* is performed. The co-husbands in a polyandrous marriage are called and a *pag* (turban) is wrapped round their heads by their maternal uncle. Garlands of *neoza*, *bija* (kernel of sweet apricots) and walnuts are put round their necks. By virtue of this rite the bride is deemed to have been married to the other brothers also and becomes their wedded wife jointly.

The groom's father sets apart a piece of land for the bride. A deed is confirmed in writing on a plain or stamped paper. The middlemen stand as witnesses and the deed remains generally with the bride's father. A list of utensils given to the bride is prepared after weighing each of them. In case of a divorce these utensils (or the cost thereof) have to be reimbursed by the groom's father.

Then comes the rite called *belding sarmu*. All the dwellers of the village including the relatives of the bridegroom assemble and offer *belding* in cash or cloth or grains to the bridegroom. These gifts are received by a *majomi* and duly enlisted. Payment in cash may vary from one to hundred rupees and in grain from five to forty *brejas*. The payment in cloth may be *dhor*, *chhanli* and *choli*.

In the evening a ceremony called *biyoshimig* takes place which marks the end of the ceremony. Those who accompanied the bride, now about to depart, offer her some cash according to the capacity of the purse of each person. The amount so collected is regarded to be the exclusive property of the bride till her death. The bride can utilize this money in any way she thinks proper. At the end she bids farewell to the people by garlanding them. The bride stays on usually returns to her father within a month after the marriage. Generally after a year she is brought back and thereafter properly settles in her husband's house for good.

It is the first marriage which is solemnized with all the pomp and show. Subsequent marriages, if any, in the family are comparatively inexpensive as compared to the first. During the first marriage it is always insisted by the parents of the bride that her-in-laws earmark certain piece of land exclusively for their daughter in case her husband (s) marries some other girl subsequently and leaves the first. Many a time this assurance is kept in the form of a document which is honoured subsequently if there is any partition in the family. It may also be mentioned that no Vedic rites such as going round the fire etc. are followed in the solemnization of marriages in Kinnaur.

Dam-tangshis form of marriage is simple and its proceedings start, as the very term implies, with a love-affair that develops between

a girl and a boy. If they find the circumstances are favourable the boy takes away the girl to his house. Then the negotiations start between the parents of both and if the parties agree, the marriage takes place. When the lovers do anticipate an out-right rejection from their parents they elope and conceal themselves for sometime elsewhere. The couple is located sooner or later. If the parents of the boy approve of the union, they send two emissaries, with a bottle of liquor to the house of the girl to open the negotiations with her parents or guardians and, to patch up things otherwise the lovers have to fight their own battle. The emissaries are asked to sit at the girl's house and soon thereafter the matter is broached upon.

Such a marriage is called *khindup* in Hangrang area. Here after disappearance of the couple a search follows. After discovery of the couple the petition made by the boy's side to girl's side is peculiar. The go-betweens are sent out equipped with a bottle of *arak* or *chhang* and a white piece of cloth, termed as *khatak*. On reaching the girl's house, the *khatak* is hung downward and the bottle of liquor is kept beside a table called *chokche*. The go-betweens then with folded hands offer salutation and broach the subject. Till they have finished their request including narration of facts of elopement and recovery of the couple, they, as a general rule, do not sit, unless so commanded by the father or the relatives of the girl. If the father of the girl is inclined to enter into negotiations he asks the petitioners to sit down, if not, he asks the go-betweens to get away with their *khatak* and the bottle. Persuasions follow. Should the father or the guardian of the girl be disinclined to the relationship the go-betweens return. The father may then bring back the girl wherever she is. In parts other than Hangrang if the girl's parents refuse the matrimonial alliance the boy and the girl are accepted as husband and wife and invited to live with the boy's parents without any sort of marriage ceremony. In case the girl's side agrees to the proposal, a bottle of liquor and some money or *khatak* as the case may be, are accepted. Worship follows with the offering of the liquor bottle to *kimshu* and its contents distributed among the persons present there. The empty bottle is returned to the *majomi* (go-between) who applies a butter mark on the foreheads of the members of the family. Thus a reconciliation on the elopement ends in a regular marriage.

A marriage date is fixed, even long after the incident of elopement and instances are not wanting when marriages are performed even after seven or eight years of the elopement during which time the girl may be having some children. The girl all the time remains in her husband's house and comes to her parents house a few days before the date of the marriage.

Darosh or *dab-dab* or *khuchis*—Sometimes the bride is way-laid and captured by her would-be spouse. This happens with or without the consent of the parents of the girl. But sometimes intimacy exists between the boy and the girl, and, when the boy finds that the girl's parents do not and will not agree to their union, he resorts to capture her by force. He may find the girl going to her daily work or in a fair or any other place within the village or outside and with the help of his friends carry her away to his house or to a second place of his dwelling. It is *de rigueur* for her to struggle and attempt to escape and, if she succeeds, she can be proud of it.

While describing *darosh*, it is necessary to mention that the first man to put his hand or catch the bride has essentially to be the would-be bridegroom. This establishes the identity of the person who is going to marry that girl. This is essential also from the point of view of the parents of the girl who at times may have objections about the would-be bridegroom but have no such objections about the family. Parents of the girl quite often insist that they would send their daughter provided a particular boy in that family accepts her as his wife. After all no father would like to get his daughter married to a good-for-nothing fellow in the family. Marriages conducted through this method are invariably solemnized subsequently. This mode of marriage is quite often resorted to by the people belonging to lower *orungs* who want to marry in a family as have higher *orung* so as to ensure their rise in the hierarchy of the *orungs*. There is a case in which a girl was properly betrothed to be married in a particular family through a proper marriage. Suddenly the would-be bridegroom resorted to *darosh*. On enquiries it was found that *darosh* was resorted to because there were rumours that three-four other families were also interested in the girl. Apprehending that anyone of them might resort to *darosh*, he decided to take the first chance. Subsequently the marriage was properly solemnized.

In the past it was not uncommon to capture a bride without either the consent of the parents or the knowledge of the girl. Subsequently such an act constituted an offence and the practice died away. Capturing a girl with the consent of the girl or her parents is not looked upon as a crime even now.

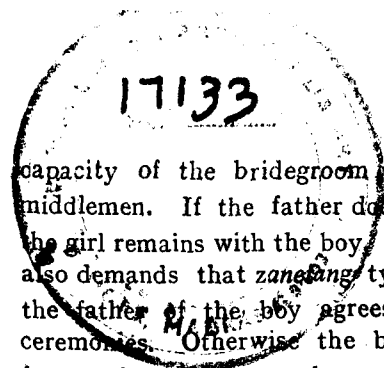
Immediately after the act of capturing, the boy's father sends middlemen to the girl's parents requesting for their pardon for the outrage committed by his son. To begin with the girl's parents show great resentment but the middlemen finally succeed in bringing them round. The girl's father asks them to make amends in terms of money called *izat* (penalty) for atonement for the disgraceful act done by the youngster. The amount ranges from Rs. 100 to 500 according to the

capacity of the bridegroom and this has to be deposited at once by the middlemen. If the father does not agree he may not get anything and the girl remains with the boy. On acceptance, sometimes the girl's father also demands that *zanang* type of marriage ceremony, be performed. If the father of the boy agrees the marriage takes place with the usual ceremonies. Otherwise the boy's father would request for exemption from such a performance by expressing his inability to stand the expenditure, and, the exemption is generally granted. Within a month, on some auspicious date the girl is sent back to her parent's house, accompanied by the husband, the middlemen and two women. On this occasion she is given new clothes and a few ornaments by the husband. This act of sending the wife duly adorned, is known as *duniyomajo-sharelala*. About three or four baskets full of *pole* are sent with her for distribution among the relatives of the girl's father and maternal uncle. Giving away this gift is called *sten-rannig*.

The boy offers as a mark of respect garlands of edible pine and some money to his mother-in-law and other elderly women in his in-laws family. The groom then returns with his men leaving behind the bride who, on a suitable date, is brought to husband's house by her father or brother. Relatives to whom *pole* had been distributed are informed about the girl's departure. They assemble at the girl's house, give a *nang* to her and a feast is held. On his daughter's departure, the father gives her a few utensils, ornaments, and Rs. 100 to 300. The relatives absolve her of the disgrace of being forcibly carried away. She then goes to her husband's house.

Har—When a married woman, develops a love-affair and decides to marry her lover or if, for any reason, she is forced to dissolve the first marriage, *har* is the outcome. The woman deserts her husband's house and is taken away by her lover. The lover, her future husband, has to reimburse the former husband the *hardanang* and has also to arrange to pay some amount on account of *izat*. The acceptance of the amount by the former husband sets the woman free and the previous marriage is deemed to have been *ipso facto* annulled. Her living with the second man then becomes a matrimonial tie. *Har*, being a Sanskrit word, means to take away.

Dowry—The pernicious practice of giving, taking and demanding of dowry does not exist. Gifts and presents are customarily given to the bride by her parents and relatives but these do not constitute a dowry. All the gifted articles and *udanang* are regarded as an exclusive property of the woman. At the time of marriage, bridegroom is given a turban, a *khukhri*,



PEOPLE

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171

101

a *nangch* (a dish) or a *batich* (cup) and a *nang* (platter) and sometimes he is given some garments. These gifts are given in the first three forms of marriages but not in *har* and widow re-marriage. The system and value of the gifts both are showing signs of increase.

Civil marriage—Only one marriage has so far been registered before the Marriage Officer (Deputy Commissioner) in Kinnaur on April 4, 1963, under section 11 read with section 13 of the *Special Marriage Act of 1954*. The marriage significantly was solemnized between a Harijan girl and a Rajput, both of Brua village of Sangla tahsil.

Marital age—The *Child Marriage Restraint Act 1929 (Act XIX of 1929)* is in force which prescribes, *inter alia*, the minimum age of marriage as 18 years in the case of boy and 14 years in the case of girl. In polyandrous families a wife may sometimes be older than some of her husbands.

Widow re-marriage—Widow re-marriage is permissible. If the betrothed of a maiden dies before marriage leaving her a virgin widow, the parents of the girl return the cash and other things taken at the time of betrothal and, marry their daughter elsewhere. If one becomes a widow after marriage then two situations may arise. Either the young widow may repair to her parents house who after re-counting the expenditure of marriage to the family of the deceased husband, can re-marry her or the young widow may elope in which case the seducer likewise pays the marriage expenses to the family of the former husband. A widow having issues and property has three alternatives open to her. Firstly, she may elope with some one, taking away all her personal property, and if she has children they are sometimes taken back from her if not already left behind who are in that case brought up by the brothers of the deceased. The usurper has to pay back the expenses to the family of the deceased. Secondly, she may live as a spouse of her deceased husband's brother. Thirdly, she may lead an independent life in her deceased husband's house.

Divorce—The *Hindu Marriage Act, 1955 (No. of 1955)* providing for divorce, being inapplicable to members of Scheduled Tribes, only traditional types of divorce is permissible. Incidence of divorce is small. A woman intent upon divorce usually seeks it through her parents. The proceedings are simple. Her parents make oral or written request to the village elders. On an appointed date the parents of the woman and her husband meet at a place to settle the matter. Marriage expenses are paid to the husband by the wife's parents. The utensils, ornaments, and *udanang* given at the time of marriage are returned by the husband. If these accounts get settled satisfactorily a deed of divorce is drawn up. This is locally called *razinama*.

Finally a small piece of dry stick is given to the couple to break. The breaking of that symbolises the dissolution of the marriage. The ceremony is known as *shing-tak-shimig*. The woman thereafter is free to look for another husband.

Economic dependence of women and their place in society

In tribal society where polyandry is very common, the lady of the house has an extremely important role to play. This mode of marriage is an economic necessity for Kinnaur so long brothers have to live in a joint family and have to depend on the local resources for their subsistence. The unity of the family depends upon ingenuity of the lady of the house who looks after all her husbands with equal favour without giving any cause for offence to anyone.

Women are indeed very industrious and play a vital role in the economy of the district. Besides the usual daily household care, they are often seen afield, helping in various agricultural operations save ploughing which is always done by men. The women sow the seed, weed, irrigate and harvest the crops, make hay, collect firewood and pasture the live-stock and carry loads. Wool carding is also their part of the job. Apart from these jobs they lend a heavy hand to the men engaged in any type of work. Despite this solid contribution they are to a great extent dependent on the men in all stages and situations in their life for shelter, food and clothings. Except for the *udanang* and whatever articles given by her parents at the time of marriage and to which she is customarily exclusively entitled, a woman (excepting a widow) has no right by way of inheritance and otherwise to any property either in her husband's or in her parent's house. Even cash wages earned occasionally by some women are generally not retained or spent privately by them, but are handed over to the parents in case of unmarried girls and to their husband by those who are married. Summing up the role of the women Dr. Sleen* has mentioned that the women do everything including the heaviest jobs and the only job to which the men attend to regularly is ploughing, which really is little more than addressing the oxen by means of a heavy cudgel. He says that women provide the best and the cheapest available labour in the area and to procure it one may even marry four or five wives. Till such time as education among the women does not spread, their existing economic condition is not likely to improve appreciably.

Notwithstanding their economic dependence, women enjoy a unique position in the social sphere of the local society. In folk dances which are a part of the life and culture of Kanaura community, women enjoy a position equal to men. In folk songs sung during these dances they hold the leading position. Within the household many women enjoy a position

*Sleen, W. G. N. Van Der, *Four Months Camping in the Himalaya*, 1929, p. 47.

of remarkable respect. A married woman capable enough of running the household efficiently is made *goine*. She has an effective say in various family affairs and nothing comes to pass without her notice. Many girls with a religious bent of mind become nuns. If any of the nuns acquires sound knowledge of scriptures and can command respect she is asked on certain religious function to perform religious acts like reciting hymns and prayers. Of late, some women have started participating in the working of modern institutions like becoming members of the gram panchayats, or taking employments as *gram sewikas*, teacheresses, dais, etc. after schooling. Women here are not subjected to purdah system. They appear unassumingly and talk to anybody without any inhibitions.

Drinking—Grapes, wild apricots and wild peaches grow here in abundance. These fruits are not really of a standard quality that could find a market outside the district, nor has any attempt, for obvious reasons, been possible in the past to improve these varieties. The only use the local people could put these fruits to was to distil spirit out of them. The famous *anguri* happens one of the qualities. This was and is used, among other things, for protection against severe cold and also in cases of illness, such as cold, flu, stomach trouble, etc. While the taking of alcohol was very common in men, it was never used by the women-folk except for medicinal purposes during illness. But surprisingly enough mostly women-folk distilled the spirit. Climatic conditions to some extent necessitated this distillation and use of spirit. For various reasons and considering the circumstances that they use spirit even for religious purposes, special licenses for distillation of liquor for their own use are allowed in the area, though some may try to augment their income by selling the spirit, specially now when considerable influx of outsiders is there.

With the passage of time, it appears that alcohol still plays an important part in their every day life. Even in the worship of the deities of this area spirit tops the list of articles required for the performance of any puja. The convention has become so deep rooted that no worship of a deity is considered complete without the offering of liquor.

On the social and cultural side, offering of drink has always been a social hall-mark and no one from well-to-do family could afford to disregard the well-established practice of offering drink to the guests. The habit appears to have got such a great hold that one does not hesitate even to borrow. During fairs and festivals, and as a matter of fact at any ceremony, people find a ready excuse to indulge in bouts of drinking.

In the times of the erstwhile rulers the people were freely allowed to distil liquor. They did so mostly for their own consumption and rarely

had occasion to sell it for profit. With the application of *the Punjab Excise Act* in 1948 when Himachal Pradesh was created, distillation became illegal. This law was, however, relaxed, partly perhaps because of the tradition of drinking but mainly because Kinnaur was a very remote and inaccessible area and the enforcement of the law was difficult. With the creation of the district in 1960 the district administration continues to follow a liberal policy in the matter of administration of excise law.

The people are often advised, in their own interest, to avoid excessive consumption of liquor, and a public opinion is growing rapidly, through educative and persuasive efforts, against the use of liquor, except for ceremonial purposes. Indeed in 1961 at a Panchayat *sammelan*, with representatives from all over the district, and in the District Planning and Development Committee near unanimous resolutions were passed restricting the use of liquor according to a gradually phased programme with the ultimate aim of eliminating distillation but allowing licensed fermented wines in restricted quantities for both private and ceremonial purposes, to suit the prevailing social customs. Meanwhile, vigorous steps are being taken by the government developmental agencies, to grow better quality fruits like apples and grapes on an extensive scale, knowing that the economic return from these would far exceed the income which the people were deriving from the sale of liquor produced from their traditional poorer quality fruits.

From My 1, 1966, the Himachal Pradesh Government liberalized their excise policy by allowing distillation and fermentation by Kanauras in restricted quantities for their own consumption on the authority of licenses obtainable at Rs. 25 for spirits and Rs. 2 for fermented liquor per year. However, open sale of liquor was not permitted, especially as adulterated distillation for profit, most injurious to health, had become an increasingly common practice. After extensive propaganda throughout the district, and after due warning, by the government against the latter type of illicit distillers, prosecutions on a subdued exemplary scale have been launched since 1966 against the habitual offenders.

The district administration, it may finally be added, continues to follow a liberal and enlightened policy in this aspect of the tribal people's way of life, to ensure that they are in no way set upon and prevented from observing their age-old traditional practices and rituals which mean so much to them. What is intended to be curbed is the illicit profits sought to be selfishly acquired through distillation by taking advantage of the artificial demand for liquor created with the large influx of diverse governmental organizations since the formation of the district.

Gambling—Gambling is almost unknown. *The Public Gambling Act, 1867 (Act III of 1867)*, is applicable in the area vide notification No. 1-1/62-Home, dated 19th September, 1962.

Prostitution and traffic in women

Prostitution, as is generally understood, is unknown and so is the traffic in women. This may be due to the laxity in the marriage customs. Whereas a single wife can be shared without rancour by a number of brothers there is no bar to their having a wife for each of them or even more than one wife. The women stick to this place and have no lure for going to places outside Kinnaur. The trafficking in women is, therefore, almost absent. This is also due to the liberty allowed to a woman to get a spouse of her choice and even leave him if she is unhappy.

HOME LIFE

Types of dwellings

The villages are in general large but do not exhibit any systematic plan. Some of them look like a cluster of ill-shaped dwellings with small narrow by-lanes and in others the houses can be seen scattered. The detached houses have the appearance of cottages. Houses, sometimes spacious and even elegant are built wherever a suitable site is available. In many cases a site is chosen with the approval of the local deity. After selection of the site efforts are made, as far as the locality of the site may permit, to have houses facing the sun.

The houses comprise generally a single storey but there are also of two or more storeys. Generally each storey has only one room with certain exceptions here and there. The ground floor is used as a cattle shed and the upper one for living purposes. Many houses have projecting wooden balconies.

The houses are invariably built of stone and wood. By the well to do people hammer dressed stones are used. In some parts they are wholly constructed of deodar wood and are compact. As no mortar is used wooden beams are inserted in the walls after suitable intervals to act as a sort of frame or binder to secure the walls from collapse under the weight of stones. Walls of a storey are generally about two metres in height. The main beam of the roof is laid almost parallel to the upper boundary of the main door as it is considered inauspicious to set it otherwise. Windows or ventilators are not provided except for a few small holes in some cases. The doors are often folding and open inwards, and to the outside are fastened iron chains, the other ends of which are fixed to the balcony above. There are no separate bath rooms and kitchens. The hearth, called *meling*, is set in the centre of a room. No regular chimney

exists. However, a hole called *dusrang* is provided in the roof for the dual purposes of letting the smoke out and admitting the light in. While raining or snowing this hole is closed with a stone slab or a plank kept always handy. The houses within are plastered with a mixture of cow-dung and mud. They are often whitewashed with a shining kind of mica, which looks well. House roofs are generally flat, made of wooden planks covered with *bhojpatra* and overlaid with earth. Most of the houses in Nachar Sub-Division have shingled roofs while in Kalpa Sub-Division roofs are slanting covered with slates. The floors are wooden for these are warmer in the winters.

The villages in Tahsil Puh and Sub-Tahsil Hangrang are neat. Some of the bigger villages are spread over a large area in small dwellings staggered around. The houses are generally ill-built for want of timber, an essential building material. The houses all over the Hangrang valley, may be found with thorn bushes thickly piled on top of the roofs. This is done to preserve the wood below, which it probably does, from the effects of the sun in so dry a climate, and also assists to some extent, in keeping out the cold. It gives the houses a peculiar fuzzy look. Moreover firewood being quite scarce, people endeavour to preserve every bit of it as securely as possible and no better place than the house-tops could be conceived for storing this commodity.

In the lower parts of the district, for storing foodgrains a separate *urch* (storing room) is constructed at some distance from the main house. The under-lying idea to construct a separate store room is to save the foodgrains even if the house is destroyed by any cause, including fire. Generally in this area of the district the foundation stone is laid always on the right side of the main door, after performing worship and making an offering of *pole*, *porsad* and some wine to the stone. At the time of fixing the main door, worship with *pole*, *porsad* and some wine is offered near to the door, the belief being that this act will ensure peace and happiness to the family.

On completion of a new house *gorasang* is held. This is a religious ceremony to celebrate the construction of the house. An auspicious date and hour is fixed, the lama appears and, after worship and chanting of some sacred verses, formally escorts the owner inside the building. This ceremony has its counterpart in other places in Himachal Pradesh where it is called *ghrasni*, both words being said to have the same origin in the Sanskrit *grihapravesha*. The local mason-cum-carpenter, who constructed the house, is invited to the *gorasang* ceremony along with his family for a sumptuous feast. Next morning he is given a *nang* full of ghee along with five to seven rupees. He and his wife are also offered clothes

the wife in addition gets a pair of *dhaglo*. Every effort is made to appease the carpenter on this occasion for should he remain unsatisfied and displeased it is feared he may curse the family. This custom is, however, fast disappearing and carpenters are being employed on daily wages.

The temples of the *devtas* are magnificent, and adorned liberally with a profusion of costly ornaments. Great sums are expended upon the construction of the temples, which are often built of cut stones. They are lofty buildings, visible from a distance, towering above all the other houses in the village. The roofs, they have are of usually pagoda fashion, with projecting balconies, embellished with neatly carved wooden flowers and fringes. A special religious ceremony called *porestang* is performed when a new roof is put on. In addition to prayers and chants the lamas offer goats and sheep in sacrifice.

Furniture and decorations—Furniture is of the simplest description. Bedsteads are rarely used and people sleep on the wooden floor on *khera* or *kherach* (mat of goat's hair) and *pakpa* (skin). These skins are also used for sitting purposes but those who are economically better off keep carpets and durries. The household furniture consists of some *kote* (wooden chests) for keeping grains and apricots, back baskets, a wooden lamp or two, a stone mortar and pestle for extracting oil from the kernel of the apricots and walnuts, a hand mill, a hookah skins of various types and sizes for holding flour and foodgrains, butter, for carrying water and churning milk. The earth is of broken granite, unfit for pottery, so the people keep water and oil in vessels made of juniper wood but *gor* (earthen vessel) is procured from outside and kept by each household for churning milk. Clothes are stowed in wooden boxes and trunks. Grinding is often done in *gotang* (water-mill) and occasionally in *hasgotang* (hand-mill). A weaving apparatus which is very simple is kept by each Harijan household. With the passage of time now the villagers who can afford to buy furniture now have chairs, tables and cots acquired from outside.

Kitchen utensils, by and large, continue to be of primitive fashion. Brass and bronze utensils are mostly used. Aluminium wares too have appeared. Some earthen pots and wooden utensils are still in use. A few silver utensils are also kept in opulent families. A list of utensils, in common use, is given in Appendix VI.

In the festival of Chatrol clay walls of the houses are decorated with images of men, women, trees, moon, stars, sheep, goats, cows and flowers drawn crudely with clay of glistening white hue. The walls of the Buddhist temples have picturesquely painted frescoes in many colours

with typical Buddhist motifs. The decoration of the temples of local deities and houses differ. The temples are decorated with the wood carvings known as *kurnang* and *mograngs*. The borders of the roof have *zalore* (wooden fringe). The wood work in temples is generally artistic. A few houses are now painted with modern paints. Well-to-do people have radio sets, table watches etc. Photos and calendars on the walls are on the increase.

Dress—The people usually put on locally woven woollen clothes and are as well clad as they can be. Men wear *chamu kurti*, *chhuba*, *chamu sutan*.

Chamu kurti—is stitched by local tailors. This garment is what may be called a shirt. This has very simple collars and a pocket on the left side of the chest. *Chhuba* is a long garment like a cloak. Some people like to have velvet outer lining on the ends of its sleeves. In winter *chamu kurti* is put under *chhuba*. *Chamu baskat* is a sleeveless woollen garment worn over the *chhuba*. *Chamu sutan* is a woollen pyjama. It is either slightly loose or *churidar* (tight), never black or white but mostly grey. During marriages and festivals some persons put on *tapru-se-sutan* embroidered in various designs and colours below the knees. Women's garments include *dhori*, *choli*, *chhanli* and *gachhang*. *Dhori* is a blanket that folds partly round the body, and partly comes up around the shoulders and across the breast, where it is fastened by a large copper or brass but generally silver brooch. The borders of *dhoris* have beautiful patterns in various attractive colours. *Dhoris* are of three grades. *Phata-orang* is the simplest and is generally worn while at work or by the poorer women. The *orang-se-dori* is the superior one both in texture and design; and the best is the *tapru-se-dhori*. The *dhoris* of all grades are generally dark or grey in colour. *Choli* is the upper garment akin to full sleeved blouse. Some *cholis* are simple while many have decorative coloured lining. The latter is called *sanjab-se-choli*. *Chhanli* is what may be called a shawl. It is wrapped round the shoulders and its two ends are fastened together near the breast by means of a silver hook called *digra*. Men also wrap *chhanli* during inclement weather. Women often wrap around their waists *gachhang* i. e. a scarlet coloured woollen or cotton cloth of about five to eight metres in length and about a metre in breadth. The common head-dress of the men and the women is a woollen cap locally called *thepang*. Outside Kinnaur this cap is popularly known as *Kanauri* or *Bushahri* cap. The crown or velvet band of it is usually green or blue or red or crimson. In fine weather this band is kept up but in cold weather this serves the purpose of a flap, which protects the ears from the cold winds and snow when it is pulled down. It is made of locally woven

woollen cloth but the cloth for the band is imported. During the festivals flowers are tucked into the seams of the caps. The traditional local footwear commonly in use is called *balzanu-pono* and is made of wool and goat hair. There is now a tendency to use other types of leather footwear, imported from the plains.

The inhabitants of Hangrang prefer clothes of dark-red or dark-brown colour. Their dress is as follows. Male child till he is about three months old is dressed in *chutan* locally prepared out of ordinary wool, or, superior wool called *umbu* or out of lambs wool called *lu*. This garment is more or less akin to a baby shawl. After three months a woollen garment locally called *ghoye*, prepared out of very fine wool, is put on by the child. Dress of grown up children includes *shew* (cap), *ragee* (mill made cloth shirt), *ghoye* (cloak), *suluka* (waist coat), *kera* (woollen rope to tie the waist) and *sutan* (woollen trousers). Their footwear is *cenri*, made of woollen yarn and goat hair yarn, having leather or rubber sole. *Kapshaw*, is the footwear purchased from the market. The same dress holds good for a female child. The colour of cloth used for the dress of male child is invariably white but for the female child it is generally black. The dress of young and old people is the same according to the size of each individual. Females wear *ra-ghoye* (shirt made of mill made cloth), *golak* or *ghoye*, *yangluk* or *lingche* (a small woollen shawl), *kera* and *sutan*. Generally black colour of cloth is preferred by the females. Mostly the garments are cut and stitched by the people themselves though a few sewing machines and tailors too have now appeared on the scene. Of late mill made cloth has come to be used increasingly and many females are now in *shalwar* and *kamiz*. In winter they put on a peculiar dress especially, when they are obliged to travel. It is a garment of sheep skin with sleeves; the fleecy side inwards, and the exterior covered over with a *sooklat* (blanket); trousers of the same, and long woollen stockings; above them boots, with a leather shoe stuffed for about 25 mm with wool; gloves of thick flannel reaching above the elbows. In addition to all this, one has a blanket round his waist, another over his shoulders, and a shawl wrapped about his head and face. Such is the garb of a traveller in the winter season, and that one is always accompanied by some blankets, which are all required at night when people are obliged to travel during the snow. In Hangrang and Puh areas all kinds of head dresses are worn; the women are bare-headed, the hair flowing loose about their shoulders; some of the men wear the common Kanauri or Bushahri cap; others, caps similarly shaped, but of red blanket; a few have hats with a narrower rim; they are of yellow cloth, fringed with red worsted thread, diverging in radii from the crown, and hanging loose all around.

The indigenous woollen clothes have many good qualities. They are economical, durable in the area where they have to work in fields,

and warm. Nevertheless impact of external influence on the dress of the people is now discernible. A girl student does not like to wear a *dhori* and prefers to go in a *shalwar* and *kamiz*. A boy student would like to dress in trousers, shirt and coat of modern cut. Coats of modern cut are preferred to *chhuba*. In some decades the whole pattern of the local dresses may undergo a radical change and may even be lost for ever.

People wash their clothes themselves at a common place where *guthungs* (woollen troughs) are permanently fixed in the ground. Some people wash with *pu* (nut) locally available and *atal* (soap nut) and, some with soap.

Ornaments—Men generally do not use ornaments except in the form of finger ring or gold ear-rings called *murki*. People used to wear *daglo* (bangles), *botone-se-shanglya* (silver chains with buttons), *gau-tungma* and silver buttons. A man specially in upper Kinnaur, usually carries a small piece of steel for striking fire, hanging from his right side called *chakmak*, a knife, a hatchet, a smoking pipe in his girdle, and a goat's hair-rope round his waist. The women are fond of ornaments, and during fairs and festivals load themselves with as many as they have. Ornaments are usually made by local silver or blacksmiths found in each village. The ornaments used by the women in Kinnaur are tabulated in Appendix VII.

The women of the district previously used to go about laden with heavy jewellery like thick bracelets, large ear-rings, heavy silver chains, various kinds of beads and precious stones but there is a growing tendency among them to use comparatively lighter ornaments, and thus, silver ornaments are getting out of fashion. The modern young men and women, are however, discarding the use of traditional heavy ornaments.

Food—The staple food is *olgo*, *bras*, and barley. *Shag*, *rad*, *kodro*, *dankhar*, wheat and maize are also taken. They have their meals thrice a day; in the morning, in the noon and at night. These are called *somchu-khau*, *shil* and *shupakchu-khau* respectively. The morning meal usually comprises local tea and flour of roasted barley supplemented by *hodd* and *kan*. At *shil* they take roasted wheat, or *yud* with *bot*, *hodd* with *baji* or *kan* and boiled potatoes. *Shupakchu-khau* comprises *hodd*, *kan*, *rote* and *phanting*. A description of local dishes prepared and taken on special occasions and sometimes also substituted for the usual daily diet will be found interesting. *Hodd* of various sizes are usually made out of the flour of the above mentioned cereals excluding *kaoni* and maize. A thin paste of the flour is prepared and spread on a hot pan and then baked. *Rote* is akin to an ordinary *chapati* prepared from the flour of maize, wheat, *rad*, *kodro* or *dankhar*.

Shag and *rad* are boiled like rice and then eaten. Rice is consumed only occasionally. *Talpole* prepared out of wheat meal, *olgo* flour or *kodro* flour almost resembles a *poori* though thicker. It is deep fried in oil. *Thispole* or *koyashid* is prepared out of the wheat or *olgo* meal cooked and fried and shaped like *jalebis*. These special dishes are prepared particularly on the occasions of marriages, festivals, pujas and other ceremonies. *Baji* is prepared by first heating ghee or oil and then adding spices to it. *Baji* is made of cabbages, turnips, peas, beans, pumpkins, carrots, cauliflowers, spinach, potatoes and *jangmuchi* (mushroom). Spices added in the vegetables comprise salt, black cumin, coriander seed, chillies, garlic and *spal* (a local root) to flavour the vegetables. Turmeric is sometimes also added. *Paithang* (pulses) and *kan* are prepared by boiling and adding salt and spices. Apricots and peaches when ripe and sweet are dried and stored in large quantities. These are first allowed to soak in water and thereafter when stones are separated a thick paste is made and is boiled and cooked to the consistency of gravy. A small quantity of buck-wheat or barley flour is then added. The preparation is called *phanting* and is taken either by itself or with *yud*. During the winter season this dish is taken frequently. *Chhura* i. e. dried skimmed curd is added to the boiling *kaoni* or rice to prepare *chhura-thuppa*. *Kherang-thuppa* i. e. boiled and salted milk is taken with *hodd* and *rote*. *Du* is prepared with the mixture of *olgo* and *bras* flour by boiling and cooking it into a thick paste. It is generally taken with butter and *kan*. *Shakar-kan* is prepared out of the dried turnips boiled. Spices and oil is added later on and tastes well if taken with *hood*. *Ka* and *pug* are generally eaten at midday and during festivals. A dish called *kok-pole* is prepared by mixing a locally grown herb into boiled milk by which process the milk is coagulated. The coagulated matter called *kok-pole* with plenty of fat is then relished. *Sigre* is made of dough in the shape of small balls and then cooked in the *shakar-phanting*. *Kapo* preparation entails adding of fat and boiling small balls of dough and is used during festival. To prepare *sutrole* flour of *olgo* or *bras* is mixed with water to make a loose paste and then cooked. The cooked and thickened paste is passed through the small holes of a gadget, made of wood, locally called *hulas*, to turn the paste into strands. When thus ready it is served with *chosang-thuppa*. *Chosang-thuppa* another interesting dish is just like curry of flour of *botang*. It is prepared in *Suskar* festival and taken with *hodd*. Eggs, fowls and fish were not consumed previously. Younger folks have now cast off this taboo. *Sha-thuppa* is akin to meat *pulao*. The Punjab States Gazetteer, vol. VIII, has mentioned *tupkha* as meat dish. It is something akin to meat stew. Sugar being dear and unavailable the people used honey as much as it would be available. *Gur* was, however, much in use. Now even sweets

are sold at the local shop. Tea is an important beverage. They never add sugar or milk to it. Instead it is saltish. Two kinds of tea are used, *sangcha*, the bark of a local tree and *shingcha*, prepared with the ordinary tea leaves imported from the plains. To prepare the traditional tea the required quantity of *sangcha* and water are boiled for sometime. Salt is then added according to taste. *Chilgoza*, or kernel of walnut are ground and softened with water to obtain a paste and butter is mixed with it. The boiled tea and the paste are then poured into a cylindrical hollow wooden vessel and is churned vigorously with a thick rod. This vessel is called *dongbo* and is made of *shur* or *pidushing* (*bhojpatra* wood). After the whole mixture has been churned for sometime the tea is now ready to be served. *Yud* is always offered with it; it is discourteous to offer tea without *yud*. Sometimes simple tea is boiled and nothing is added to flavour it. This is called *thang*. Certain persons have become tea addicts and they do not even drink cold water. They believe the tea relieves fatigue. Common tea prepared after popular method has also now made its appearance. Those who can afford usually serve seasonal fruits and even biscuits with the tea. Milk is not used due to its non-availability. Whatever little milk cows and goats yield is converted into butter which is either consumed in the preparation of the local tea or is stored in leather pouches or earthen pots for important occasions like marriages, festivals, guests etc. Oil produced from the kernels of wild apricots, peaches and walnuts is the main fat that is used besides the butter. The *khal* (oil cakes) is fed to animals generally but is also occasionally added in vegetables.

These traditional dishes are still prepared and taken along with many new food items which have now come into use as part of regular diets. Wild apricots and peaches as well as apples, grapes, pears, plums, walnuts and *chilgoza* are widely consumed during their seasons. Food habits do not differ much from community to community although the menus may differ according to the economic position of the various households.

Amusements—On account of the rigours of the climate, mountain-locked isolation and the poor economy which prevented the entry of modern means of amusement to this area, the people throughout the past naturally devised their own methods of amusement, which reveal a strong sense of humour and the craving for all types of amusements among the inhabitants.

Within the houses the inmates of a family, in the long wintery nights, spend their time with riddles and by relating traditional stories and legends of adventures in the inaccessible hills and forests in the weird areas. Stories of gods and evil spirits are common. Singing and dancing

on the least pretext serve as good entertainers. The long drawn out melodies emanating from the sweet throats of the womenfolk have given them a permanent epithet of being called "Kinner Kanthis." And if one listen to the melodies echoing through forests and valleys, the truth of the epithet will be evident. While amusing themselves with such abandon they continue mechanically to spend their time in spinning wool for their warm clothes. Women are generally gay and indulge in singing the sweet melodies whether at work or in leisure. The songs take away much of the monotony of their tiresome hard life.

Besides the festivals already mentioned in which the entire community participates without restraint there is yet another amusement held like any other festival yet is essentially distinct. This is called *toshimig* (to sit together) and is celebrated at different times in different parts. The recreation extends from about a month and a half in certain areas to about a week in the others. *Toshimig* is usually organised by unmarried women although, occasionally, a few married ones also join. The party thus formed is locally known as *toshimig-konya* and comprises five to twelve members. The bevy of girls choose a *goiney* (leader). They first decide upon the date of the *toshimig* and also the amount of mutual contributions in kind, invariably comprising food-stuff, *shudung* and *phasur*. Following the decision they arrange storage of *shudung* and *phasur* so collected. Other food-stuffs are collected only a few days before the actual commencement of the *toshimig*. Meanwhile they find a house in the village, commodious enough for the performance. Instead of paying rent the owner of the house is compensated by the girls either by providing him physical labour or, in some cases, by providing food occasionally to a family member of the house-owner with the *toshimig-konyas* during the period of performance. On the day of the *toshimig* the girls assemble in the said house, clean it and prepare food. Thereafter they go in twos to invite and bring along with them their boy partners, called *toshimig-konyas*. The boys and girls then partake of the food prepared previously. The repast is followed by dances and songs. Musical instruments like *dhol*, *bugjal*, *damantu*, *ban* and *shonnal* are played only by the boys. Songs are sung by the whole group. These dances and songs continue for days together during which period they even forget to attend to their individual domestic affairs except for emergent matters. The group of dancers sometimes invite the villagers and even some outsiders. The invitees only watch the dances sometimes even join in the dancing but they do not share the meals with the main group. Occasionally a cash award by a spectator is received but it goes only to the ladies.

The male partners have to bear the entire expenditure of two meals by providing a ram or a goat and rice sufficient enough for the party. The boys meet this expenditure by mutual contributions. Till the last

night of the *toshimig*, dances and songs continue to be performed as usual. The next morning meals are served to the boys by the girls. It is now time to disperse. At the time of departure every male partner is presented with a bunch of *chambaka* flowers by girls. In turn the girls are given cash ranging up to sixty rupees, by the male partners. Customarily the girls accompany up to the male partners house and depart thereafter. The departure after such a gay, joyful and long party is naturally sad and they bid good-bye with heavy hearts.

COMMUNAL LIFE

Pilgrim centres

In the past inhabitants of Kinnaur used to go to Manasarowar on pilgrimage. Another important pilgrimage centre since the remote past has been the Riwalsar lake in Mandi district, held in high esteem and is still visited every year by many. Within the district there is a place called Rangrito approaching the status of a pilgrim centre, situated at a high altitude on the route followed in going round the Raldang Kailas. Here is a temple dedicated to Rangritungma.

Community dances

Kanauras love dancing. No festival or ceremony would be complete without it. The accompanying songs of the women dancers consist almost invariably of old or contemporary local legends set to simple melodies. Harijan musicians with drums, wind-instruments and cymbals, attend the dancers as they circle, arms entwined, with slow, rhythmic tread round their village deity, seated in state, in the temple courtyard. They make a delightful picture in their best, festive attire, bright faces shining with simple pleasure as they dance and sing under the pure blue skies of their beautiful abode of snow.

There are, broadly speaking, two types of folk dances namely *kayang* and *bonyungchu-chashimig*. *Kayang* can be further classified according to movements of steps, style of holding hands, variety of songs sung and music played during the dance. In Nesang, there are some six varieties of *kayang*, *dabarkayang*, *pulashon*, *somahelang*, *tegsowang*, *bangparshimig* and *thungru*.

In the *dabarkayang* the dancers arrange themselves into a circle, the males leading and the females following but always remaining distinct. The leader of the dance is called *dhuremt*. The *dhuremt* holds in his hand a *chhaumri* (a whisk with silver rod) of the local deity. *Chhaumri* is of two types, one is *teg-chhaumri* (superior one), the other is *gato-chhaumri* (inferior one). For the use of the former some cash has to be offered to the

deity but for the latter no fee is necessary. As soon as the leader gets the *chhaunri* the musical instruments start being played. The local musicians call the tune as *nimat* in honour of the deity. The leader of the dance continues to swing the *chhaunri* till the music stops. The leader thereafter rewards musicians with some cash.

The orchestra soon starts playing again with tunes calculated to provoke dance performance. The rhythm is finally changed to *kayang*. Soon men and women join to form an arc or a circle. Usually the elderly men remain near the leader. Similarly in their own section of the circle or arc elderly women lead the other ladies. In front of the leader within the arc or circle move the musicians playing their instruments.

The leader with his left hand holds the right hand of the third man in the circle and, the *chhaunri* in his right hand. The next man to the leader similarly holds the right hand of the third person but his right hand rests either on the leader's shoulder or on his *gachhang*. Similarly the right and left hands of each dancer are held by every third person. The circle slowly keeps on moving right and left, forward and backward in a rhythmical form. As a rule they move from left to right. First three steps are taken forward with the left foot, the right foot following two steps. Then the right foot is stretched forward taking one step forward and one backward. Thereafter the steps start with the left foot. Thus the dance circle continues moving and at every fourth step the dancers pause for a moment and slightly swing backward or forward. Occasionally they would abruptly stop moving and the leader would start the rhythm of the dance the other way by a light push. When such a backward push is given the dancers shout *shabas, shabase, shabase* etc. The dance movements are collectively called *chalang*.

During the dance performance any two women who are conversant initiate the song first. This is called *balgithang*. The lines are repeated in chorus by all the dancers. The repetition is called *jagithang*. In this way the dance continues for hours together, the song and the leader keep changing at frequent intervals.

Pulashon dance of Nesang is performed like *dabarkayang* but without any song though musical instruments comprising drums, kettle-drums, cymbals and *ban* (bronze plate-bell) are there. Here the circle of dancers is headed by *shu-mathas* who holds in his right hand the *kro* of the deity. To begin with the dance steps are slow but the tempo gains momentum towards the close.

Somahelang is performed to the accompaniment of a song of the same name. This song describes the names of certain species of flowers etc. found in the area from Shyalkhar to Maneoti Dhar, of the district. In this *kayang* also a circle is formed and is danced in the same way as *dabarkayang* with the difference that it is a slow and graceful dance in which the speed is never accelerated.

Tegsowang is generally danced to the accompaniment of song of Karam Gyan, who was, it is said, a resident of Morang village. Other songs may also be sung. Musical instruments are sounded. It is almost similar to *somahelang* with this distinctive feature that movements are generally restrained and the dancers are more sombre.

In *bangparshimig kayang* the position of hands of the dancers remain the same as in the other *kayangs* but steps are taken in a different style. They move in a circle from left to right taking steps inward and outward. To begin with, the dance is slow but later on the speed is greatly increased. The song of Ropa Tholpa is fancied with this dance.

Bakayang or *thungru* is another form of the *kayang* the main difference being that it is not performed in a circle. Instead, it has two or more rows of dancers facing each other. They hold their hands in the same way as in other *kayang*. Rows of dancers on one side retreat rhythmically taking measured steps, the opposite rows advancing. The dancers in these rows move only forward and backward. Slow tempo is maintained. In this dance the men and women are not distinct sections but are intermingled in each line. Musical instruments do not attend the dance. Songs of rajas, wizards and deities are generally sung. At Kamru, this *kayang* is invariably performed on *beesh* festival. As many as eighteen songs, on different topics, are sung.

Bonyungchu-chashimig is the second category of the local dances. It is also called *khersaya* in Nesang. Generally the musicians sit in the centre of the dancing arena and individual men dance round them. Women do not take part in this dance. Sometimes they supply the songs while sitting aside.

In Hangrang area the different types of dances are called *shon, gyukshon, katakpa, shabro, sumgyak, yando-mando, rekshung, shabro yulba, lushen, tali-lamo, tinger, lakpa-kurche-cheja* and *mon-shon*. These dances and festivals are held in *santhang* i. e. the village ground or temple yard.

Johri Sita Ram in his book "*Our Border Lands*" has mentioned that "*bhangra*, the Gaddi dance of Chamba is catching the imagination of the Kinnauris and becoming very popular in the Sutlej valley." It is not

*Johri, Sita Ram, *Our Border Lands*, p. 154.

understood on what authority Shri Johri has made this statement. There is so far no interest in *bhangra* type of dance and if anything, the Kanauras are making greater efforts to develop their own folk-dances. The interest in the folk-dances is very great and they perform these dances on every occasion of fairs and festivals, marriages and community gatherings. We are frequently having parties of Kinnauri folk dancers coming out to perform on the occasion of the Republic Day in Delhi, Himachal Day or Independence Day or during Summer Festival in Simla.

Festivities—A general notion is that numerous fairs are held all the year round in Kinnaur. The difference between a fair and a festival is important. The term 'fair' as is generally understood, conveys an idea of a great periodic market for merchandise or for conducting trade with or without amusement. In more modern times the term fair also includes such features as exhibition of agricultural products, manufactures, and other articles for public inspection and study. In Kinnaur it can be said that no trade activities are seen in such gatherings that may be termed fairs.

A festival is a day or a series of days specially or publicly set apart for religious observances. Whether it is a casual or periodic occurrence, or whether it is ritual by grave or gay or spiritual it is to be regarded as a festival or holy day as long as it is professedly held in the name of the religion. Local festivals seem generally to have had a religious origin. In most religions, ancient and modern, particular times and seasons are set apart for the observance of rites and ceremonies, and, these times are known as festivals. Also because the natural forces are supposed to be directly controlled by the supernatural powers, seed time and harvest, spring and autumn are the times when the important festivals are held. In nearly all such seasonal festivals, the struggle between life and death is enacted. In many cases festivals are held in order to get rid of natural calamities such as famine, disease and death and to secure food, wealth and health. These festivals seem to have been derived from primitive nature-worship and are attached to particular seasons and events in the agricultural year, to mid-winter and mid-summer, to spring and autumn, to ploughing and sowing and to the springing of corn and harvesting. These festivals exhibit the position of the local village community held in the iron-grip of the common agriculture under which every one is obliged to do the same thing at the same time. Some of the festivals are connected with the dead in which annual feasts are held. These religious feasts would seem to be connected with ancestor worship. Whatever be the origin of a particular festival in this district it may be said that there is now a regular succession of such ceremonial observances having become established from year to year. All or most of the features attached to a festival, as the term is generally understood, are present in various local festivals celebrated in this district. A detailed calendar of festivals is given in Appendix VIII.

Kinnaur is the abode of mythical Kinners, the great singers and dancers. Traditionally on any appropriate occasion the people of the district start singing and dancing. Singing and dancing are their only source of merry-making during which they forget all the sorrows of their hard life. In the entire Kinnaur, it will be seen from the calendar given in Appendix VIII that approximately one hundred different festivals are held all the year round. Some festivals may commence simultaneously or on different dates in different villages while the others are peculiar to a particular village. The significance of their celebration differs from season to season but singing and dancing are the main highlights. In most of the festivals flowers are used in abundance. Perhaps *ukhyang* or *phulech*, the festival of flowers, is the most important seasonal festival. *Phulech* festivals are held in various places during the month of August-September (*Bhadra Bk.*) and September-October (*Asvina Bk.*). Various kinds of flowers are used in this festival.

The most interesting feature of the majority of festivals is the zest and the genuine love of flowers which people generally love. The Kanauras are no ordinary show off lovers of flowers, the effort they make to collect them and the joy they express, in dancing and singing, on the collection of flowers from high hill tops are indicative of that love. After a difficult ascent to the meadows and after even spending a night in the caves, when eventually the bouquets are prepared, the men present them to their ladies and to their deities alike. Some important festivals are described below.

In the month of March-April (*Chaitra Bk.*) the festival of *chatrol* takes place in many villages. The main idea behind its celebration is to ward off the evil or malevolent effect of the stars and to pray for good crops during the ensuing year. The ceremony commences at dusk time when in each house-hold, a pitcher is filled with a mixture of hot embers and ash, over which some roots of incense are thrown to bring out smoke. Cooked victuals are also then mixed in the pitcher. It is then *waived* round the heads of each family member and thereafter the pitcher is brought out and taken *bralam* i.e. to a place within or outside the village where four paths converge. There the pitcher is broken with a thud. Breaking of the pitcher symbolises death of the evil. During this festival walls of the houses are painted with figures of trees, ears of corn and usually with the figures of the domestic animals.

Beesh is the second important festival observed in the month of April-May (*Vaisakha Bk.*). In many villages it is also held in the month of May-June (*Jyaistha Bk.*). In these months many more festivals are held and the main idea of celebrating most of these is to herald the

outset of the spring season, when worship and prayers are offered to local deities, in eternal gratitude for the change of season and extend welcome to the new year. The ploughing does not start prior to the celebration of the festival. Worship of the plough and land forms an essential part of the proceedings on this auspicious occasion. By this time, the apricot trees are full of blossoms, and as there are no other flowers available during this time of the year these lovely blossoms are offered to the local deities in the worship.

In the month of June-July (*Asadha Bk.*) people generally make pilgrimage to some Buddhist temples or to high mountain tops. The sacred Kailas Mountain is worshipped in this month by the people of Spilo.

The *dakhrain* is one of the most important festivals held in the month of July-August (*Sravana Bk.*). The main significance of this festival is merry-making, enjoying of choicest foods, as milk and butter are available in abundance in this month, and to supplement the feasting with community singing and dancing. People look gay and decorate themselves with choicest flowers. Celebrations may differ from village to village in minor details. Each village deity is generally taken out of its temple-abode and is offered flowers.

In most of the festivals flowers are used in abundance. *Ukhyang* or *phulech* is perhaps the most important and widely prevalent seasonal festival of this district which commences in village Rupin in August (*Bhadra 10, Bk.*). It is held in September (*Bhadra 20, Bk.*) in most of the other villages when the flowers are in full bloom. In Jani village it is observed last of all in the month of October-November (*Kartika Bk.*). *Ukhyang* is a combination of two words *u* and *khyang*. *U* means flower and *khyang* means to look at flowers, meaning thereby the delight in flowers. It is only after this festival that the green grass and flowers start withering. Various kinds of flowers are used in this festival of which *rongal*, *loskarch*, *hasbal* and *gyalchi* are more common. Details of the celebration may also differ from place to place but significance is the same all over the area. The one held at Kamru is given below as a specimen.

In Kamru a considerable quantity of flowers is used and exhibited. On the morning of 4th September (*Bhadra 19, Bk.*) a person from each household proceeds towards hill tops, and on gaining the site of the flowers, they collect them to the extent to make a full load. The bouquets meant for offering to the deity are brought in hand. All the flowers are deposited in the caves called *udabro* just above the mela ground. There the oracle of Mahasu deity who is kept waiting the arrival of the flower gatherers proceeds first of all to worship and appease the mountain spirits and goddess Kali supposed to accompanying the party, by sacrificing a goat.

Then the party gradually reaches the village singing the *ukhyang* song. The following morning the villagers, old and young, climb up towards the hill and reach their *dogris* i.e., their summer residences. They take their lunches with them. The entire population of the village congregates at a fixed place below the mela ground. By about mid-day the *kardars* and the local musicians reach there and the deity Badri Nath, represented by a *kothar* is taken in procession to the ground. On gaining the appointed place where the people are already assembled, the mouth-piece (oracles) of the deities Badri Nath and Mahasu then get possessed by the respective deities and the procession proceeds to the mela ground. There a he-goat is sacrificed as an offering to goddess Kali and mount Kailas on behalf of the villagers. The *kardars* of Badri Nath go to a nearby spring and the dance is kept up till their return. The dance ceases on the arrival of the *kardars*. The *grokch* of Badri Nath then goes into trance. He then selects two persons from the flower collectors to bring the flowers from *udabro*. The selection of men is made by the mystic process of giving mustard seeds. The bouquets brought forward are handed over to the oracles and then a small goat is sacrificed in the name of the goddess Kali. The *grokch* then distributes some flowers, the first to receive the flowers used to be the raja of Bushahr followed by the wizer of Pawari and then others. Afterwards the *grokch* utters the *chironing* and then forecasts about crops, change of season, etc. Thereafter the gathering take their seats and partake of various victuals. In the mean time people jokingly smear each others face with *yud*. Afterwards all the flower gatherers go to *udabro* and bring flower loads to be taken to their houses. The remaining people also retire to their houses. By about dusk people again assemble in the village *santhang* and bring out the deity from inside the temple. The flower gatherers bow to the deity singing the *ukhyang* song. Then the dance starts in which the ark of the deity is swung with the dancers. On the next day also people dance in the *santhang* for some time and the festival comes to end.

Jagro—In each village which has a temple dedicated to Mahasu deity apart from the one of the local *devta*, *jagro* is celebrated either on the day of *phulech* or on the succeeding day while in Kamru it is celebrated a few days after *phulech*. In this, one can see the display of a fine sword-dance performance by the *grokch* of the deity. The *grokch* keeps on dancing with the swords sometimes even four at a time, swinging them dexterously. He is supposed to be dancing while possessed by the deity and usually remains in a sort of trance.

Losar is an important festival held in the month of December-January (*Pausa Bk.*). The significance in its celebration is to welcome

the new year. In the morning of the *losar* day in Puh, *yud* (flour of parched barley) mixed with butter-milk is partaken by all members of the family and garlands of unshelled *chilgoza* are put on by them. Even the household animals, like rams, goats, dogs, *zo* and horses are garlanded. Visits to the neighbours and friends are reciprocated. During these visits greetings of *losoma tashi*, meaning 'happy new year', and *losoma shalkid*, which is a sort of blessings are also exchanged. The host has to provide snacks to the guests who visit him to wish the *losoma tashi*.

Another festival which deserves mention is *khepa*. It is customary to bring and stick small branches of a thorny bush, such as *bhekal*, in the door frames of individual household to ward off evil spirits. In some villages these thorny branches are spread on the roofs too. On the last day of the festival all these are removed and thrown far away from the village. In some villages these are burnt, as if to symbolise the burning of the evil spirits. Images of goats, sheep and rams are prepared out of the thick paste of *bras* flour and placed in a line in front of the withered thorny branch in a corner of a room. Special dainties are prepared and eaten. After removing the thorns, the houses are thoroughly broomed. This is called *wash-pegmig*, and is performed invariably either on Saturday or Tuesday.

Sazo is observed in January (*Magha 1, Bk.*). This festival is celebrated to bid farewell to local deities at the time of their departure from their respective village temples for the temporary sojourn in the Kailas Mountain, the abode of Siva, during the winter season. On the *sazo* day the local deity is first of all worshipped and thereafter all the decoration like jewels, clothes including the *mukhangs* are removed and the bare ark of the deity is left in the temple and the decoration, *mukhangs* etc. are safely deposited in the *kothi*. From the temple to the *kothi* while the clothes, jewels and *mukhangs* are being carried, *sazo githang* (farewell song) is continuously sung. After this festival no musical instruments can be sounded during the succeeding eight days. A dance without musical instruments is, however, held every day for the following seven days, for about an hour, in the *santhang*. For a fortnight complete silence prevails in the village charging the atmosphere with some sense of gloom and poignancy due to the departure and the absence of the deities.

Phagul is one of the famous festivals held in February-March (*Phalguna Bk.*). The highlight all over being that during the long wintry days when the peasants remain idle, they get a chance to eat well, dance and sing to break the monotony of daily chore.

Public games—Dances held frequently, indoor and out-door, provide adequate opportunity of physical exercise as well as amusements to all. Boys and girls in some villages often play *bandras kui*, the game of

monkeys and dogs. One of them plays the landowner, another his dog and the rest play monkeys. The landowner pretends to be busy in the field work while his dog sits beside him, dozing. Meanwhile the monkeys enter the field, destroy the crop and then make a noise. Attention of the owner is attracted. He calls for his dog who chases the monkeys. Some of the boys climb the trees, others take secure positions and so on. Soon they re-assemble and restart the play. Another popular game of children is *mangasho-tangsho* (hide and seek). Besides these indigenous games, football, volley-ball and badminton are popular in schools.

ECONOMIC AND PROFESSIONAL GROUPS

Majority of the population comprises cultivators. Next to this group, in numerical order, come those engaged in household industry, in construction, in other services, in agricultural labour, in mining, quarrying, live-stock, forestry, fishing, hunting, plantation, orchards and allied activities, in manufacturing other than household industry, in trades and commerce and the last one is transport, storage and communication. Non-workers number 12,852.

Before the introduction of the *Land Reforms Act*, the state government was the holder of proprietary rights over vast tracts of land. Now under the Act *ibid* some tenants have secured proprietary rights over the lands which they were cultivating as tenants-at-will. This progressive land legislation has benefitted enormously a large number of tenants and is likely gradually to benefit many more.

CHAPTER IV AGRICULTURE AND IRRIGATION

Land reclamation and utilization

Land resources are not so much dependent on the extent of the geographical area as on the uses to which land is actually put. This is no where so apt as in the case of Kinnaur. Classification of area is as follows:-

Classification		Total area in hectares during the year						
		1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	
1.	(a) Geographical area by professional Survey	6,51,762	6,51,762	6,51,762	6,51,762	6,51,762	6,51,762	
	(b) By village papers	13,534	13,553	13,701	13,729	13,806	13,913	
2.	Forests	9	9	9	9	13	13	
3.	Barren and unculturable land	1,315	1,280	1,286	1,263	1,264	1,271	
4.	Land put to non-Agricultural purposes	376	408	404	387	409	413	
5.	Culturable waste	1,396	1,366	1,362	1,378	1,393	1,343	
6.	Permanent pastures and other grazing land	1,366	1,360	1,469	1,472	1,470	1,579	
7.	Land under mixed tree crops and groves not included in area sown	1,407	1,443	1,164	918	932	1,100	
8.	Current fallows	65	49	65	91	118	87	
9.	Other fallow land	7,600	7,638	7,942	8,211	8,207	8,107	
10.	Net area sown	3,198	2,924	2,539	2,467	2,549	2,581	
11.	Area sown more than once	10,798	10,562	10,481	10,678	10,756	10,688	
12.	Total cropped area							
			80%	78%	76%	77%	76%	
			24%	22%	18%	18%	18%	
			56%	56%	59%	59%	58%	
			11%	11%	7%	7%	8%	
			10%	10%	11%	11%	11%	
			3%	3%	3%	3%	3%	
			10%	10%	10%	10%	10%	
			10%	9%	9%	9%	9%	

The geographical area of the district by professional survey and by village papers presents amazingly varying figures. The area figures by professional survey are those supplied by the Surveyor General of India, Dehra Dun. This vast difference is roughly attributed to the absence of any measurement of uncultivated, uncommanded and waste lands and forests, probable lack of precision in the measurement of some mountain peaks and snowy regions, and possibly to unavoidable discrepancies emanating from professional and departmental surveys, when the two are conducted independently of each other and relate to hilly and mountainous terrains. The huge disparity in figures is by and large due to the fact that vast undetermined wastes and forests were not measured during settlement operations and these do not find place in village records. The most probable explanation for this vast difference consists in defective survey including possible omission from measurement of some inaccessible mountain fastnesses and peaks. The major portion of the district is mountainous and rocky. The higher hills and mountain ranges beyond 4,880 m remain snow clad throughout the year and there are numerous inaccessible rocky portions. The area which has been cadastrally surveyed is the one given under the sub-heading, area by village papers. The sharp variation in these two figures is, therefore, imminent.

During the year 1960-61, the total area under forests was just nine hectares and increase to the tune of fifty per cent has been noticed during 1965-66, bringing the area under forests to thirteen hectares. Barren and unculturable land constituted ten per cent of the total area. There has been a slight decrease of one per cent in this type of land due mainly to the efforts of the government to plant more and more trees. Three per cent of the land is used for non-agricultural purposes. Culturable waste has been to the extent of ten per cent. Permanent pastures and grazing lands which constituted ten per cent of the total area during 1960-61 registered one per cent increase during 1962-63 and have remained static thereafter. Fallow lands which measured to eleven per cent of the total area during 1960-61 have been decreased to eight per cent during 1965-66. Net area sown during 1960-61 was fifty-six per cent of the total and there has been an increase of two per cent during 1965-66.

IRRIGATION

Irrigation, due to peculiar topography of Kinnaur and the constant scarcity of rains have led people to improvise possibilities and methods of irrigating almost all their cultivated lands through the *kuhl* system. By and large, when water through *kuhls* is available all the lands receive their share, whereas, during the months when water is not so available only such crops are raised, which can do without constant supply

of water. By 1969-70 a net area of 4086 hectares was under irrigation. Besides, 1552 hectares of land were irrigated more than once in the same year.

Equally in importance, with the *kuhls*, is the source of snow water utilized for irrigation. When the snow starts melting, water is controlled and diverted through small check dams and taken to the fields. *Kuhls* constructed by the zamindars in the past were not able to irrigate the fields lying at higher level, but now the dams are so situated and in most cases so raised that maximum quantity of water is harnessed and taken in a flow which is not rapid. Here and there the dams get destroyed but people have devised through experience better methods in masonry work as also in the conveyance of the water to avoid porous soil where precipitous rocks and ravines intervene. Skillfully constructed wooden flumes and aqueducts are employed. Such a device can be seen a little beyond Lippa on the way to Asrang. The quantity of water transmitted through wooden channels is not lost much in transit. In some cases rustic masonry pillars more than 12 to 13 metres in height or tall wooden stakes rising from the middle of the ravine supporting the continuance of the channel can be seen.

Unfortunately, the rivers which flow through deep gorges are incapable of being tapped for irrigation. The banks of the rivers rise in steep cliffs thereby making impossible for the water to be carried through the channels. Up to the present time, therefore, the mode of irrigation in this district remains confined exclusively to *kuhl* system.

The land is usually irrigated by flow. By flow too irrigation is a very difficult task in this mountainous area, requiring capital, labour and patience, as also engineering skill suited to local needs and conditions. The amount of land to be irrigated is dependent upon the quantity of water available. Here less than half the net area sown is irrigated to some extent. Owing to the scantiness of the summer rainfall water is also applied to some of the autumn crops, when it can be brought on to the land.

During the Third Five Year Plan, the government repaired the existing traditional *kuhls*. Often the villagers used wooden pipes to carry water over rocky and sandy stretches and this needed frequent replacements. The government have now provided a number of pipe lines and pucca *kuhls* and have thus obviated a recurring maintenance menace. Consequently the flow of irrigation water has increased and seepage controlled. So far nineteen minor irrigation channels have been constructed.

Protective bunds to protect crops

One of the reasons for low productivity in agriculture is the progressive deterioration of soil due to erosion. In Kinnaur soil erosion poses a serious and greater problem due to the steep nature of the terrain and, therefore, scientific handling of the problem and effective steps for undertaking soil conservation measures on a large scale become necessary. Soil erosion is responsible for heavy losses of fertile soil. Water, wind, snow and avalanches constitute the main eroding force and scale off the loose surface soil.

Soil conservation work in this district started very recently by the Agriculture Department, is still in the infant stage. The cultivators being guided in soil conservation are responding favourably by resorting to these measures. The land taken up for treatment under this scheme is being put under cereal and lesser millet crops including barley, wheat and *olgo* by the cultivators. The scheme includes works like bench terracing, afforestation and contour plantation of fruit plants. The Agriculture Department is pursuing the schemes of soil conservation and land development more vigorously and special efforts to introduce horticulture in new-command areas are afoot.

AGRICULTURE

Though agriculture remains upto now the main source of living, still the farmer has had to face insurmountable odds. The climatic conditions, magnitude of soil erosion, the peculiar nature of the holdings, are some of the factors that have taken all the resources of human brain to eke out existence for himself. With the passage of time, introduction of scientific methods, such as use of fertilizers, and improved seeds, are yielding better results. Alongwith this more profitable avenues, for the betterment of the people are opening up. These include, horticulture, production of temperate vegetable seeds, service, crafts and industries. Thus some of the people have begun to take to these fast remunerative occupations, but agriculture including horticulture is bound to remain in importance as an occupation of the first rank affording means of subsistence and source of gainful employment to a considerably large part of the population.

That conditions for agriculture vary in different parts of the district will be apparent, when it is considered that the elevation, at which cultivation is carried on, ranges from about 900 to 1200 m above the sea level on the banks of the Satluj to about 3650 m on the mountain slopes. The greater part of the area is, moreover, beyond the range of the monsoon rains and consequently presents special features of its own to be reckoned

with by the cultivators of the land. The following quotation throws light on the agricultural conditions of the past.

"The spaces of arable land are few, and the cultivation is commonly in narrow strips along the brows of the mountains. The crops for the most part are poor, and a great want of grain pervades the whole country; in times of scarcity, horse chestnuts, after being steeped in water for two or three days to take away their bitterness, are dried and ground into flour, and apricots and walnuts also form part of the food of the people.

Where there are two crops, the standard grains are barley, *phapur* (*Fagopyrum esculentum*), and *ogul* (*Fagopyrum emarginatum*)..... At the places where there is only one harvest, the crops are *ooa* (*Hordeum coeleste*), wheat, *phapur* and barley.Wheat and *ooa* are not productive in low situations; at 10,000 and 12,000 feet they thrive best. The *ooa* which is mentioned by Dr. Wallich in the *Flora Indica*, is the most hardy grain, and I have seen both it and *phapur* at 13,600 feet.The other grains are *bathoo* (*Amaranthus Anardhana*), *cheena* (*Panicum miliaceum*), *koda* (*Paspalum scrobiculatum*). There is a little rice at one village only. There are gardens belonging to most of the villages; they are neatly arranged, watered by copious streams, and fenced with hedges, or where there are no bushes, they are enclosed by stones dykes.

The kitchen vegetables are peas, beans, greens, and turnips, all of them well tasted; and peas and beans do not thrive below 8,000 feet, and the turnips which are the largest and finest I ever saw in India, are in the highest perfection at 10,000 or 11,000 feet. The people have begun to cultivate potato, which is very productive, but not near so common as it ought to be".

In the old gazetteer of the erstwhile Bushahr State it is stated, "There is no systematic fruit cultivation in the State, but there is good deal of fruit. Fruit is often dried and made into *atta* in the winter, when it is cooked and eaten mixed with ordinary flour. Especially this is done in Kanawar, where the corn produce is not sufficient to support the populace. Fruit thus treated is chiefly that of the *pallu* (apple), *chulli* (apricot), *baimi* (peach), *khanaur* (chestnut), and sometimes *akrot* (walnut)".

Soils

According to the first land settlement, held in the year 1897 the classification of soils is a *kiar* (1st class and 2nd class), *bakhal* (1st class and

1. Gerard, Capt. Alexander, *An Account of Koonawur in the Himalaya etc. etc.*, 1841, pp. 63-66.

2. *Punjab State Gazetteer*, Vol. VIII, Simla Hill States, 1910, p. 49.

2nd class) and *karali* (1st class and 2nd class). *Kiar* is rice land irrigated from hill streams. The first class sometimes yields two crops, rice at *rabi* and maize at *kharif*. Area of *kiar* is insignificant. *Bakhal* is manured land near the homestead and ordinarily yields two crops. *Karali* is more or less newly reclaimed land or else old clearings at some distance from the homestead, which cannot be manured. As a rule it yields one crop only. *Bakhal* is sometimes irrigated from streams, but as a rule, it is dependent upon rainfall. *Karali* is entirely so. Here is a superior class I of land which comprises the vineyards and apricot orchards, and is called *newal* (warm low-lying lands of the Satluj valley) producing two or more crops in a year. In more than half of the district there is practically no rain during the summer. This renders the unirrigated crops in the *newal* areas exceedingly uncertain, and makes irrigation valuable everywhere. Thus unlike other parts of Himachal Pradesh where paddy fields are, as a rule, irrigated, here all the crops are watered wherever possible. The high lands away from homestead are called as '*kandas*' and are very productive.

Soil, generally speaking, is usually steep and consists of sandy, sandy loam, clay loam, stony and gravelly types. People are not accustomed to use proper soil and water conservation measures with the result that soils usually remain poor in fertility and give very low yield. All these types are met with in each *tahsil*. In Hangrang valley of Puh sub-division we meet with sandy loam to clay loam soil with patches here and there of other types also. The rest of this sub-division has sandy to stony soil. Kalpa sub-division consists of sandy loam to stony and gravelly types of soil. The soils in Nachar sub-division are mostly sandy and stony with patches of other types here and there. Clay loam soil is suitable for growing crops like wheat and barley and fruit plants. Sandy loam soil suits to lesser millets as also vineyards. Stony, gravelly and sandy soils, as a matter of fact, are not suitable for crop cultivation though these can be put under fruit plants profitably. But due to shortage of land, these are being put under crops.

About the Hangrang valley which has different climatic features the following remarks by Hutton are worth reproduction. "The change in the nature of the country is most sudden;.....the country is seen to wear a sad and sombre air of cheerless desolation; not a tree is to be seen, and the back and crumbling hills are either wholly barren, or clothed with nothing of larger growth than the dwarf willow and the dog-rose.....villages are situated at wide intervals from each other, and cultivation is wholly

*Hutton, Thomas, *Journal of a trip through Kunawur, Hungrung, and Spiti*, 1838, pp. 81-87.

confined to the immediate vicinity of them, and usually upon a confined patch of alluvial soils, evidently the deposits of some former lakes....The practice of cultivating in steps upon the mountain's sides, appears indeed to be almost universally neglected, which however, is most probably owing to the nature of the hills themselves. On the southern side of this range lies the thickly wooded district of Kunawur, where cultivation is often carried in steps nearly to the summit of the mountains,.....From Hango,... I proceeded to Leeo.....a broad and level tract of land which is well cultivated, and from its warm and sheltered situation in the bosom of hills, is highly fertile, producing in favourable seasons two crops consisting of wheat, celestial, beardless and common barley with beans and peas. Apricots too are abundant.....

Chungo is situated in a basin somewhat similar to that of Leeo, while the flat and level bottom of the vale again furnishes a broad tract for cultivation.

The soil is the mixture of clay and sand, the latter predominating and is a deposit from the waters of the lake which once filled the valley".

CULTIVATION OF DIFFERENT CROPS

The time, both of sowing and reaping, varies with the elevation. Spring crops are usually sown from the middle of September to the middle of December, and are reaped in the lower valleys in April and higher up any time up to the beginning of July. Autumn crops are sown from March to the middle of July, and reaped from September to the end of November. In the colder parts snow lies a long time and there is, therefore, in some places only one harvest, and, the spring and the autumn crops are sown and reaped together, sowing, being made in September-October and the harvesting taking place in August and September. Crops are better and heavier in such localities than in the lower villages, where the climate is warmer. The following are the principal crops of each harvest.

Rabi

Wheat (*rojat, jod, or jad, oja, tho or do*)—On high lands it is sown as soon as the rains are over, i.e. in September, and on low lands at the end of October after the autumn harvest. Sometimes in high and cold regions wheat, peas and barley are also sown in the month of April. It is reaped in the high lands just before the rains in June, and a month earlier in the lower fields. As the cultivators find sufficient time between the harvest and sowing of *rabi* crops in this district, it is, therefore, not possible for them to prepare the land quite thoroughly

for raising a good crop of wheat. The number of cultivations vary according to the nature of the soil. The wheat crop is mostly grown under rain-fed conditions. Where adequate irrigation facilities are available it gives increased outturns. The crop takes about a week to germinate and appear above the ground. At higher elevation the wheat crop remains under snow for a few months and makes very little growth during the winter. With the advent of spring, the crop starts making rapid growth and hastens into the reproductive stage. It responds to liberal irrigation. It requires plenty of sunshine at the ripening stage. The crop is adversely affected by frost during winter and early spring, if the soil moisture is low. Wheat attains full growth on deep and medium type soils. Very late and very early sowings of the crop are not conducive. A crop sown very early will make considerable growth before severe winter sets in, and may be damaged by snow and frost. If sown very late, the tender seedlings would find it hard to make a rapid growth during the spring time, with the result that flowering and fruiting of the crop may be delayed beyond the most opportune time.

Barley (*tag, cha, tang, chak, nan tak-swa*)—Barley occupies premier place as a bread cereal or for processing into a kind of drink. It is sown at the same time as wheat, but ripens a month earlier. It is very well adapted to all the climatic regions. Barley is not difficult to mature under severe conditions of cold. It may be grown on almost all cultivated soils but crop does well on soils of medium fertility. It is grown even on soils which are considered too high for wheat. An excessive supply of nitrogen causes the crop to lodge and impart a dark colour to the grain, which is not a desirable quality in malting barley. The crop is able to take full advantage of the manure residues left in the soil by the previous crop, by virtue of its extensive and fibrous root system. Its quality is dependent upon a sustained supply of soil moisture during the growth period. In snow bound regions, winter barley gets a sustained supply of soil moisture in the spring due to the melting of snow. After one or two ploughings, the crop is sown by broadcasting the seed. In the colder regions, more seed is used so that the crop may be thick in stand and may tide over the severe conditions of winter.

Lentils (*kerche*)—It is sown in October, and cut in May and June.

Coriander seed (*bugo*)—It is usually sown from the end of September to the middle of November; ripens on low lands in April and on high lands in May. It is sold as a spice.

Field peas (*nyar*)—It is sown in November and harvested in May and June.

Kharif

Kharif sowing season extends from March to July. Crops sown usually in this season are lesser millets, potato and maize. These crops are harvested from July to September.

***Panicum milliaceum* (*chiche, chit, chay, chid*)**—Its crop is sown in July and cut in September. It is usually cooked like rice.

Maize (*chhalia*)—It is sown in July and harvested in September and is grown, as a rule, on *bakhal* land only.

***Penisetum italicum* (*shag, kaoni*)**—Sown in May, it ripens in September. It is boiled and eaten like rice.

***Amaranthus* (*dankhar*)**—Sown on *bakhal* and *karali* land at the same time as *kaoni*, it ripens a little later. It is of two varieties, red and white, but the grain yielded by both is white. Its leaves, when young, are used as vegetable. Grains are made into flour and bread. Its species *taka* is also used in a similar way.

***Elenstne corocana* (*kodro*)**—This millet is sown from April to June, and ripens in October. It is either eaten as bread, or made into *thuppa* or *phanting*.

Olgo, gyamray, gyamras* (*Fagopyrum polygonus*) *bras, dao* (*Fagopyrum esculentum*), and *chabrya are varieties of buckwheat. *Olgo* grows everywhere, but the others are mostly confined to the higher lands. *Bras* is the principal autumn crop.

***Botang* (*cajanus bicolor*)**—A pulse, sown and cut at the same time as *dankhar*. Usually eaten as dal, but sometimes baked into *chapatis*. Potatoes (*welu, halu*) are also cultivated in some areas.

Vegetables—Some area is put under vegetables also. Cabbage, turnips, peas, beans, pumpkin; tomatoes, chillies, radishes, greens and garlic are worth mentioning. During 1959-60 about nine hectares were under vegetables in tahsil Nachar, seventeen hectares in tahsil Kalpa, twenty-one hectares in tahsil Sangla, half a hectare in tahsil Morang, four hectares in tahsil Puh and five hectares in sub-tahsil Hangrang. Amongst non-food crops tobacco and other drugs are also being gradually cultivated. About two hectares of land are under these varieties:

The following table shows the average distribution of area under different crops during the years 1959-60 to 1965-66 :—

	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
	(Area in hectares)						
Paddy	45	44	66	56	54	61	48
Wheat	1603	1527	1364	1355	1385	1377	1335
Bajra or combu	—	—	—	1	—	1	—
Barley	2557	2705	2657	2646	2625	2507	2449
Maize	100	95	115	139	189	141	172
Ragi or marua	307	290	285	273	285	291	309
Little millets or common millets	5197	5112	5163	5190	5172	5276	5181
Green gram or mung	—	—	1	1	1	1	—
Black gram or urd, mash	24	39	35	23	27	28	75
Masur	2	2	4	4	6	4	—
Other pulses	322	320	261	197	230	231	204

The standard yield per hectare during a normal year is barley 203 kg, ragi 224 kg, mung 129 kg, black gram 129 kg, masur 92 kg, and potatoes 110 kg.

Shows and exhibitions

Previously these were organised at Rampur (in Mahasu district) and the cultivators interested in taking part in these shows entered their products. In 1963 an agricultural exhibition was organised at Kalpa in which 255 participants took part and 836 exhibits were displayed. From October 30 to November 1, 1964, an exhibition was again held at Kalpa in which 315 persons participated and 826 exhibits were displayed. This exhibition has now become a regular annual feature. The exhibits adjudged best are awarded prizes. These shows have encouraged the local people to grow better and selected varieties of fruits and vegetables and to use chemical fertilizers.

HORTICULTURE

The district is endowed by nature with excellent climate and soil for the production of a variety of fruit. The climatic conditions, fertility

of soil and altitude make this area, receiving about 380 mm of annual rainfall, very suitable for the growth of dry fruits as well as temperate fruits. Prior to the formation of Himachal Pradesh no extensive horticultural development work was done. But there are instances to show that plenty of apples, grapes and some dry fruits were produced. The Department of Agriculture established a research station of dry fruits in 1954 under the First Five Year Plan. In 1959-60, 824 hectares of land were under wild fruit plants like edible pine, while almost the entire district is suitable for growing temperate vegetables and dry fruits; its lower part is more suitable for growing apple, cherry, apricot, pear and grape. A chain of fruit research stations, demonstration orchards and nurseries has been established to develop horticulture in the area.

Changes in the area under different fruit crops

The table given below gives the annual distribution of area under various fruit crops. No mentionable change, except, in the case of apple has yet taken place in the area under different crops.

	Apples	Grapes	Other fresh fruits	Cashew- nuts/ walnuts	Other dry fruits	Vegetables	Potatoes and other vegetables
	(Area in hectares)						
1959-60	5	14	94	10	109	356	74
1960-61	5	12	92	8	109	364	64
1961-62	6	11	74	10	112	338	74
1962-63	11	11	85	10	120	305	49
1963-64	27	10	96	11	128	357	63
1964-65	40	6	112	11	140	345	55
1965-66	36	13	130	7	139	341	52
1966-67	46	15	132	10	150	322	67
1967-68	55	9	143	11	196	357	51
1968-69	73	11	133	12	163	330	47
1969-70	78	9	128	7	183	322	48

Production of temperate vegetable seeds

Climatic conditions of Kinnaur, particularly of areas beyond Tapri, are most suitable for the production of temperate vegetable seeds, viz., cabbage, carrot, turnip, sugar-beet etc. These areas have scanty rains and heavy snowfalls. Prior to Partition, Quetta, now in West Pakistan, was the main temperate vegetable seed producing area. After Partition, seed industries were set up in Jammu and Kashmir State and in Kulu district of Himachal Pradesh, but due to unfavourable weather conditions encouraging results could not be achieved.

The areas of Kinnaur are suitable and can be developed into different seed producing zones. To achieve the objective the government in collaboration with the Indian Council of Agriculture Research established one Research Station on the foundation seed of temperate vegetables at Kalpa with a sub-station at Ribba, in the year 1960. The station aims at conducting research on different aspects of raising seed crops, encourage and guide the cultivators to grow seed crops and finally get their (cultivators') produce marketed.

Progress of scientific agriculture

Agricultural implements—Due to peculiar topographical conditions, improved implements designed for plains cannot be used here and hence none has been distributed among the farmers so far. Fodder cutters, small garden tools and *kisan* ploughs are of some use and are being popularized and distributed.

The old type of agricultural implements manufactured and repaired by local artisans are still in use. The local wooden plough is of very primitive type and is, sometimes not even provided with an iron share, in some villages. Its working capacity and durability is very low and due to its peculiar shape it cannot be used for the purpose of line sowing, weeding and hoeing. Its small handle retards the progress of ploughing, and as such is being replaced by an improved plough. The efficiency of other local tools and implements too is rather low. Some of the old type of agricultural implements, still in use, are given in Appendix IX with their local names.

Seeds and manure

The cultivators usually set apart seed out of their own produce of grain. Those who do not do so obtain their requirements either from the progressive cultivators in the village or from the Agriculture Department. Due to lack of staff and difficult means of communications no perceptible progress could be achieved in distributing improved seeds prior to the formation of the district. However, in the year 1956-57 the Agriculture Department distributed about 2,190 kg seed of wheat, 559 kg seed of barley, 1,679 kg seed of maize and 1,306 kg seed of potato. The year wise details of improved seeds distributed are indicated below.

Year	Name of seed					
	Wheat seed distribu- ted	Barley seed distribu- ted	Wheat seed exchanged (in quintals)	Barley seed exchanged	Potato seed distributed (up to date variety)	Vegetable seed distributed
1	2	3	4	5	6	7
1961-62	31.76	—	—	—	14.43	—
1962-63	31.20	9.64	14.76	—	17.65	0.95

1	2	3	4	5	6	7
1963-64	63.04	19.50	12.50	0.96	29.95	1.46
1964-65	12.43	1.04	59.07	—	31.95	2.20
1965-66	9.03	11.40	41.75	5.46	40.00	—
1966-67	21.00	14.59	11.05	17.95	60.30	13.00
1967-68	24.26	13.81	29.04	14.59	57.42	2.85
1968-69	113.01	19.00	86.06	10.00	60.00	4.74
1969-70	143.10	2.67	153.30	2.67	60.67	3.21

The rotation of crops prevalent here does not help much in the maintenance or regaining of the soil fertility because crops like legumes which add to the soil fertility are generally not grown. The rotation is like this. Wheat and barley are followed by *olgo* and peas by lesser millets, wheat and barley. In lower hills barley alternates with maize and pulses. There being a general dearth of cultivable land cultivators do not keep much of their lands fallow. To catch early crop of lesser millets only about 25 per cent cultivable land is left fallow by most of the cultivators.

Excreta of human beings, dung and droppings of domestic animals and, in some cases, leaf mould too are used as manure. Cow-dung and droppings of sheep and goat are used as manure in Kalpa and Nachar sub-divisions. In Puh sub-division there is shortage of grass due to which cultivators do not keep many animals. Dung and droppings of the small number of cattle and goats, which they keep, can hardly be used as manure because they keep on moving from place to place with their live-stock in search of business. Therefore, the people use their night soil as manure. Each family has a latrine in which the night soil is kept for a few months and is then carried to the fields before ploughing.

The refuse is allowed to remain in the shed for a few days and then taken out and made into a heap in the courtyard from where it is carried for application. Sometimes refuse is directly taken from sheds to the fields. This manure is, usually, not properly decomposed. Where and when heavy rain falls, and also with irrigational wells on slopy land the essential nutrients, particularly potash, are drained out. The dark-brown liquid which consists of the vital fertilizing element in available form is lost, and the heap is left as a poor mass of organic matter in different stages of decomposition.

Chemical fertilizers have found their way to the district. To popularize their use by convincing the cultivators of their speedy and spectacular results these chemical fertilizers are supplied gratis for use in the demonstration plots. To enable the cultivators to purchase chemical fertilizers without difficulty of covering long distances, fertilizers depots are opened at convenient places. There is now a chain of such depots sprinkled over the district. Carriage charges of fertilizers to these depots are being subsidized to keep their cost within the reach of the farmers of all economic

standing. Mentionable among these fertilizers include ammonium sulphate and superphosphate. The quantity of ammonium sulphate distributed to the cultivators stood at 1.3 MT in 1960-61 and 2.5 MT in 1961-62. The quantity of superphosphate so distributed during the same years stood at 1.5 MT and 2.3 MT respectively.

The fertilizer distributed during the following years is depicted below. The figures are indicative of the growing popularity of chemical fertilizers.

Year	Ammonium sulphate	Urea	Superphosphate
In metric tonnes			
1961-62	2.2	—	3.8
1962-63	7.8	—	1.49
1963-64	4.6	7.18	4.7
1964-65	2.51	8.64	15.1
1965-66	2.8	13.4	—
1966-67	2.8	10.4	12.2
1967-68	2.2	9.8	2.8
1968-69	—	23.7	13.8
1969-70	44.5	13.8	26.4

Cultural methods to preserve fertility are few. Besides the use of the manures and chemical fertilizers an age-old practice of mixed cropping, particularly in the *kharif* season, still goes on. Maize is sown mixed with potato or bean or *kaoni*, and *phapra* and *bean* are also sown together. This method of mixed cropping ensures preservation of fertility of the soil.

Agricultural diseases and pests

Many diseases and pests cause injury to the crops. With advanced scientific methods the Agriculture Department is helping farmers to combat the damages to their products.

Activities of the Agriculture Department

The Government of India during 1960-61 sponsored a special scheme to establish garden colonies to encourage plantation of orchards in compact blocks by giving long term loans at the rate of Rs. 325 per hectare and also making available the technical guidance by providing some technical staff for each colony. Two garden colonies have been established, one at Nachar and the other at Spilo. Some more are likely to be established in the near future. To make the local people horticulture minded the Department of Horticulture advances horticulture loans to the needy persons at the rate of Rs. 200 per hectare.

Under what is known as the demonstration and propaganda scheme the agricultural programme is given priority in all the development blocks functioning in the district. The staff posted in these blocks tour extensively in the area and extend on the spot guidance to the cultivators. A number of village leaders' training camps have been organised to acquaint the cultivators with the scientific and economic methods of cultivation. A good number of farmers have been trained in these camps.

The Development Department also holds training camps to educate the farmers about various operations connected with fruit cultivation viz. soil and climate requirements, site selection, lay out and pit digging, manuring, pruning and application of pesticides. So far 173 farmers have been trained.

The following table shows the achievements made under the local manurial resources scheme.

Sl. No.	Particulars	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70
1.	Compost pits dug out (in Nos.)	624	613	1223	1077	N.A.	775	1169	759	709
2.	Volume of compost prepared (in metric tonnes)	1624	3034	7576	8085	N.A.	4234	7571	22441	3734
3.	Volume of super-reinforced compost prepared (in metric tonnes)	—	71	33	138	N.A.	—	—	—	—
4.	Trench laterins prepared (in Nos.)	1105	35	109	207	N.A.	92	18	50	41
5.	Volume of N. S. compost prepared (in metric tonnes)	1552	1210.5	4804.5	3508	N.A.	2980	2000	1537	535
6.	Volume of super reinforced N.S. compost prepared (in metric tonnes)	—	6	9	14	N.A.	—	—	—	—
7.	Green manure seed distributed (in kg)	—	—	98.15	281	N.A.	—	—	—	—

8.	Area brought under conventional (hectares)	—	—	1	4	N.A.	—	—	—	—
9.	Area brought under additional (hectares)	—	—	1	4	N.A.	—	—	—	—
10.	Area brought under mixed cropping with leguminous crops (hectares)	—	—	11323	58	N.A.	—	—	—	—
11.	Subsidy given for construction of single seated trench laterins (in rupees)	2500	—	3000	4000	N.A.	—	—	—	—

To combat the problem of insects, pests and diseases in fruits, vegetables and cereals, insecticides and fungicides have been stored at the district headquarters, at all block headquarters, farms and progeny orchards so that these may be readily available to the cultivators. Rat campaigns are organised, sanjose scale controlled, seed treatment effected and crops and vegetables, treated. Sets of dusting and spraying equipment have been purchased for supply to cultivators on fifty per cent cost and a good number of these sets have already been supplied on subsidized rates. The insecticides are supplied to cultivators either free or on fifty per cent cost.

The following chart throws light on the plant protection activities.

S.No.	Particulars	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70
1.	Area baited against field rats (in hectares)	23	411	2212	2454	695	3704	1284	1179	3156	1076
2.	Orchards sprayed (in hectares)	12	43	107	167	321	666	454	399	405	1797
3.	Crops and vegetables sprayed (in hectares)	4	19	74	153	146	216	—	—	635	227
4.	Foodgrain treated against store pest (in metric tonnes)	—	17	36	14.4	114	61	102	28	60	8

5. Seed treated against seed born diseases (in metric tonnes)	0.2	10.8	14	17.1	4.5	26.29	228	65	18	24
6. Roguing (in hectares)	—	53	123	187	155	78	—	—	—	—
7. Area treated against Epi-lachna beetle	—	—	—	87	52	159	10	85	94	100
8. Area treated against blight	—	—	—	—	—	58	—	—	—	—

For the development of fruit production a chain of progeny orchards has been established and thousands of fruit plants distributed.

Agriculture research centres and schools

So far there are no agricultural schools or colleges within the limits of the district. The Department of Agriculture, after trial at their own research stations and farms introduces and popularises the improved varieties of seeds and plants among the cultivators. A brief description of the existing farms, nurseries and research stations is given below.

For the distribution of improved seeds of cereals in this area, a seed farm was set up in 1959 at Kalpa, for multiplication of nucleus seed, on an area of eight hectares acquired from the raja of erstwhile Bushahr State. An area of about three hectares has also been earmarked for raising the foundation seed of recommended varieties of temperate vegetables like cabbage, turnip, carrot, beet, peas and beans. This work is jointly financed by the Indian Council of Agricultural Research and Himachal Pradesh Government on 50 : 50 basis. The foundation seed of these vegetables is being raised under controlled conditions at this place and is further multiplied partly here and partly at other places.

One more seed multiplication farm was established at Leo in the year 1960-61. During 1966 the farm was transferred to millets section for conducting research and producing quality seeds of local millets. The centre is likely to cater to the needs of the farmers of not only Kinnaur but also of the adjoining district of Lahul and Spiti.

To begin with, a dry fruit research station at Boktu, tahsil Kalpa, was started as a sub-station in 1954, under the scheme of intensification of research on temperate fruits and financed jointly by the Indian Council of Agricultural Research and the State Government. The research work here relates to almond, walnut, pecan-nut, hazel-nut, pistachio-nut, apricot,

plum/prune, apple, pomegranate, grape and cherry. A collection of over one hundred varieties, imported from Afghanistan and U. S. S. R. and collected from within the country, has been built up. Studies are in hand on relative vigour, time of blossoming, time of ripening of fruits, yield of fruit quality etc. of different varieties. Selected on the basis of their performance varieties are multiplied for general distribution. A nursery was also started here.

Another dry fruit research sub-station at Giabong, tahsil Puh was started in 1960 in the Ropa valley at an altitude of 2,895 m. The station covers an area of four hectares. Walnut, pecan-nut, apricot, apple, plum, pomegranate, grapes, almond, pistachio-nut and hazel-nut have been planted here.

A raisin grapes research station was established in 1958 at a place called Sharbo, tahsil Kalpa about 4.8 km down-hill from Kalpa, at an elevation of 1,980 metres. Table and raisin grapes of about forty varieties including the famous varieties of Afghanistan have been planted. This is perhaps the only research station on raisin grapes in the country and is expected to yield results of far reaching importance.

Three progeny orchards at Ribba, Kilba and Nachar were started during the Second Five Year Plan. Three fruit nurseries were established at Bhabha, Sangla and Spilo. These progeny orchards and nurseries are expected to meet the demand of plants by the residents of the district. These progeny orchards and nurseries stock fruit trees of outstanding merit to supply bud wood, to supply pedigree and disease free plants at reasonable price and to make the supplies available from the nearest possible source. They serve as model and demonstration unit and a nucleus for the development of horticulture in the surrounding areas. During 1963-64, about 43,330 fruit plants were raised.

A zira (cumin) and saffron research station at Kamru was set up. A quality cumin in a wild form is found at some places in the district. To study the possibility of taking up its regular cultivation, research is being made. This scheme also includes propagation of saffron for which this area is considered suitable. The possibilities of cultivation of cumin and saffron on a commercial scale, are also being explored. A collection of sixteen local and seven improved types of cumin has been made. There is hope that saffron might be successfully grown along the banks of Satluj river.

The department distributes fruit plants and the supporting index will give an idea of the number of such plants distributed during the past years.

S. No.	Kind of plants	Prior to 1960-61	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
1.	Apple	4205	6962	10491	18060	18903	30000	66484
2.	Pear	—	815	602	320	300	—	150
3.	Apricot	—	1085	1275	2560	3488	4297	6620
4.	Cherry	—	140	193	90	—	—	—
5.	Walnut	—	316	150	110	442	318	750
6.	Grape	—	403	200	280	305	356	4000
7.	Plum	—	5	280	190	483	1234	870
8.	Almond	—	54	—	1670	1735	2313	1900
9.	Pomegranate	—	—	125	280	300	15	50
10.	Peach	—	—	300	650	740	457	700
11.	Persimmon	—	—	40	20	—	—	—
12.	Pistachionut	—	—	—	—	—	100	52
Total		4205	9780	13656	24230	26680	39090	81576

ANIMAL HUSBANDRY

Area under fodder crops

Land holdings being small and the cultivated area being smaller still there has never been the practice of growing fodder crops. The main sources of fodder are the natural grasses in forests and grazing lands. The area of pastures in the possession of the local inhabitants, is measured to 1470 hectares (*ghasnis* and *ruttas* etc.). Unmeasured pastures are estimated to be about 3,95,138 hectares. During the scarcity months (15th November to 15th April) the animals are fed on the leaves of oak and other trees. In fact the fodder available from all sources in the district is inadequate. Usually the herds of cattle and the flocks of sheep and goats are let loose to graze in the extensive pastures and during summer months they are sent up to the Alpine pastures. As the winter starts approaching the herds and flocks are brought down to the villages and subsequently migrated to lower parts of Himachal Pradesh and even to the plains of Punjab and Uttar Pradesh. Their return journey commences as the days start getting warmer. The cattle remaining behind in the villages are perforce, stall-fed during the inclement weather. The system of stall feeding is not in vogue here. The cattle when in their sheds are also kept like the flocks of sheep and goats and are not tethered. To meet requirements of fodder in winter, hay serves the purpose. The stock of hay is usually supplemented by the stalks and chaff from food crops or leaves from the trees on private lands as also from the forest trees.

The animals domesticated by the people are listed with their local names in Appendix X.

The following table based on the last three live-stock enumerations conducted in 1956, 1961 and 1966 gives an idea of the domestic animals :—

S. No.	Name of animal	1956	1961	1966
1	2	3	4	5
1.	Cattle	20,705	20,126	21,398
2.	Buffaloes	195	...	...
3.	Sheep	32,225	42,422	58,414
4.	Goats	42,316	18,853	28,372
5.	Yaks	N. A.	536	1,166
6.	Poultry	1,023	2,485	5,758
7.	Horses and ponies	88	757	983
8.	Donkeys	---	1,704	1,760
9.	Mules	...	122	511
10.	Pigs	---	...	60

While there is little change in the number of cattle between the three enumerations, the buffaloes have totally vanished. No solid reason, is however, available for this complete extermination. There has been a marked improvement in the number of sheep and this is attributed mainly to the improved sheep breeding practices introduced by the Animal Husbandry Department. The department imported various types of merino rams from America, Spain, Germany, Australia and U. S. S. R. to improve the local breed by cross breeding. The number of goats went down by 55.5 per cent during the 1961 cattle census. Reasons for this sharp decline, as given by the Deputy Commissioner, Kinnaur were that, "Flocks of sheep and goats have been migrating to lower hills in October-November every year and returning to Kinnaur's Alpine pastures during summer in the months of May and June. It may be that owing to heavy snowfalls flocks may have moved to Kinnaur's Alpine pasture a little later after the actual enumeration and therefore, some flocks may have been enumerated during 1961 in the lower hills of Mahasu, Sirmur and Mandi districts."

Evidently the rearing of goats was considered dangerous to the soil conservation and consequently to the whole catchment areas of the Bhakra Dam. It was the policy of the government to replace goats by the rearing of sheep and thereby reduce the goat population gradually. Later the local population reacted to this decision as a result of which eventually a more go slow policy to reduce the goat population was adopted. During the 1966 cattle census, however, the goats once again registered an increase of 33.5 per cent over the last cattle census figures as

the government allowed some laxity in the rigid operation of its decision to totally exterminate the animal. However, the policy to reduce the goats stands and the overall reduction during 1966 cattle census was to the tune of 32.9 per cent.

The increase in the number of equines from 88 during 1956 to 2583 in 1961 and again to 3254 during 1966 is attributable to the coming into being of the Kinnaur district during 1960 and as a consequence thereof manifold increase in the developmental activities. The other means of conveyance being very scarce and unobtainable the equines had to be employed. Another reason for this increase is the induction of army into the district to combat the danger of Chinese invasion.

The yaks during 1966 also registered an increase of more than 100 per cent over the last cattle census of 1961. Reason for this increase is that the progeny born out of the meeting of male bullock and female yak has been enumerated in the category of yaks in the district.

The protein rich and highly nutritious food that people get from the birds has led to the increase of poultry population.

Cattle—Inhabitants of this isolated border area have been, down the ages, unaware of the improved and scientific methods of feeding and breeding cattle. As will be noticed later, now various schemes aiming at the improvement of indigenous breed of cattle and introduction of improved breeds are being pursued.

Cross bulls of Dexter Sindhi breed have been provided by the department for breeding purposes. The government bears fifty per cent of the feeding charges of these bulls. In addition three bulls, one of Dexter Sindhi breed and the remaining of Holstein cross are being maintained by the department for upgrading at their centres at Sangla and Peo respectively.

To begin with three artificial insemination sub-centres have also been opened at Nachar, Nigulsari and Kilba. The sub-centres are stocked with semen collected from the Regional Bull Centre at Jeori (Mahasu). A steady and encouraging response from the local populace and satisfactory results will work for the extension of the scheme to the entire district.

Yaks—In the higher parts cows are rare and yaks are the substitutes. The male is called yak or *yag* and the female *breeme*. The produce between the yak and the cow is common, the male being named, *churu* or *zo* or *zofo*, and the female *zomo*. They are strong and hardy and like cold places. The cross breed is much more docile. As a source of milk, this animal is decidedly much heavier in yield than cow. The shaggy

little creature has the broad hump peculiar to Indian cattle, and which doubtless, like that of the camel, is nature's provision for times of scarcity, affording a storehouse of fat on which to draw, when other food fails. Instead of lowing like other cattle, its conversational powers are limited to an almost inaudible grunt which to a creature so gregarious must really be very trying. Perhaps this accounts for his anxiety to walk close to his companions. Yaks are the most important among cattle in the district. The Animal Husbandry Department have provided three yak bulls for upgrading work. One Yak Breeding Farm at Chhitkul has also been established. The progeny born in this farm is distributed to local people.

Dairy farming is still a desideratum.

Sheep—They account for more than half of the total live-stock population. Next to agriculture the major occupation of the inhabitants is sheep rearing. Almost every household has a flock of sheep. Manifold benefits are derived from this animal in the shape of milk, meat, skin and, above all the wool which besides satisfying the local needs of woollen-cloth, is also exported. Sheep are also used as pack-animal on the paths too dangerous for larger beasts. The local breed being poor, is being improved by cross breeding with the rams imported from Spain, Germany, Australia and U.S.S.R. Improved rams are also being distributed to the sheep breeders at subsidized rates.

Goats—The goats rank third in numerical strength after sheep and cattle and provide mutton, milk, hair and skins. It also serves like sheep, as a pack-animal. Goats are regarded as most destructive animals from the stand-point of soil conservation. Therefore, this poor creature seems to be awaiting its reduction in number if not total extermination in the near future. Besides the common goat, a special variety called *chigu* is also found. This variety is being improved and multiplied due to its valuable fleece called *pashm*.

Horses, ponies, mules and donkeys—Due to the mountainous tract and non-availability of means of communication, these beasts of burden are largely reared. Donkey tops in the numerical strength followed by horses, and ponies and mules.

Poultry farming—At present the poultry is quite inadequate though people have, of late, started realising the need to develop this important item for nutrient food. As it is necessary that poultry development be taken up on scientific lines in order to propagate the suitable improved breeds, schemes have been formulated to achieve this objective.

The Animal Husbandry Department offers facilities of training in poultry husbandry at the Regional Poultry Farm, Kamlahi (Simla). Successful trainees are given poultry birds at fifty per cent cost alongwith a role of wire netting to encourage them in poultry rearing. Facilities of loans and subsidy also exist.

Measures to improve the quality of breeds and to secure greater output—The following breeding centres and farms have been established in the district :—

Sheep Breeding Farm, Karchham—A flock of Spanish merino ewes and rams was imported in 1961-62 for this farm. Some indigenous sheep were also purchased as a foundation stock. A flock of Russian merinos has also been imported. Pure as well as cross breeding is being undertaken at this farm. Five sheep and wool extension centres also functioned at Jangi, Sangla, Peo, Kaksthal and Bhabha (Katgaon) for sometime, but were closed down subsequently and instead veterinary dispensaries have been opened at Lippa, Barua, Peo and Sholdang and the outlying dispensary at Rupri converted into a regular dispensary. The rams are lent out to the breeders during the breeding season from these centres without any charge and taken back when the breeding season is over. The quality and quantity of wool produced from these breeds is much superior than that produced from the indigenous sheep.

Horse and mule breeding scheme—A farm has been temporarily located at Jeori in Mahasu district and is likely to be shifted to some suitable place. Connemare mares and stallions were imported from Ireland for this farm. Besides, Spiti mares and stallions as well as Chamurti mares and Tango ponies are also being maintained at this farm. For the purpose of mule breeding Jack stallions have also been purchased. The breeding programme is broadly based on the crossing of Spiti and Chamurti mare with the Connemare stallions. The Connemare mares are also being crossed with the Connemare stallions.

Goat Breeding Farm, Sangla—A *chigu* goat breeding farm at Sangla was opened in the year 1960 to improve the valuable stocks of *chigu* goat. The scheme had, however, to be abandoned and the farm wound up from March 31, 1965 due to the non-availability of *chigu* bucks for cross breeding. In the past the *chigu* bucks used to be imported from Tibet.

Poultry farms—There are at present, two poultry extension units located at Tapri and Peo. Egg produce of these farms is sold for hatching and table use. Birds for breeding and also for table use are also available at these centres.

The following datum gives an idea of the work so far done at these centres :—

(a)	Total number of eggs produced	40,137
(b)	" " " " sold for hatching	4,675
(c)	" " " " sold for table use	36,528
(d)	" " " birds distributed for breeding purposes	3,545
(e)	" " " birds sold for table purposes	714

Animal diseases—The common diseases are foot and mouth disease and mange of all types. Other diseases *viz.* rinderpest, haemorrhagic septicaemia, and anthrax etc. are very rare. The animals in general are suffering from malnutrition and debility or weakness. To provide necessary veterinary aid to the live-stock there exist nine hospitals located at Kalpa, Sangla, Jangi, Nachar, Puh, Leo, Ribba, Bhabha and Kilba, twelve dispensaries, at Giabong, Chango, Pawari, Chhota Kamba, Rakchham, Nigulsari, Rupri, Morang, Lippa, Peo, Barua and Sholdang. To protect the sheep from the menace of skin diseases, sheep dips have been constructed at almost all the migratory routes of the flocks and mass scale dipping of sheep is undertaken. They are also drenched with medicines to mop up the internal parasites.

Cattle fairs—No cattle fairs are held for marketing of the live-stock. However, cattle shows and calf rallies are organised to inculcate a sense of competition. Since 1961 twelve such shows have been organised at various places.

Fisheries

Before the setting up of Fisheries Department in the year 1950-51 there were no hard and fast rules and regulations governing pisciculture, no practice of closed season and no bar on the size of fish. Licence fee was, however, charged at the rate of five rupees per person per day or a portion thereof and thirty rupees per person per week.

Subsequent to the organisation of the Fisheries Department, and the application of the *Indian Fisheries Act IV of 1897* and the *Punjab Fisheries Act II of 1914* and rules framed thereunder, efforts were made to place fisheries on a sound footing. Fishing has been brought under a rational licensing system. The licence fee for fishing in the trout waters is five rupees per person per day, rupees seven and fifty paise per family of two members per day and twenty rupees per person per week or thirty rupees for a family of two members per week. The fee for fishing in other than trout waters is ten rupees for general licence and

fishing with rod and line for a period not exceeding fifteen days. Fifty paise are charged as fee for fishing for one day with rod and line.

The season for trout fishing mainly in the Baspa river commences on 1st March and lasts up to 7th October. From 8th October to the last day of February the season for fishing is closed. The Baspa and Spiti rivers and certain streams, namely, Barang, Tangling, Kozang or Kashang, Lippa or Kirang, Shyaso, Leo Hango-Chuling and Tirung are important from the stand-point of fisheries. Pond fish culture is engaging a greater attention. Possibilities of introducing mirror carp, an exotic fish, are being explored at high altitudes. Stocking of mirror carp at lower altitudes of the district has already been undertaken successfully.

Construction of a new Trout Farm at Sangla was undertaken in 1960-1961 for attracting tourists. In the past Sangla had been anglers paradise but later it suffered a great set-back following large scale poaching. Trout ova imported from Barot were laid for hatching at this farm and the result has been successful. The fingerlings would be stocked in the Baspa river. During 1963-64, 10,000 trout eyed ova were hatched and 6259 fish were raised. Similarly in 1964-65, 20,000 trout eyed ova were brought and as many as 13356 fish were raised in the hatchery. The farm is still under construction. The object, however, is to raise the number of fish from 15,000 to 20,000 fish every year to provide game to the anglers and tourists and for food to the local populace.

FORESTRY

Importance of forestry in the economy of the district

The ratio of forest area to the total land area works out to about five per cent prescribed by National Forest Policy standard. The total population of the district, is wholly dependent for their day to day needs of timber, firewood etc. on this meagre area of the forest. A huge number of 84,520 of live-stock is also dependent for fodder, forage, grazing and browsing on this forest area and other Alpine pastures. Apart from these living beings directly or indirectly dependent on the forests for the sustenance of their life there are other substantial advantages accruing from the forests. They form a good source of revenue of the state. They are responsible for precipitation and rainfall. The forests also support and shelter a variety of fauna which add to the income and attraction of the district. Alongwith timber, firewood, fodder and litter, the forests produce a variety of medicinal plants which adds to the income of the state as well as of the people. A sizable part of the wooded area is covered by *chilgoza* trees producing edible nut which fetches a handsome price and forms a substantial source of income to a good number of families.

From aesthetic point of view the forests here beautify the otherwise dreary and rugged mountain slopes, adding to the scenic charm of the area. Generally the mountain slopes are quite steep and thus exposed to the danger of erosion even in the event of a scanty rainfall. The existing forests as far as possible arrest the surface run off of the water and thus save to the possible extent the valuable and inadequate surface soil from being washed away. These circumstances indicate that forests in Kinnaur have a unique importance in the economic set up both in the present and in the future. But economic importance of forests also lies in factors like topography, altitude, soil accessibility, scientific development, regeneration and scientific exploitation. None of these factors, in the past, have been favourable in this area. Of late the district has gained unique importance and, among other things, it has now become more accessible and thus feasible for better management, development and exploitation. Forests are expected to play an important role in the economy of the district in the years to come.

System of forest management

No records are available to throw adequate light on the early history of the forests of Kinnaur prior to 1850. It is, however, widely recognised that in the early days, the forests occupied a much greater area.

With the advent of civilisation, shifting cultivation on a large scale was practised and land for cultivation was carved out of the best belt of forests at such elevations as 1800-2400 m. Consequently, deodar forests, which reach their optimum development in this zone suffered the maximum loss. *Karali* cultivation, which is still practised widely is interpreted as a kind of shifting cultivation, although it seems to be more stable. Hundreds of hectares forest land, even in recent times, at such places as Barua Kanda in the Kilba Range and Cherring in the Kailas Range have been illegally broken, trees of *kail* and fir lopped, felled and burnt and the land ploughed for cultivation.

Grazing, lopping for fodder and firewood and felling of timber have caused very serious and unrecuperating damage to large tracts of the dry and arid zone forests.

Burning of *panwals* (grass lands burnt annually during winter) for the new and tender blades of grass has led to the destruction of the fire tender species and the gradual recession of the forests. Extensive areas have, thus, been laid bare in the bottom of the entire Satluj valley. The ill effects of biotic interference have been further aggravated by the vagaries of nature.

In 1850, a trader purchased deodar trees from the then raja of Bushahr at two annas each but the forests were not heavily worked until 1859, when other Indian and foreign traders obtained permits to fell indefinite number of trees merely by giving the raja a bag of rupees. It is said that when the offer of the Britishers for the lease of the forests came, the raja too gladly accepted it.

With the advent of the Britishers and the establishment of cities and cantonments in the plains, a large quantity of timber was required. Out of the hill timbers, deodar alone was initially considered of any value and, therefore, the traders aimed at extracting exclusively this timber. The forests situated on the hill sides overlooking the Satluj river, in which the logs could be easily floated, had to bear the earliest brunt of such a devastation.

Owing to indiscriminate exploitation from the accessible forests, they receded into the interior and thus increasing dearth of timber was felt soon. In 1851, Lord Dalhousie, the then Governor-General of India, deputed Capt. Longden to explore and report on the forests of the western Himalayas including those of erstwhile Bushahr State which he did in 1852-53. His report on the Bushahr forests was favourable.

In 1861 the Punjab Railway Company deputed Mr. Strong to examine and report on the forests of Bushahr State with a view to extending their operations for procuring sleepers from the region. After examination Mr. Strong reported on the Bushahr forests as quoted here. "By 1862 all the good deodar trees had in the preceding few years been felled in the areas within three miles of the river, in the territories of Mandi, Suket, and in the Hill States of Koti, Kumarsain and Bhajji which overlook the Sutlej, but the interior hills of Bushahr were extensively clothed with the finest deodar, particularly on the upper parts of the northern slopes, commencing at Nachar, and terminating near Hangrang ridge, which forms the northern limit of the species, and of all tree growth except birch and juniper. This stretch of country is situated on the banks of the Upper Sutlej and Baspa rivers."

Mr. Cleghorn, who explored the Satluj valley in 1862 was deputed by the then Governor-General of India to ascertain the extent to which the forests of Western Himalayas could supply railway sleepers. Cleghorn considered the forest sufficient, if worked with care and good management to yield 8,000 trees annually. He suggested that the raja was keen to have better supervision of his forests from the destruction caused by the traders and applied to the Superintendent, Simla Hill States, to appoint an

*Tandon, J. C., *Revised Working Plan for the Kinnaur and Kochi Forests 1961-62 to 1975-76.*

officer for the purpose of control and realisation of revenue of seigniorage which was proposed at rupees three and fifty paise per tree of deodar which alone had a market.

The first step taken towards this state of affairs and to prevent the total destruction of the forests, was made by Mr. Barnes, Superintendent of Hill States when rules were drawn up and a local Forest Ranger appointed. But the measures did not have the desired effect.

In 1864, the management of the Bushahr State Forests was taken over by the British Government and a lease (Appendix XI to this volume) was conducted with the raja of Bushahr in consideration of certain payments. Sir Dietrich Brandis, after his appointment as first Inspector General of Forests of India made a tour of inspection of these forests. He estimated in his report that 30,000 deodar trees had been felled between 1859 and 1863. Easily accessible forests were practically denuded and fires often swept the felling areas. Despite constant efforts and great expenditure, a little success has been achieved in restocking these areas and the ruins of the old forests can still be seen in such forests as Kaksthal, Dippi, Sapni, Tangling, Kastiarang and Runang.

Brandis drew up a felling scheme based on rough linear surveys. Only easily accessible forests on the left bank of the Satluj were included. The system of management proposed was selection of trees with a girth limit of 1.82 m and fellings were limited to 3,000 trees annually. In 1872 he again visited Bushahr and found that the rate of felling had averaged only 1,500 trees annually. He recommended an early preparation of a proper working plan which was soon taken up in hand by Ribbentrop with Batchelor and Stenhouse. This plan for the period 1875-1890 was of particular interest because then was first realised the necessity for differentiating between the treatment of compact blocks of regular high forest and that of irregular forest on steep ground. The former type received two successive regeneration fellings and in the latter, fellings were to be made by selection of individual trees.

The plan further provided for a detailed examination of the Pandra Bis forest. The capital growing stock of deodar was estimated to be 98,000 I class trees exclusive of Pandra Bis forests. The annual yield was fixed at 2,000 I class trees. Between 1875 and 1890 only 3,309 trees were felled but during the next decade the average annual fellings amounted to 2,302 deodar trees.

No authentic records are available to show whether any artificial regeneration was attempted. However, a small bouldry patch of about four hectares of ground on the left bank of the Satluj near Sholtu, was

destroyed by some traders, and was subsequently planted with 1867 deodar transplants, of which only a few survived. A patch of mature deodar at Sholtu forms a living monument to all those who introduced early forest conservancy.

Thus, during the aforesaid period, the forests were managed under the reports of Brandis and others, published in 1864, 1875 and 1881. The forests were worked by the departmental agency. The Survey of India completed a special forest survey of the tract in 1886-87 which facilitated the overall management of the forests.

The earliest attempts for demarcation of forests commenced in 1868 were limited in the first instance to those deodar forests that were being worked. By 1887, Minniken completed the settlement and the demarcation but owing to certain discrepancies, it was not implemented till 1916 when Mr. Glover took it up again and finally completed it in 1921. The general results of management had a beneficial effect upon the growing stock and a check was imposed on the indiscriminate destruction. Attempts to introduce deodar by underplanting or sowing it under a complete canopy met with failures.

The first detailed working plan was prepared by Mr. Lace in 1892 for a period of twelve years 1892 to 1904.

Under Hart's plan, covering the period 1905-30, the forests were divided into five working circles only, three of which, namely the Satluj working circle, the Kinnaur working circle and the Sangnam working circle represented the old upper Bushahr, now lying within the boundaries of this district.

The Satluj working circle comprised all the valuable deodar forests from which a sustained yield under the selection system could be expected. The objects of management were to bring distribution of the age classes and to foster the spread of deodar. The Kinnaur working circle comprised mainly of areas in dry zone in which the conditions rendered it impossible to treat the forests by any other method than that of improvement fellings. The objects of the management were to maintain the forests for protection purposes and to improve them by making cautious fellings at fifteen years' intervals. Fellings in this circle were carried out in accordance with the prescriptions and some of the forests so much improved that they were brought under more intensive treatment by Hamilton.

The Sangnam circle comprised the poorest dry zone forests suitable only for protection, and remote fir and *kail* forests of the wet zone from which timber could not be extracted at a profit. All undemarcated forests

were also placed under this circle. No fellings were prescribed and removals during the currency of the plan were made by right-holders.

Owing to a great rise in demand for *kail* timber during the First World War unregulated felling of many healthy *kail* trees was carried out. But after the war a general slump was witnessed in the market which resulted in heavy congestion of the *kail* crops. Approximate area of workable forests rose to 8901 hectares in 1930 from 8092 hectares in 1905. The fellings under Hart's plan were heavier than those made under Lace's plan which resulted in more healthy results.

During the period from 1929 to 1960 the leased forests of upper Bushahr (now mostly Kinnaur) were managed under three working plans, namely Kitchingman's plan (1929-59), U.S. Madan's plan for the leased forests of western Pandra Bis (1947-58) and Hamilton's plan for Kinnaur forests (1930-60). A few forests of the Nachar and Pandra Bis ranges were managed directly by the erstwhile Bushahr State during the period 1929-60. Kitchingman, in his plan, made only indications to their future management. During the Second World War unregulated fellings of fir and spruce trees were carried out and 1,272 I class, 392 II class and 291 III class trees were removed. During 1948-59, fifty-nine hectares were prescribed for planting with deodar and twenty-six hectares with fir out of which only in about twelve hectares deodar plantation was established. Fir was completely ignored.

While Kitchingman took up the revision work of the Hart's plan in 1929 for the Kochi tract of the Satluj valley, Hamilton prepared the plan for the Kinnaur tract. The area covered by the plan was approximately 4,000 sq km out of which 21,933 hectares were demarcated forests. The working plan covering Kinnaur and Sarhan forest divisions for the period 1961-62 to 1975-76 has been recently revised.

Forest products

Timber may be described as principal product followed by firewood, grass, leaves, *chilgoza* and medicinal herbs. A Forest Research Division was created during 1961-62 to conduct research on various forestry problems. A commendable research feat of grafting of *chilgoza* on *chil* trees was undertaken for the first time. During 1964-65, about a hectare of *chilgoza* nursery was raised at a cost of Rs. 12,001, in the district. The district abounds in several herbs of medicinal value recognized in the *British Pharmacopoeia* as well as in the indigenous system of medicine. The important species are, *karu*, *ban kakri*, *kala zira*, belladonna, *dhoo*, *chireta*, *patish*, *artemisia*, *ephedra*, etc. In addition valerian roots are a source of important valerian oil used in the perfumery industry. The

dioscorea deltoidea whose tubers are the source of diosgenin has come to be recognized lately as a very important species. It occurs fairly widely in Kinnaur. Due to the rising demand and the high price offered in the market for the drugs, cultivation trials of a few species such as *kuth*, *zira*, *ephedra*, belladonna, aconite, atropa belladonna and *A. acuminata*, *digitalis lanata* and *D. Purpurea*, *artemisia maritima*, *saussurea lappa*, *anethum graveolens*, *podophyllum hexendrum*, *dioscorea deltoidea*, *aconitum heterophyllum* and *A. chasmanthum*, *valeriana Wallichii*, *carum carvi*, and *digitalis* were made, but were not continued and the active principal contents etc., were not fully evaluated. The demand for the crude drug is rapidly on the increase and, therefore, the possibilities of large scale cultivation of a few species are fairly bright.

Measures to secure scientific exploitation and development

The plantation of quick growing and soft wood trees, coniferous and broad-leaved species, is being planned so as to save the forests from being denuded. Large plantations are to be made on the areas without trees so as to avoid soil erosion. Degraded forests too are being rehabilitated. A great emphasis is being laid on the mechanised transportation and exploitation of forests so as to avoid wastage of the order of forty per cent caused by the present unscientific system. So far there exists no institute to provide training in forest education within the area of the district.

State assistance to agriculture

To increase agricultural production is the central theme of the government policy regarding agriculture. To achieve this objective government is making all out efforts by providing assistance to the agriculturists in a variety of ways. Most modern techniques on the latest scientific methods of agriculture are being brought to the knowledge of the farmers through the field staff of the Agriculture Department. Suitable advice is rendered through the same agency to help farmers improve their agricultural methods and practices. As far as possible improved agricultural implements, fertilizers, insecticides etc., are being introduced and propagated.

Financial assistance too is provided liberally. The State Government advances *taccavi* and other loans to the agriculturists for betterment of their lands, for planting orchards and purchase of bullocks. Legal aid is also given for conducting cases pertaining to grant of proprietary rights and possession of *nautor* land. The improved seeds, scientific manures and other essential requisites pertaining to

agriculture are supplied by the government at concessional rates. The rate of interest varies from four to five per cent in respect of different kinds of loans and recovery is effected in easy instalments spreading over a period ranging from one to fifteen years. The agriculturists have taken full advantage of these facilities and improved their economic condition by investing the amounts of loans in productive ventures. The following table will give an idea of the amount of loans granted under various Acts since the formation of the district.

Loans Advanced Under Act No. XIX of 1883

Year	For land improvement	For fire and flood sufferers
	Rs.	Rs.
1960-61	3,50,000	1,00,000
1961-62	4,00,000	500
1962-63	3,50,000	—
1963-64	4,00,000	8,000
1964-65	1,00,000	—
1965-66	4,95,000	—

Loans Advanced Under Act No. XII of 1884

Year	For horticultural purposes	For establishment of garden colonies
	Rs.	Rs.
1960-61	31,00,000	—
1961-62	40,00,000	40,00,000
1962-63	53,75,000	35,75,000
1963-64	50,00,000	8,10,000
1964-65	38,95,000	18,83,000
1965-66	33,21,000	9,69,400

Loans Advanced Under Low Income Group Housing Scheme and Village Housing Project Scheme

Year	LIGHS	VHPS
	Rs.	Rs.
1960-61	9,800	—
1961-62	68,000	33,920
1962-63	80,000	8,480
1963-64	74,670	14,390
1964-65	59,050	9,750
1965-66	49,000	4,800

Floods, famines and droughts

Floods of high destructive nature are unknown. Main damage caused by floods is in the form of soil erosion. Continued droughts

sometimes cause conditions like famines here and there. The shortage of foodgrains during such scarcity periods is made good by imports. Droughts are experienced but not frequently. In the living memory no mentionable drought has been experienced. To overcome the problem of floods as far as possible irrigation channels have been constructed. These are fed by snow waters through small rivulets.

CHAPTER V INDUSTRIES

Old time industries

Kinnaur does not find mention in the context of industries in any ancient book. It is mostly an agricultural tract. There is no available evidence to suggest that there was any important industry except wool weaving industry about which some of the travellers like James Baillie Fraser, Capt. Alexander Gerard and Rahul Sankrityayan did mention in their works. People depended in the past on their own economy as the area was absolutely secluded from the rest of the country. Every village had to be self sufficient and the people had to be provided with their necessities among themselves. The dry and cold climate forced them to take to a subsidiary occupation of weaving woollen cloth. Their devotion to deities inspired them to make metal sculptures, artistic metalwares, musical instruments, fresco painting and wood-carving in the local temples. Still unsatiated with the various forms of embellishments, embroidery, artificial flowers etc. were invented. Their high æsthetic sense found expression in many original designs for decorating certain handicraft pieces. It seems that there also has been in practice some cottage industries like silver-smithy, *pono* (shoe) making, carpentry, black-smithy, basketry, oil extraction, distilling, bee keeping and painting.

James¹ Baillie Fraser throws some light on the manufacture of woollen material in the erstwhile Bushahr State, including Kinnaur. He mentions that the fabrication of woollen cloths of several kinds was the only product of the district. Good quality wool was available in the district and still better quality was imported from Bhutan. Blankets of the quality of finest English ones, woollen cloth, and fine webs were produced of a very fine fabric. These woollens were produced for self consumption and for a casual sale in the neighbouring states. Each shawl cost about seven to ten rupees during about 1820. Their fineness did not vary much and they were made in two breadths sewed together, forming a piece of one and three quarters to two metres broad by four metres long. Gerard² observed that the people, in eighteen-twenties occupied their time, in the winter season, in weaving blankets, caps, shoes etc.

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1. Fraser, James Baillie, *Journal of a Tour through part of the snowy Range of the Himala Mountains, and to the sources of the rivers Jumna and Ganges, 1820, pp. 273-274.*
 2. Gerard, Captain, *An Account of Koonawur, in the Himalayas etc, etc, 1841 p. 81*

According to the *Simla District Gazetteer of 1888-89* good blankets, *gudmas* and other woollen shawls were woven in the Bushahr State. Some of the *gudmas* were soft and thick and woven in grey and brown stripes. Colour was seldom used and one monotonous isabel tint seemed to be the rule. Coarse type of blanket weaving was a domestic occupation. Embroidery work was totally absent. Shuttles made at Amritsar (Punjab) were used. Hand¹ weaving of cloth and blankets was the main industry. Sangnam and Kanam villages were known for their thick white fleecy *gudmas*. Besides, few articles of brass, copper and bell metal, like prayer wheels, horns, and other musical instruments, for temple use, and typical ornaments of women were manufactured. The Salvation² Army at Chini had introduced improvements in weaving techniques during 1914-15. A weaving school was opened and each pupil used to get some subsidy. The weaving master was trained from the Salvation Army School at Ludhiana.

Rahul³ Sankrityayan has stated that the Kanauras manufacture cloth for sale at the *lavi* fair which both sexes attend in large number, to dispose of their merchandise and in return purchase the goods of the down country. He was informed that in the past, *gudmas*, *pattus* and *pattis* were sold at Rampur cheaper than even in Sangnam and Puh.

Textile industry—There is a good sprinkling of shepherds who rear flocks of sheep providing wool for the manufacture of home-spun woollen cloth. The local woollen art fabrics had enjoyed undisputed supremacy in the erstwhile Bushahr State. The Bushahr rulers paid sufficient attention to develop and keep alive this handicraft industry. The woollen fabrics may be articles of luxury to the outsiders but have been necessities for the local people because of the cold climate. Exquisite designs came into vogue as a result of giving expression to religious rituals and sentiments. This handicraft industry, still alive, has materially benefited the local economy by providing subsidiary income to the craftsmen. Joint family system, still very much in existence here, affords easy basis for division of labour in a family. One of the male members is usually charged with the job of rearing sheep and goats, another looks after the domestic affairs and women to the spinning work. Shearing of sheep is usually done twice and occasionally even thrice a year. Thereafter the fleece so obtained is washed in the water and then dried. Combing or carding follows by means of *shorcho* (wooden combs) at home by the women-folk. Wool is spun both by men and women the division being that warp is spun by men and weft by women, on a spindle which consists of a

bamboo stick, generally about a quarter metre in length, inserted in a wooden disc. The yarn is handed over to an artisan who spreads it on the ground, passing it round pegs fixed at certain distances, equal to the length of the article to be manufactured. Weaving is invariably done by the Harijans, found almost in every village. Weaving operations, as a rule, are undertaken in the winter as the weavers are engaged in agricultural works during the other seasons. Only in exceptional cases, such as to execute special orders to cater to the needs of marriages etc., the weaving may be taken up in other seasons also.

Mr. Schreve, a Moravian Missionary had introduced a handloom from Europe towards the end of nineteenth century and taught the people of Kinnaur to make blankets. A pit-loom is set in a room usually in lower storey of residential house or sometimes in a separate hut meant exclusively for this purpose. One end of the loom in this room is fixed to a peg driven in a wall while the other end rests on the earth. The yarn spread on the pegs is transferred carefully on to the loom and fixed in it vertically, systematically avoiding any overlapping and entanglement of the threads. The yarn thus set is called *rin* (warp) in local dialect. The process is followed by filling yarn called *pyud* (weft) in the throw-shuttle to be crossed horizontally into the warp while weaving. The process continues repeatedly crossing the weft alternately in-between the vertical yarn strings till at last the required length is secured.

The piece, is then taken out of the loom and finishing touch is given by removing the undesired threads. The un-woven warp threads called *chang* (hem) in local parlance, remaining on both the fringes of the piece are carded and made in the required designs. Average production, per weaver per day, is about two to three metres of cloth. A weaver is engaged for about four months in a year in this industry. For softening the finished product it is soaked into water and is bruised. The main articles manufactured are *pattus* (shawls), *dohris* (woollen garments), *chhanli* (blankets), *pattis* (tweeds) and mufflers etc. of various designs. *Gudmas* are woven in Sangnam. Tools and equipments used include, reeds, healds, throw-shuttle, peg warp, *tasrat*, spindle, *koru*, *khiri*, hammer, chisel, hand saw, small scissors, needle, small lidless wooden box and throw-shuttle loom.

The age old and comparatively crude method of weaving is said to be uneconomic resulting in low quality of production and small income.

1. *Simla Hill States Gazetteer*, 1910, p. 60

2. Administration Report of Bushahr State 1914-15.

3. Sankrityayan, Rahul, *Kinner Desh*, 1956, pp. 67-68.

In all 408 cottage establishments wove *dohri*, *pattus* and *gudmas* which provided part-time employment to 816 persons in 1961. Nachar block with 192 units claimed the first position in this regard, Puh block stood second with 177 establishments and Kalpa block ranked third with 39. The workmanship of the craftsmen of Puh block is said to be superior to that of Kalpa and Nachar blocks. In the past Puh block, being closer to the trade route, could easily get wool from Tibet. But Kalpa and Nachar blocks comparatively farther from Tibet could enjoy lesser advantage in this respect.

Due to the lack of transport facilities this manufacture is done for home-consumption or against order for which the materials are supplied by the customers and the craftsmen are only paid the manufacturing charges. Surplus pieces, if any are bartered away locally. Only neglected number of fabricated pieces are displayed at *lavi* fair at Rampur. Previously the products were exported to Tibet, which practice has now ceased due to suspension of trade relations with China.

Metalware and ornaments—The artisans engaged in this industry, locally called Domangs, are scattered all over the district. There is at least one in every village engaged in this part-time occupation. They do solid and hollow casting, prepare engraved metalware, ornaments and traditional musical instruments, on order. In all 117 cottage establishments manufactured metalware and ornaments providing part-time employment to 234 persons in 1961. Kalpa block claimed first position having fifty-seven establishments, Puh block was second having forty-two establishments and Nachar block ranked third with only eighteen establishments. The metal is provided by the customers themselves. The workmanship charges are, as a rule, paid in kind. Workshop of silversmith is usually in the ground floor of the house, the facade of which is porticoed to let the light enter. The skin-blower, called *sapkhu*, is set in the hearth to ignite the charcoal to flames. These crafts are in vogue since time immemorial. It is said that these crafts have been imported from Tibet by the Tibetan master craftsmen. The religious sentiments towards local deities imparted impetus to these crafts. Local demand kept these crafts alive to the present day. The work of old artists depicted through frescoes, carvings and engravings on the temples of the area has been the source of inspiration to generations of craftsmen to make various articles with exquisite designs. The process of manufacture in general is as follows. The metal, put in a *khorich* (crucible), is heated to melt. The molten metal is put in a mould. The liquid solidifies and takes the shape of a rod or lumb. This is hammered repeatedly on an anvil fixed in a wooden log set near the hearth, to convert the metal into a sheet or desired form of ornament. The article thus prepared is put into

the fire for sometimes to be heated slightly. It is then boiled in apricot juice and washed with a brush. The main tools used in this process are, skin-blower, anvil, tongs, hammer, chisel and moulds. Skin-blowers are made locally of the goat-skin which cost seven to ten rupees and anvil is imported from Rampur costing four to seven rupees. Hammer is either manufactured locally at a cost ranging from five to seven rupees, or sometimes imported from Rampur. Chisel, costing a rupee each, is made locally. The same artisan when required to do so produces gold ornaments namely *murki* (ear-ring), *balu* (nose-ring), *chander sen har* (necklace) and *long* (nose ornament) also, on order.

Domangs also do engraving on the ornaments like *tungma*. Enamelling on *chak* and *zutti* is also done for which precious stones are, procured and impressed in the ornament in a systematic manner corresponding to a regular design to make it more elegant. The ornament in this position is heated red and then allowed to cool down. Usually gems with a hue of blue, black, green and red are used. For engraving *tungma* the design is first carved with a chisel on the ornament when it is hot. On the carved impressions gems of various shades are studded. Images of local deities, figures of domestic and wild animals are manufactured by casting method known as *cire perdue* process in the following manner. The original model is made of wax, light green in shade. The modelling, though delicate and simplified, expresses all the grace of the figure to be attempted. The craftsman sits on the floor with burning charcoal in an earthen pot set on his left and a lump of bee-wax in his left hand. The wax melts with the heat. The right hand gives a crude shape to the wax and the final shape is given with the help of an iron nail. The craftsman endeavours to bring out all the grace of the figure by applying the slightly heated nail in a systematic manner, to the crude figure. When the wax model is finished burning charcoal is removed lest it should spoil the figure by melting. This wax is coated with refined clay paste. The paste is applied gradually on the model leaving an opening at the top. Finally it is coated with a thick clay paste. The figure is then kept in a safe place for natural drying. When dried the model is gently heated and the wax starts melting which flows out through the opening. The melted metal is then poured through the clay opening at the top. The metal takes the place of the wax inside the hollow of the clay. The clay crust is either broken or washed. The solid cast figure is further chiselled and embellished with hand tools made by the craftsman himself.

The wax model is made in the similar manner, as described above, by the craftsman in hollow casting process. The wax model is covered with coats of refined clay paste leaving opening at the top and bottom. The bottom opening is bigger than the top. The wax model is gradually hollowed with

the help of an iron nail. A lump of refined clay paste is skillfully inserted in the hollow of the wax model and the bottom opening sealed with coats of refined clay paste. It is left for natural drying for about four days. It is then gently heated so that the melted wax drains out through clay opening. The melted metal is then poured through the clay opening. The clay coat is either broken apart or removed by applying water. The lump of clay inserted through the bottom is gradually removed with the help of iron nail and water, thus creating a hollow inside the metal cast. The hollow cast figure is further chiselled and embellished with hand tools. Sometime in the hollow portion of the metal cast precious stones are inserted with various other materials. To insert these the bottom opening is sealed with metals in such a manner that the joints are invisible. In beating and raising process the required metal is melted and converted into rods which are hammered into thin sheets. Thin sheet is cut into a required size and shaped into a desired article by bending, twisting and beating. A thick paste of rosin, available locally, is spread on a wooden plank. The shaped metal sheet is set on the rosin with the reverse side facing the craftsman. The desired design or figure is raised, on the obverse which is set in the rosin, with the help of small chisel and hammer, that is, the craftsman works on the reverse side. The obverse side is protected by the thick paste of rosin which also helps in raising the surface of the metal sheet as the paste gives the shape to the raised portions. Thus the article is shaped. Sometimes it is washed with hot juice of apricot, made locally, to remove the undesired material. If necessary, the figure is further touched up with chisel on the obverse. Door handles (lion's head), musical instruments and some of the ornaments are also made likewise.

Silver currency, once much in circulation is no longer in existence and thus a good part of silver that was used for ornaments is not available. Due to this non-availability the industry is on the decline.

Blacksmithy—The members of Domang community manufacture all kinds of agricultural implements and musical instruments for local temples. Workshop of a Domang is usually in the ground floor of his house. In some cases where the house may be single storied the workshop is in front of the house by raising walls on three sides and leaving one side open. Skin bellow is fixed to the hearth. The tools used by the craftsmen include crucible, pincer, chisel, hammer, anvil and *sapkhol*. To process *bham* (a large kettle-drum), to start with, copper iron is purified by melting it with some common salt for two or three times. The purified metal is put into crucible and heated to melt. Molten metal is transferred to a vessel (mould) made of ash where it solidifies. The ash vessel is later on

broken and the metal is taken out. The metal thus obtained is repeatedly hammered on an anvil. The wrought sheet is given a concave shape and the joints are welded together by means of alloy of brass, zinc, silver and ammonium chloride. The upper side which is circular in shape is mounted with hide and tied properly with leather strings. Cost of the material used ranges between one hundred and sixty and one hundred and eighty rupees. Manufacture charges come to sixty rupees, approximately. Another instrument *nagari-cho* (pair of kettle-drums) is also processed by a similar manner. The manufacture of other articles like *ronsheeng* (hornpipe), and *dumko* (a vessel used for distillation of local wine) undergo slightly different processes.

Pono making industry—*Pono*, the most original and crude footwear, is manufactured by Chamangs. To supply the needs of the local people *pono* came to be manufactured locally. Availability of raw material, i.e. wool and leather, also gave fillip to this industry. Leather is cut to a required size and shape. All around the edges of the leather sole small holes are made closely. A leather lace is made to pass through all these holes. The bottom is thus ready. The woven piece of rough cloth is then stitched, with an iron needle, to the sole or bottom. To manufacture embroidered shoe, called *tapru-se-balzanu-pono* or *zomba* an embroidered woven piece of cloth is used. The sole of a *zomba* is made of it by stitching with the threads made from goats' hair for making the sole durable and strong. Two pieces of equal breadth and length of soft woollen cloth are cut into required size. These are stitched together. The two pieces (vamp) are stitched from the toe portion giving 'V' shape and from the back portion giving 'U' shape. The various local patterns are then embroidered on the vamp. The *pono* costs eight to fifteen rupees depending upon the workmanship. The district has fifteen establishments providing part-time establishment. These shoes till the recent past were bartered but now this system is on the decline. This industry is decaying due to availability of ready made leather shoes. Moreover, due to the change in the tastes and fashion, people now prefer leather shoes. Consequently, the local Chamangs have veered round to manufacturing leather shoes.

Wood work—The people of Ores community have been engaging themselves in the occupation of carpentry. Gerard informs that *porwa* or vessels of juniper-wood made at Sangnam and Ropa, and much resembling Scotch cogs formed, among other things, an item of export from Kinnaur to Ladakh. A carpenter is needed in about every village to manufacture wooden utensils for domestic use, to make agricultural implements and to construct houses. There are no separate craftsmen who exclusively make wooden carved articles etc. except the craftsmen of Kalpa, Thangi,

Rarang, Sapni, Batseri, Shaung, Bari and Bhabha. The most typical wooden items of utensil are *zom*, *zwach*, *gam* and *chaoring*. A tree, usually hollow, is felled and cut into pieces of required size. A piece is planed and is given a required shape. Where the wooden log is not hollow it has to be hollowed first. The vessel is generally turned out of a single piece of wood.

All the wooden parts of the agricultural implements are processed by the carpenters. They play an important role in the construction of houses and their adornment by wood carvings particularly are found on the walls and fringes of temples. Carvings on the door frames and door jambs of a sanctuary claim admiration. A few households, influenced by the modern ideas, now like to have cots and other essential items of furniture manufactured by the carpenters. Carpenter is supplied wood by the customers and workmanship charges, usually, are paid either on traditional barter system or, occasionally, on cash payments. The carvings on temples and local houses is the common site. The carvings of Nachar really deserve appreciation. Due to the low cost and durability these articles are still popular and this industry is existent.

Basketry—Basketry industry is practised by the Chamang community especially at places of availability of material like *rajial*, *chako kastyang* and *reg-shing*. The only tools used in this industry are sickle and adze purchased locally. Main articles manufactured are *koting* (conical basket), *chhatoch* (basket with a handle) and *changor* (basket). Basketry making is done usually in winter months. Sticks of trees mentioned above are ripped and twigs are prepared. Twigs of *reg-shing* are adjusted vertically to form a frame of desired shape of an article. Twigs of *rajial* and *chako kastyang* are joined together and are run through the frame of *reg shing* thus weaving the body. This interweaving is continued till the desired length is achieved. The prices of *koting*, *chhatoch* and *changor* vary between two and three rupees, one and two rupees, and again one to two rupees, respectively. Because loads have to be carried on the backs the *koting* is in great demand and so the emphasis is also on preparing this type of baskets. Other baskets are used for household needs. This craft is still existent as was in the past and has not yet suffered decay.

Oil extracting industry—Oil is locally extracted, for domestic use in almost all the households out of the kernels of *chul*, *reg* and *ka* after the age old process. Kernels of stones of apricots, peaches and walnuts are taken out and dried in the sun for two to three days. Dried kernels are put into *kaning* (stone mortar) and pounded repeatedly with the pestle to a thick paste. Paste is then put into a cauldron and highly heated. Small cakes are made out of heated paste. Each cake is placed on the edge of the mortar and pressed with heavy hands so that oil starts oozing out of the cake and running into the mortar. The oil

so obtained is conveyed from the mortar into a metal or an earthen-ware, locally called, *gagri* or *pathu* respectively.

Oil cakes are crumpled into small pieces and dried in the sun for a couple of days and again subjected to the original process to get the remaining oil out of them. The oil cakes are then used as cattle food. This cottage industry has not suffered any decline though oils from the plains have also started coming on the scene.

Distilling industry—Distilled or fermented liquor is prepared for household use, by employing indigenous methods and implements out of all kinds of fruits and grains. *Arak* or *rakh* or *phasur* and *dakhangu phasur* or *anguri* are prepared by distillation and *ningo*, *chhang* or *shudung* and *boja* by fermentation. The following description of distillation primarily relates to Hangrang area though in essence it holds good for other parts of the district. *Arak* is distilled from *tag* or *nanga jo* (barley). Requisite quantity of barley is put in a large copper or brass vessel locally called *chagjan*. Water is added in such a quantity that the same may get absorbed into the grains by the time they get matured. The matured grains are heated to boil. When the grains are softened and the water dries up the vessel is put aside. The grains are taken out of the vessel, spread over a blanket and allowed to cool. When cooled powder of *phap* is sprinkled over them at the rate of seven tablets of *phap* to five *kods* or *tamats* of the barley. *Phap* is a special ingredient or fermenting agent not prepared locally but brought from places like Chango and Rampur. Thirty to forty tablets of *phap* can be had for a rupee. After sprinkling, the powder is mixed with the grains by rubbing with hands. The grains are then put into an ordinary gunny bag or a local bag made out of hair of goats. The bag is closed and kept carefully duly covered with rags, bags and pieces of cloth. The hole is overlaid with a stopper. This is done to provide warmth to the grains. If properly warmed the grains ferment within about forty hours otherwise they may take longer to ferment. When the grains reach the desired degree of maturity they start giving out a special sweet smell. If touched the grains can be felt warm. These have by now softened to a great degree and are somewhat sweet and tasty. The peculiar odour, the warmth, the softened state and the sweet taste are signs indicating that the grains have been properly fermented and are ripe for further processing. These are then transferred to an earthen pot locally called *zama*. Besides the mouth, the pot has a small hole in its bottom. The mouth of the pot is covered with a circular piece of stone and made air-tight by plastering with clay and dung. The bottom hole is closed with a wooden cork. The earthen pot containing grains is either put in a cool place if it is the summer season or placed at a warm place if it is the winter. The pot is allowed to lie for about twenty days in the summer season and for about a month or

even two months during the winter season. Thereafter, as a prelude to distillation, the grains are taken out of the *zama* and poured into another pot, locally called *dig*. *Sampa*, at the rate of one *thai* to one *kod* of grains, is mixed with the grains. At this stage water almost equal to the quantity of grains is also added. The grains and water are well stirred with a wooden stick. The mixture is allowed to remain in the *dig* for one day. Then the *dig* is kept on the hearth and heat is applied. Now again some water, almost equal to one-fourth of the water added on the previous day, is added. The *dig* is now covered with a stone lid, locally known as *khalap*, having a small hole in its centre. The edges of the lid and the mouth of the *dig* are made air-tight by plastering them with mud. Around the central hole in the stone lid is put up a small ridge of dough. The stone lid is then overlaid with another wooden instrument locally called *thokche* which has also a hole equal and corresponding to the hole in the lid. Both the holes are joined together. The dough already applied there prevents the steam to run out. The wooden device has also a hollowed pipe-like projection to one side. The other end of this pipe holds a woollen thread or wool through which the cooled steam percolates into another pot called *lukche* set below the end of the pipe. On the upper edges of the *thokche*, which is hollow, dough is applied. On it is kept a basin, locally called *kundo*, full of cold water. This water is repeatedly changed as soon as it gets hot. This process of distillation continues so long as the liquor has been distilled to a desired quantity. If superior quantity is desired only three-and-a-half bottles will be produced out of five *tamats* of grains. One-and-a-half bottles of a lower quality may be distilled more.

Dakhangu phasur (anguri) is prepared out of *dakhang* (grapes) by distillation. For processing *ningo* the initial processes are the same till the grains have been put into *jama* (an earthen pot). *Jamas* are of two types; one having a hole in the bottom and the other without a hole. For distillation purposes hole-less *jama* is used. To prepare *ningo*, *chhang* and *boja*, a *jama* with a hole in the bottom is employed. To produce *ningo* a little water, say about two bottles, is poured into the *jama*. After twenty or twenty-five days the lower hole is opened and the water previously added gets percolated in a pot. About half the quantity of water comes out. This is the best quality and is called *ningo*. The hole is again closed.

After *ningo* has been prepared water is again poured into the *jama* about 25 mm above the level of the grain. This water is allowed to remain in this position for about twelve hours. Thereafter the hole is again opened. The water percolates and the *chhang* is ready. The grains so used are finally fed to the cattle.

For the preparation of *boja* too the process is the same till the grains have been poured into the *jama*. If the *boja* is needed urgently the pouring of the grains into the *jama* may be dispensed with. The grains are poured into a copper pot and rubbed with hands so much so that the mixture of grains and water is turned into a thin paste. This paste is filtered by means of a seive and the liquid is ready to serve.

Liquor made is stored in the house for daily use or for festivals and ceremonies. So far this industry has not decayed.

Bee-keeping—Bees are locally called *wasyang*. Bee-keeping is practised almost all through the lower part of the district. Some foreigners have left interesting accounts about bee-keeping. Here is one. “*To-day I saw several places where the ground was torn up by bears, in search of the honey of the field-bee, which is common at this height and situation. The hive-bee, such as we find in Europe, is also a native of this part of the interior; but they are less numerous than in the tracts bordering on the plains; they are lodged in apertures in the walls of the houses, and the honey is procured without destroying the bees, as they are smoked out with burnt straw; a far more rational operation than the barbarous method in use amongst more civilized people. About half the honey only is generally taken away; consequently the bees return to the rest. In elevated villages the honey is collected once a year, but in milder climates both in Spring and Autumn: the latter season produces the finest quality”. In Yula village nearly every house contains a hive. The system of apiculture is said to be very primitive. The *yang bokhar* (hive) either consists of a box or a stone slab having a small hole, enclosing an opening in the wall of the house. The hive is invariably set at a sunny point beneath the eaves. In the outer side of the box or the hollow in the wall to serve as an exit and entrance for the bees. The inner side is so contrived that it can be opened at will without disturbing the bees. As a rule the hive is opened only twice a year, once in March and again in September, when all the *wass* (honey) is extracted. Bees are smoked out through the entrance hole with a smouldering rag or with a smoking ember of wood. After extraction the honey is cleaned by filtering. Hives yield wax also. The Agriculture Department has posted an Assistant Entomologist for Kinnaur for giving impetus and providing facilities for the development of apiculture on scientific lines. Substantial progress has already been made in this regard in Kalpa and Nachar blocks, where apart from introducing a training programme in bee-keeping, scientific bee-hives have been distributed at subsidized rates to various farmers, who have been able to thereby supplement their income.

*Lloyd, William Gerard Alexander, *Narrative of a journey from Caunpoor to the Boorendo Pass in the Himalaya Mountains*, Vol. II, p. 279.

Honey is locally used as such. It is also either turned into distilled liquor locally called *wassphasur* or fermented liquor known as *wasu shudung*. The surplus, if any, is sold.

Painting—Many local temples, contain wall paintings. The artists are professional and hereditary. One Sharp Singhe of Nesang spent nine years in Tibet to learn this art. He is a notable painter. In Lippa, Rispa and Nesang are a few painters well known for their painting of fresh plaster, cloth and paper in Tibetan style. The designs are absolutely local and religious themes are attempted. The fresco painters of Lippa also make painted clay statues.

Paper making industry—A few craftsmen in Ropa are engaged in the manufacture of paper out of *ziko* bark. The bark is boiled and ground. Ground paste is mixed with water so as to make paper pulp. Water is sieved out of the pulp which is then spread on a wet piece of muslin and allowed to dry before tearing from the muslin. This paper is used for painting.

Chambaka flower making industry—It is artificial flower made by almost all Kinnaur women, from a very thin paper-like material available in Sirmur, Mandi and Bilaspur districts. The material is given the shape of semi-circle and a few pieces are tied with straw so as to make a bunch of *chambaka*. These are used on caps. Increasing inflow of factory-made goods is threatening to destroy tribal arts and crafts.

INDUSTRIES AND MANUFACTURES

Power

The main sources of power supply constituted human beings, cattle and water only till 1965 when, for the first time, the facility of hydro-electricity was provided in the district through Nogli Hydro electric power station having a 22 KVHT line. In 1968 under Mehbar Micro hydel scheme, two generators of 100 KW each were also commissioned. The electric supply system of the area is interconnected also with Jutogh 66 KV grid sub-station fed from Bhakra complex. Thus there exists a proper arrangement for continuity of supply to the area electrified in the district. Till March, 1971 nine industrial, 1503 commercial and 326 domestic consumers have been connected and eighteen census villages have been electrified. These villages are Sapni, Barua-Batwari, Buneug Sering, Rogi, Yuwarangi, Urni, Miru, Taranda, Sungra, Natpa, Lower and Upper Pangi, Chini, Lower and Upper Duni, Kothi, Telangi, Pawari, Sangla and Kilba.

Mining—Main minerals of which traces have been found include copper, iron pyrites, gold, silver, pegmatites, mica, talc china-clay, gypsum, lime-stones and dolomites.

About three kilometres to the north-west of the forest rest-house at Purbani, tahsil Kalpa, there is a band of pyrites among the gneiss and is estimated to continue to a considerable distance. The band dips above 70° to the north-east. There are evidences of old workings.

Iron¹ was stated to be produced in various parts of the country and lead generally found. It is likewise probable that copper exists in some parts of the district, and several other sources of hidden wealth may lie concealed in these rude tracts. Gerard² observed that gold dust was sometimes found in small quantities, at a sandy place below Morang in Satluj, which is commonly called Zung-Tee; the first word means gold, and the latter water. This occurrence, however, seems too poor for economical exploitation.

About two kilometres east of Chagaon in a large pegmatite vein, nearly fifty metres thick, silver is reported to occur and the evidences of old working have been recorded.

Mica recovered from the surficial workings is not of good quality but chances exist of getting good quality mica at depths.

The evidence of mining of copper in Ropa valley was also seen by Gerard³. He observed a copper-mine in Ropa valley and on the opposite bank of the river, facing the pass, a very productive one. This was stated to have been worked a few years earlier than 1841; but the miner (who was a native of Chamba) after levying a large sum of money from the inhabitants of Ropa, disappeared, and no further progress was made since.

Slates are quarried at Bhabha in Nachar tahsil; at Kalpa, Khangi, Rogi and Yuwarangi in Kalpa tahsil; at Barua, Chasu, Kilba and Rokti in Sangla tahsil; and at Rarang in Puh tahsil.

Large and medium scale industries

There exists no large scale industry. Chances are remote at least in the non-distant future for the establishment of large scale industries. During the Second Plan period a distillery at Kalpa was proposed to be started. But it has not yet come into existence. In the Third Plan no provision existed for establishment of large scale industries. The possibility for setting up medium and small scale forest-based and agro-based industries

1. Fraser, James Baillie, *Journal of a Tour through part of the Snowy Range of the Himala Mountains, and to the sources of the rivers Jumna and Ganges, 1820*, p. 273.

2. Gerard, Captain Alexander, *An Account of Koonawur, in the Himalayas etc. etc.*, 1841, p. 27.

3. *Ibid* p. 273.

are being explored. These industries, if found remunerative, are likely to be established during the Fourth Five Year Plan. The progress of such industries will very much depend on the extent to which the hydro-electric potential is exploited.

In considering the possibilities of setting up fruit-based industries, the under-mentioned figures obtained from the 1965 Family-wise Socio Economic Survey may be of interest.

Sl. No.	Fruits	Total No.	Estimated yield in Kg
1.	Wild apricots	68075	4186877
2.	Apricots	2439	52148
3.	Wild peaches	13113	684985
4.	Peaches	2424	42029
5.	Wild apples	4811	196782
6.	Apples	9996	423181
7.	Grapes (Improved)	126	3691
8.	Grapes (Local)	1987	112567
9.	Walnuts	6656	2817397
10.	Walnuts (<i>kagzi</i>)	3823	2586091
11.	Almond (<i>katha</i>)	702	7808
12.	Almond (<i>kagzi</i>)	261	1370

Small scale and cottage industries

Out of the total population of 40,980 as many as 198 persons are engaged in mining quarrying, live-stock, forestry, fishing, plantation etc., and twenty-three in household industry according to 1961 Census. Cottage industries like spinning and weaving of woollens are found. The district excels other parts of Himachal Pradesh in the manufacture of *gudmas* and *namdas* which have earned name for their quality and artistic get up. In order to accelerate the industrial activities many production-cum-training and production-cum-common facility centres have been established to impart training in various arts and crafts to create an industrial bias and to introduce new designs and techniques through such centres. By 1966 there were as many as eighteen such mentionable centres, under the Industries Department. Blanket and Tweed Production Centre, Nachar, started functioning in 1961 with an outlay of Rs. 25,000. Articles, being manufactured in this centre include blankets, tweeds, serge, *pattis* and *pattus*. Local artisans are availing common facility from this centre. The centre made sales of Rs. 49,509 up to 1965-66.

Gudma and *Namda* Production Centre, Spilo started functioning in 1961 to provide common facilities to the local artisans in preparing

gudmas and *namdas*. By the end of 1966 the manufacture of *chugdon* was also started. Wool is being supplied to the local spinners and weavers on a decentralisation basis for spinning and weaving for which the workers were paid wages. Sale proceeds of the centre up to 1965-66 amounted to Rs. 24,924.

Wood Working Centre, Duni, was opened in 1962 and started manufacturing furniture, required in various offices. The centre was merged early in 1964 with the cluster centre which has taken over the task of supply of furniture.

Carpets and Druggets Production Centre, Sangla, started functioning on October 1, 1961 at an investment of Rs. 7,000. It manufactures carpets, druggets, *pattis*, and *dohris* for which there is a large local demand. Local artisans are availing themselves of a common facility in the above trade. The centre made sales worth Rs. 12,849 up to 1965-66.

Leather Centre, Kilba has imparted training in leather work at Kalpa, Sangla and Kilba. The centre in 1964 was converted into a production centre due to lack of trainees and is now manufacturing shoes, *chappals*, attache cases etc. Sales till 1965-66 valued at Rs. 14,314. The centre was transferred to Mandi District of Himachal Pradesh in 1968.

Leather Embroidery Centre, Spilo was started with a capital outlay of Rs. 2,000 in 1961 and was engaged in the craft of shoe embroidery. An additional sum of Rs. 10,000 was added to the capital outlay in 1964. The unit was subsequently merged with the centre of Kilba already mentioned.

Government Craft Institute, Kalpa, started functioning in July, 1962, to impart training in various crafts i.e. tailoring, cutting, knitting and embroidery. In all thirty-one girls were trained up to 1965-66. Subsequently in 1968 this unit was merged in Cluster Centre, Duni now called Rural Industrial Training Institute.

A weaving centre was first started at Duni and was subsequently shifted to Rarang for the purpose of imparting training with improved fly-shuttle looms in weaving, and also in spinning. In all fifty-two persons were trained at these two centres till 1965-66. The third weaving centre at Sholtu has been established to impart training in weaving and spinning. Now all these centres have been merged with the Blanket and Tweed Production Centre, Nachar. This centre later came to be known as the Government Industrial Extension Centre (Textile). This centre aims at encouraging and reviving the old art of blankets and tweeds. It also produces shawls and *pattus*. The production in this unit was to the

tune of Rs. 22,918 in 1962-63, Rs. 3,541 in 1963-64, Rs. 17,170 in 1964-65, Rs. 35,132 in 1965-66, Rs. 51,854 in 1966-67, Rs. 6,298 in 1967-68, Rs. 7,097 in 1968-69, and Rs. 10,191 in 1969-70. Government Tailoring Centre, Nachar started functioning in 1961 at Kalpa and was shifted to Nachar in 1962 for imparting training in tailoring and cutting. In all forty-six trainees were trained till 1965-66. The unit has since been shifted to Nigulsari.

Nagal-ware Centre, Paunda was started in 1962 to impart training in the preparation of baskets, chicks, toys etc. Thirty trainees were trained till 1965-66. Since this centre did not prove any useful purpose it came to a close in 1968.

Hosiery Centre, Morang was transferred from Theog and started functioning at Puh in 1963. The centre has imparted training in preparing sweaters, socks, jerseys etc. and had been imparting training at Morang. It trained eighteen persons up to 1965-66. The centre has now been closed for want of raw material. Oil Milling Centre, Nachar came into existence in 1964 for the milling of wild apricot and mustard seeds and providing facilities to the local artisans. The sale proceeds of the centre amounted to Rs. 6223 till 1965-66.

The articles manufactured in the above centres are either consumed by the local people or placed in the Himachal Pradesh Emporia located at Kalpa and various other places, for sale. During 1964-65 as many as eighty-nine persons were trained. In all these training centres articles worth Rs. 27,556 were produced, and articles worth Rs. 49,975 were sold during that year. Every step is taken to rehabilitate the passed out trainees providing them necessary tools and equipments on subsidized rates. Trainees, after completing their training, in these centres either form co-operatives or start their own business. The government also grants loans to the people for the establishment and development of industries.

Now, all these departmental institutions, have been transferred either to the Himachal Pradesh State Small Industries Corporation, registered on 20th October, 1966 as a limited concern under the *Company's Act, 1956*, or to the Himachal Pradesh Khadi Village Industries Board except the following institutions which are still being run by the Industries Department.

1. Rural Industrial Training Institute at Kalpa.
2. Tailoring Training Institute, Puh,
3. Tailoring Training Institute, Ribba, and
4. Tailoring Training Institute, Nigulsari.

Under the *Punjab State Aid to Industries Act, (Himachal Pradesh Amendment 1964)* Rs. 26,625 were advanced in 1965-66, Rs. 27,700 in 1966-67, Rs. 29,000 in 1967-68, Rs. 15,000 in 1968-69 and Rs. 5,000 in 1969-70 for the development and establishment of industries.

Industrial potential.

Prospects of mineral-based industries are bound to remain gloomy till the basic step of undertaking comprehensive and thorough geological survey is taken and completed in order to assess the mineral resources. The exploitation of minerals, if they happen to exist in appreciable quantity and of reasonably valuable quality would depend on the availability of cheap power supply and well-developed means of communication. Planning of roads and electrification programme, by taking into account the needs of the mineral infested areas, can, therefore, go a long way in the exploitation of minerals.

China-clay deposits found near Lippa have some potentialities for their local use. After the confirmation of quality and quantity of China-clay, possibilities of manufacture of crockery and roof tiles on the basis of small scale industries can be considered for consumption in the adjoining areas. The idea, if implemented, can provide employment to the local inhabitants and can be economical. At present the use of costly imported brass, copper and aluminium utensils is a great drain on the family exchequer of the poor populace of the area.

Gypsum is found between Lipak and Yulang streams, in sub-tahsil Hangrang, in good quantity and of good quality. But its economics of working on large scale for the present are not favourable. However, efforts will be made to make use of gypsum deposits by employing it as a manure in potato fields in general. The manufacture of artistic images and statues may also be taken up as a cottage industry.

There are potentials for forest-based industries also. *Ban* trees are found in abundance, particularly in the lower parts. At present *ban* trees are being used only for making charcoal. Its bark and branches go waste or are used as fuel wood. The bark of *ban* contains about seventy per cent tannic acid which can be used in leather tanning. Its branches can be utilized for making umbrella sticks.

Walnut wood, suitable for manufacturing butts for guns, is found in sufficient quantities and can feed some small scale units. Finished butts can be supplied to gun factories.

Rajial, a species of bamboo, available locally, can be used, as it is at present actually used, to make a variety of articles. With more

training, articles like lamp shades flower vases, various sports goods, furniture, buttons and curtains can be produced and small scale units can be organised.

In some parts grapes are grown in abundance and the people of this tract already distil *anguri* liquor from it. Other local fruits are likewise used for distillation of liquor. There is, therefore, a wide scope for the opening up of a distillery. Kinnaur is ideally situated for horticulture. Abundant fruit production programme is being launched by the Himachal Pradesh Government which will give rise to needs of fruit canning, fruit preservation, jams, jellies and some other fruit products and will necessitate in the course of time the establishment of small units engaged on these lines. Cider can be made from apple juice for which there is a good foreign market. Good fermented apple juice can also be made the product of the brewing industry which would have both national and international markets.

Fourth five year plan proposals

An Industrial Development Corporation in Himachal Pradesh for the development of medium and large scale industries on fifty-one per cent contribution in the form of purchase of shares by the government and forty-nine per cent contribution by the private parties has been set up. Through this corporation are proposed to be set up a grape and apricot brandy unit at a cost of ten lakh rupees, a fruit preservation unit at a cost of two lakh rupees, cedar wood oil units at a cost of five lakh rupees and pine oil extraction units at a cost of five lakh rupees.

Similarly for the development of mineral based industries in the Pradesh, a Mineral Development Corporation has been set up on the same ratio of contribution as in the case of Industrial Development Corporation. Under this programme mining operations are proposed to be undertaken in this district at a cost of twenty lakh rupees during the Fourth Plan period.

It is proposed to set up a District Industrial Development Corporation with an authorised capital of fifteen lakh rupees and government share of Rs. 7.70 lakh for the development of village and small scale industries. Under this scheme are proposed a hosiery production unit, a district emporium, a leather goods production unit, a unit for the manufacture of agricultural implements, units for processing of indigenous herbs, and a unit for the manufacture of furniture, components of doors and windows etc.

The district is rich in the production of raw wool of various staple length suitable for the manufacture of numerous types of woollen fabrics such as blankets, tweeds, *gudmas*, *namdas* etc. Woollen textile industry is the major traditional cottage based industry. For the development of this industry, during the Fourth Plan, on the pattern of assistance prescribed by the All India Handloom Board, grants and loans to the tune of Rs. 50,000 are proposed to be given.

In order to give sufficient employment to persons engaged and trained in the art of spinning and weaving, a scheme has already been initiated for distribution of raw materials to the artisans for the production of handloom fabrics. This scheme has gained popularity for a considerable number of local inhabitants engaged in the trade of spinning and weaving. To get this scheme going, a sum of two lakh rupees has been proposed in the Fourth Plan.

Difficulties faced by the craftsmen include procurement of raw material, improved designs, improved tools and equipments and, facilities for the use of improved and hand operative machines which do not displace the human labour but on the contrary save time and bring about improvement in the quality. Therefore, the proposal has been made for setting up of procurement depots at a cost of eight lakh rupees. Such depots would discharge the functions of procurement of raw materials and designs, and research and development of designs.

Wood carvings, paintings and fresco paintings have been the ancient arts here as can be seen on many temples and old houses. There is a scope for the development of these arts. Therefore, to keep these industrial arts alive and further to make use of the local talent on commercial scale, as in Kashmir, it is proposed to introduce apprenticeship scheme into the aforesaid two arts during the Fourth Five Year Plan. Under this scheme training to the apprentices will be imparted for a period of three years. Estimatedly the scheme is to cost a lakh of rupees.

A desire for industrial development has been created among the local people. There are proposals to liberalise the rules for the disbursement of industrial loans. Therefore, demand for industrial loans, during Fourth Plan, is expected to be higher and to meet the likely high demand a provision of ten lakh rupees has been proposed on this account.

The decision of the Government of India, is that a part of the present rate of interest, chargeable on industrial loans, under the *State Aid to Industries Act*, be subsidized by the Himachal Pradesh

Government. Therefore, individuals and the co-operatives will be charged interest at the rate of three and two and a half per cent per annum, respectively, as against the existing rate of four and a half per cent. For this subsidy a provision of Rs. 15,000 has been proposed.

The transport in Himachal Pradesh is nationalised. The system of granting route permits to the industrialists, to carry their products, is proposed to be liberalised. In the case of small scale industries unable to afford to have their own transport arrangements, freight charges are proposed to be reduced by fifty per cent. To implement this a provision of Rs. 10,000 has been proposed. This is calculated to achieve the desired level of industrialisation by reducing the cost of transport.

Subsidy on electric supply and laying of electric lines to small industrial units is proposed to be given. This is estimated to cost Rs. 50,000. Similarly it is proposed to send artisans to acquire improved techniques outside the Pradesh, as facilities of training techniques do not exist within the Pradesh. For this purpose, a provision of Rs. 10,000 has been made for payment of stipends to the trainees.

To train the women folk in tailoring to enable them to subsidize their income by stitching the garments of their daily use themselves, it is proposed to set up six tailoring centres at an estimated cost of one lakh rupees. Sewing machines with other accessories will also be provided and the capacity of each centre will be to train ten trainees per session of one year.

There is a scope for paper making industry out of the *bhoj-patra* tree bark. Stationery articles, drawing and art papers are proposed to be manufactured, for export. A provision of ten lakh rupees is proposed for the establishment of the centre.

A rural industrial estate proposed to be established at Sholtu in tahsil Nachar will be organised soon. In the Fourth Plan it is expected that there would be more incentive towards industrialisation and as such it is proposed to make a provision of five lakh rupees for its establishment and extending essential services to the State. A committee has already been constituted with Deputy Commissioner, Kinnaur as Chairman to examine the feasibility of setting up an industrial area.

CHAPTER VI

BANKING, TRADE AND COMMERCE

BANKING AND FINANCE

Indigenous banking

In the days when money was not known and still less utilised as a medium of exchange even in the progressive areas, it was all the more incapable of being utilised in the sequestered area of Kinnaur. What we call indigenous banking system did not therefore, operate here even in its rudimentary form almost till the immediate past. The only method of exchange which was popular and handy was the barter system. With the passage of time the institution of zemindar-*sahukars* appeared on the scene, along with the other more effective and agreeable, indigenous banker, namely, the abode of the local deity. Money in the form of coins settled into circulation. The zemindar-*sahukars* provided credit facilities, restricting advances to small sums in the beginning, at sufficiently high rates of interest secured against immovable property or jewellery. The abodes of local deities functioned as treasuries advancing money or grain against the solemn oaths taken in the presence of the deities promising to return such loans under specified and stipulated conditions. The breaking of such oaths projected a dread or wrath of the celestial unknown. The need for securing loans grew rapidly with the comparative increase of social and religious obligations in the society where in marriages, litigation, trade and commerce and in various ceremonies demanded expenditure in their performance. On the other hand the economic level remained at a relatively low ebb and registered only negligible growth, compelling perpetuity in debts on the incoming generations. The benefit went to the money-lenders who became more greedy, usurious and fraudulent. The state assistance came very late in the form of *taccavi* loans which however were not able to displace the money-lenders of the yore. It is, however, noteworthy that the rate of interest charged by the money-lenders in this area was much less and even to-day it is so as compared to the interest appropriated by the money-lenders in other areas. This may be due to the fact that the people here are simple and honest. The private money-lenders charged 15 to 20 per cent interest in Kinnaur as against 25 to 30 per cent in Rohru and Rampur.

Thus while the above institutions of money-lenders still continue to be in vogue, though on a gradually diminishing scale, facilities for the

availability of credit on suitable terms have been offered by the Himachal Pradesh State Co-operative Bank which was opened on 10-11-1960 at Kalpa. The recently organised co-operative credit societies constitute another source of providing loans to their members, at a reasonable rate of interest. *Taccavi* loans advanced by the government provide adequate facilities to the farmers. Besides the usual *taccavi* loans, horticultural, industrial and housing loans on short or long terms at reasonable rates of interest, as well as loans for improvement of land, for establishing orchards, for construction of houses and for setting up of small scale and cottage industries are also available to the people, rather more liberally because of the inclusion of Kanauras in the Tribes.

A very close and exhaustive Family-wise Socio-Economic Survey of Kinnaur was carried out in 1965. The indebtedness position of the people as revealed by the Survey is given below :—

Categories	A	B	C	D	Total
Total No. of household	1,822	2,083	1,342	1,010	6,257
Total No. of household in debt	901	847	554	361	2,663
Private debts					
No. of families	845	897	509	264	2,515
Amount (Rs.)	3,53,653	6,51,651	4,93,177	4,99,197	19,97,678
Government loans					
No. of families	43	91	95	127	356
Amount (Rs.)	1,76,800	99,311	1,17,360	2,51,338	6,44,809
Total Amount (Rs.)	5,30,453	7,50,962	6,10,537	7,50,535	26,42,487
Causes					
Government	*LIGHS	Hort. loan	Land improvement	Industries	
Private	Marriages	Festivals and deities.	Home construction	Procurement of food and supplies	Land Trade redemption
					Miscellaneous (a) Purchase of animals. (b) Medical and compensation.

The problem of rural indebtedness is of the same nature and magnitude as elsewhere in the hills, arising from an ignorance about the productive and unproductive loans, high rates of interest, inability of the

*Low Income Group Housing Scheme.

borrower to pay in his lifetime and passing on of his debts to his successors. Kinnaur being a remote area had developed a closed economy. Since the circulation of money was limited it gave rise to barter economy. Monetised markets were altogether non-existent. With the passage of time some periodic fairs dedicated primarily to trade and commercial activities, proved conducive to the introduction of money in a more pronounced form. In such circumstances, it is understandable why the number of private money-lenders and financiers have been appreciably more in remote parts also. It appears from *the Revised Assessment Report of Chini* drawn in the year 1928 that some people were engaged in money-lending. The private money-lenders, in howsoever small number they existed, might have played quite an effective role in meeting the credit demands of the local people if and when they were forced to borrow. Especially so when such money-lenders formed the sole source of credit owing to non-existence of organised banks and co-operative societies. The local rulers due to their limited revenue resources were hardly in a position to provide loans on an extensive scale to the needy people when they fell prey to natural calamities or other forces acting to their disadvantages. On such occasions the private money-lenders must have come to the borrowers' rescue but in all probabilities must have dictated their own terms, so ensnaring the debtors as to make their grip stronger and stronger ultimately culminating in the usurpation of what such debtors possessed. Since the authority of the ruling prince was rather loose and light on such people of this difficult area the creditors could enjoy a free hand in the exploitation of their debtors. It may, however, be presumed that the incidence of indebtedness in the shape of money must have been light.

Co-operative credit societies

On the formation of Kinnaur District, a District Co-operative Marketing and Supply Federation came into existence in place of the old Tahsil Co-operative Union at Kalpa. This federation started arranging supply of consumer commodities to the member societies and marketing of agricultural produce. During 1961-62 goods worth Rs. 3.51 lakhs were supplied by the District Federation to the member societies. Besides, the District Federation also functions as a distributing agency on behalf of the government for foodgrains in the area. About 6,500 maunds of foodgrains were distributed in 1961-62.

Agricultural multi-purpose societies

These societies were organised in 1951-52 in this area for the first time and to start with they numbered six after each *patwar* circle. By 1962 the number rose to eighteen and the share capital and working capital

increased accordingly. As is the pattern elsewhere also these societies provide credits to the agriculturists and also supply implements etc. at reasonable rates. During 1961-62 money advanced by these societies amounted to Rs.10,000 and implements etc. worth Rs. 32,000 were sold to the local inhabitants on subsidized rates.

Service co-operatives

In pursuance of the policy resolution of November 1958 passed by the National Development Council the reorientated policy of the Co-operative Department was set in motion as a result of which co-operative societies were formed at village level. These societies have not registered the same growth and impact in this area as has been the case elsewhere.

Consumer store

There is one such store at Kalpa since 1960-61 catering to the requirements of government employees in consumer articles. Likewise, there is one co-operative society which aims at providing cheap means of transport for passengers and goods. This transport society came into existence in 1961-62.

One industrial co-operative society was also organised in 1962 for purposes of manufacturing furniture.

Multi-purpose co-operative society

This society is at Kalpa and deals in general merchandise, cloth, etc. It was subsidized by the government but the people have not shown any enthusiasm to enroll themselves as its members as has happened elsewhere also.

Yet another society known as the *Kothi Sewa Sehkari Sabha Samiti* with a membership of 22 has recently been registered at Kothi extending its activities into two or three villages, more. The society aims at providing loans to its members at cheaper rates and undertaking supply of fertilizers, improved seeds and consumer goods to them.

The working of the credit and non-credit societies can be glanced through in the succeeding tables. The statistics will reveal that the number of societies have been varying from year to year and similarly membership and working capital underwent a conspicuous change.

Credit societies

Years	No. of societies	No. of members	Working capital	Loans advanced	Loans recovered	Rate of interest
			Rs.	Rs.	Rs.	
1961-62	23	1,621	3,11,266	11,405	11,004	9% to 9½%
1962-63	25	2,134	1,02,188	29,224	15,045	" " "
1963-64	28	2,407	1,62,425	26,530	13,977	" " "
1964-65	33	3,405	2,05,640	36,142	38,361	" " "
1965-66	34	4,729	2,84,418	79,494	38,216	" " "
1966-67	34	5,445	2,92,662	70,409	43,596	" " "
1967-68	34	5,710	3,17,562	56,373	57,031	" " "
1968-69	33	5,665	3,12,935	92,815	75,583	" " "
1969-70	34	5,854	3,47,750	68,710	61,560	" " "

Non-credit societies including district federation

Years	No. of societies	Membership	Working capital
			Rs.
1961-62	—	—	—
1962-63	1	11	88,531
1963-64	7	660	3,27,458
1964-65	7	662	1,72,116
1965-66	8	697	2,10,578
1966-67	8	747	2,30,616
1967-68	6	518	3,20,140
1968-69	5	500	3,85,227
1969-70	5	535	3,90,498

Co-operative bank

A branch of the Himachal Pradesh State Co-operative Bank Ltd., was established with headquarters at Kalpa on November 10, 1960. This fulfilled a long-felt want of providing financial assistance to the local co-operative societies which had started functioning in Kinnaur as well as of providing banking facilities to the public. The balance of deposits from the various co-operative societies as on June 30 of the years are given below :—

Years	Rs.
1960-61	1,78,146.75
1961-62	2,84,276.46
1962-63	2,63,377.04
1963-64	5,00,616.09
1964-65	7,25,671.88
1965-66	6,85,238.69
1966-67	6,83,089.26
1967-68	8,50,315.15
1968-69	8,02,024.75
1969-70	6,98,940.73

This bank advances loans, both for short and medium terms, to its member societies and to a limited extent to individuals. The bank charges interest at the rate of six per cent from its member co-operative societies which become eligible for securing loans by purchasing shares of the value of Rs. 100 at least. The yearwise position of advances of loans and recoveries is as under :—

Years	Advances	Recoveries
	Rs.	Rs.
1960-61	52,401.89	32,430.68
1961-62	318.22	18,725.37
1962-63	2,29,953.63	1,66,801.45
1963-64	3,62,300.35	3,75,876.14
1964-65	3,02,412.31	3,40,697.72
1965-66	7,143.53	9,876.32
1966-67	1,10,554.68	37,327.15
1967-68	95,938.95	84,813.43
1968-69	1,12,939.85	82,230.16
1969-70	1,02,131.69	1,21,966.34

There was a loss of Rs. 4,826.80 on June 30, 1961 but during the year 1963-64 it earned a net profit of Rs. 1,435.58. The branch transacts all kinds of banking business.

Land mortgage bank

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Rs.	Rs.
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1958-59	2,000
1959-60	...
1960-61	5,000
1961-62	10,000
1962-63	15,000
1963-64	15,000
1964-65	8,000
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TRADE AND COMMERCE

Course of trade

Although the old Hindustan-Tibet Road was the main trade route yet trade was also conducted through various high and weird

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Trade and commerce relations between this district and Tibet were mentioned in detail in the Settlement Report drafted for the old Chini tahsil of erstwhile Bushahr State. The traders used to import wool, salt, *pashm*, sheep and goats, and bring them down to Rampur *mandi* for sale along with the local products like *karu*, *patish*, *neoza*, *zira* etc. During the *lavi* fair the goods imported from Tibet used to be disposed of. Likewise the Chini traders sold foodgrains, sugar, cloth, etc. in Tibet. There was a standing agreement between the government of Tibet and the Bushahr State. One of the conditions being that every third year there was an exchange of presents through messengers.

Apparently the economy of the people of Kinnaur largely depended on the trade with Tibet. About 150 regular and 250 occasional traders used to visit Tibet every year to exchange on barter system products from their respective areas. The Tibetan wool called *pashm* had a ready market in Rampur and the other areas in India. With the occupation of Tibet by China the authorities there started putting hurdles in the way of traders and started imposing restrictions in various ways on the transactions, which had been going on for centuries between the two parts. To crown the existing difficulties the Chinese authorities

in Tibet refused to accept transactions in any other currency except Chinese and for that there were no banking facilities. The already tottering trade, therefore, completely stopped when China did not agree to renew the trade agreement with India. The local economy naturally suffered a great setback. Another difficult and anxious problem which came up was about grazing of live-stock.

The Kanauras used to take their live-stock to Tibet for grazing purposes. With the restrictions on crossing over the border, this practice has now been completely abandoned creating in its wake a big problem for the government in finding alternative pastures for the affected graziers. It is estimated that about ten thousand sheep and goats used to be taken across the border for grazing in the pastures of Tibet. The problem is colossal particularly in view of the paucity of the pastures available locally to sustain this large number of live-stock. However, the Himachal Pradesh Government have been endeavouring to accommodate all the live-stock by re-adjustment of the pastures on which the graziers have their ownership rights as also by persuading them to solve this problem mutually and in co-operation with each other. Those who are adversely effected are being rehabilitated in other occupations.

For the rehabilitation of the displaced traders the government has started co-operative marketing and supply federation through which traders can obtain loans for business etc. Two societies have in substantial measures rehabilitated most of the traditional traders. These societies are the 'Rang Foch Simant (Muleteers) Co-operative Society, which with headquarters at Puh has been transporting supplies for the local people as well as the army. It has earned a substantial income which has been fairly distributed among all the members who were former traders and owned a number of pack-animals. Similarly, the Kinnaur District Co-operative Transport Society has been transporting goods to the remote areas of Kinnaur in jeeps, and with the widening of the roads has recently started operating a truck to enable larger stocks to be transported. The petty traders, who either do not own animals, or do not have enough land or other means of livelihood, to make up for the lost trade with Tibet are taking up alternative businesses, such as opening of shops, owning of improved breeds of sheep etc. Grant of interest-free loans is greatly helping them in mitigating their problems of resettlement.

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2. *Ibid.* p. 276.

This bank advances loans, both for short and medium terms, to its member societies and to a limited extent to individuals. The bank charges interest at the rate of six per cent from its member co-operative societies which become eligible for securing loans by purchasing shares of the value of Rs. 100 at least. The yearwise position of advances of loans and recoveries is as under :—

Years	Advances	Recoveries
	Rs.	Rs.
1960-61	52,401.89	32,430.68
1961-62	318.22	18,725.37
1962-63	2,29,953.63	1,66,801.45
1963-64	3,62,300.35	3,75,876.14
1964-65	3,02,412.31	3,40,697.72
1965-66	7,143.53	9,876.32
1966-67	1,10,554.68	37,327.15
1967-68	95,938.95	84,813.43
1968-69	1,12,939.85	82,230.16
1969-70	1,02,131.69	1,21,966.34

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centres at different places. In order to increase the yield of the indigenous stock of sheep and goats, crossbreeding with the imported breed is being extensively encouraged. It is hoped that within a few years time not only the local requirement of wool would be met fully but that there would be surplus production of wool available for export also.

Imports and exports

In spite of the area being mountainous and the means of communication and transport meagre and difficult it had its import and export business. In the words of Fraser, "The direct commerce of Bischur with other hill states and with the plains is very limited, chiefly consisting of imports of sugar, cloths, small quantities of iron work, brass utensils, indigo, etc., which is returned by raw iron, blankets, opium, a little tobacco, musk, bhang, turmeric, which is much esteemed, and the articles which pass through the hills from Bootan. The exports to Bootan and Garha, are, corn to the nearer and barren parts, ghee from Kunawur, iron, opium, tobacco, and wooden cups for tea; and from the plains it becomes a thoroughfare for all the common articles of produce and manufacture, as sugar, sugarcandy, cloths both coarse and fine, indigo, etc. The returns are almost entirely wool, both shawl and common, of a fine quality. Salt, as much tea as they can afford, with a little fine Chinese cloth, some musk, borax, etc. are brought to exchange for low country commodities at Rampore. Kunawur sends little to Ludhak besides ghee." Another traveller Gerard says, "Almost all the trade is conducted by barter. The Koonawurees take to Ludak, Kharwa or strong red cotton cloths, white cotton cloth, and chintzes of various sorts both coarse and fine, a little broadcloth, a few silks, gongs or large circular metallic instruments struck with a hammer, and used by the Lamas in their devotions, iron both wrought and unwrought from Nawur, and Koot-laha or Busehur, Tutenang or spelter, lead from Sirmour and Junsar, copper and brass pots, match-locks, straight swords, sabres, shields, bows and arrows, knives, scissors, spectacles, looking glasses, Sunkhs or sacred shells used by the Hindoos and Lamas in their religious ceremonies, crystals, precious stones, sandal-wood, Porwa or vessels of juniper-wood made at Soongnum and Ropa, in Koonawur, and much resembling Scotch cogs, otter skins, called "Ootur", indigo, oil, ghe, or boiled butter, opium, tobacco, rice, wheat, barley, walnuts, apples, raisins, almonds, Shungtee, or Neoza, the seed of a pine, peculiar to Koonawur and other mountainous districts where there is no periodical rainy season, and in taste similar to the pistachio nut, cloves, cinnamon,

nutmegs, cardammums, Misree, Goorh, Cheenee and Shukur, four different kinds of Sugar, sheep and goats, and Rakh, a spiritous liquor distilled from the grape in Koonawur.

The Koonawurees bring back, Kesur, or saffron, produced chiefly in the hill state of Kooshtwar, N. W. of the river Satluj, coarse shawls manufactured in Ludak, Numdas, or felts, Dochuks, or ingots of silver, soom, a kind of blanket dyed red and blue, Thermas, Goodmas, Punkhees and pushmeenass, four sorts of woollen stuffs, the latter of shawl wool, Bulghar, or Bulkhal, or skins of red Russian leather, Tincal and borax."

*"The Koonawurees take to Garoo the same things as to Leh, with the exception of goats and sheep, which are abundant in that country.

In exchange they bring back, much rock-salt which is dug out of the lakes, Beangee and shawl wool, the produce of the Tartar sheep and goats, gold dust, tea and borax, Nirbissi or Zedoary, a few shawl goats and Beangee sheep, and large Tartar dogs of a very ferocious breed, which guard their flocks from panthers, leopards, and other wild beasts, and are excellent watch dogs for preventing bears from committing ravages amongst the vineyards." In the past no attempt was made to maintain a proper record of the imports and exports. In the absence of such records it is difficult to assess, even approximately the volume and value of imports and exports.

However, the exportable local products are timber, *neoza*, *karu*, *patish*, *zira*, *dhoop*, blankets (*gudmas*), *pattis*, yak-tails etc. As a result of incentive provided by the government, commodities such as walnuts, almonds, apples, grapes and vegetable seeds of cabbage, turnips, sugar beet and English-carrots are likely to be exported in large quantities from the near future, thus greatly increasing the income of the people of Kinnaur district.

Recent developmental activities have opened up the area and has facilitated imports. The imported articles include sugar, loaf-sugar, tinned stuff, condiments and spices, salt and oil, foodgrains, cloth, stationery articles, articles made of iron, hosiery goods, fabrics, footwear, brass utensils, kerosene oil, cigarettes and tobacco, leather goods, cement, building material, furniture, books, articles of sports, guns and gun power, radios and transistors, machinery and gadgets, colours and dyes, knick-knacks etc. etc. The articles of import obviously outnumber the articles of export.

1 Fraser, James Baillie, *Journal of a Tour through part of the Snowy Range of the Himala Mountains, and to the sources of the rivers Jumna and Ganges*, 1820, pp. 274-75.

2. Gerard, Captain Alexander, *An Account of Koonawur, in the Himalayas, etc. etc.*, 1841, pp. 181-82.

*Gerard, Captain Alexander, *An Account of Koonawur, in the Himalayas, etc. etc.*, 1841. p. 184.

TRADE CENTRES

Regulated markets

There does not exist, so far, any regulated market. The organisation of such market even in the distant future seems dubious.

Centres of wholesale business and mandis

This district being still in its infant stage and in fact due to its sparse population and terrain only small centres of wholesale business have so far been established. To call them *mandis* would be a misnomer. Rampur, once the capital of the Bushahr State, was a famous entrepot of wholesale business. With the development of the means of communication and availability of the vehicular transport, centres of business are springing up at Kalpa, Karchham and Tapri. The co-operative societies, small production-cum-training centres and *khadi gram udyog* centres are looking after the local products like *gudmas*, shawls wool, *neoza*, *zira*, etc. For the purpose whole district has been covered with activities to raise the marketing texture.

Retail centres

The retail centres at present with the number of important shops indicated against each are at, Kalpa, 9; Tapri, 3; Pawari, 1; Shontong, 1; Puh, 4; Aran Jhula, 3; Chauhra, 1; Wangtu, 2; Nachar, 2; Sangla, 5; and Karchham 3.

Besides, smaller shops and hutments owned by some retail merchants are spread all over the district. Generally one or two shops can be seen in many villages, catering to the day-to-day needs of the local people.

Fairs, melas and other rural marketing centres

As has been said above the people from Kinnaur used to bring their articles, to Rampur for sale at the annual three fairs, *lavi* from 12th November to 16th November (22nd *Kartika* to 1st *Agrahayana Bk.*); *dhal* from 26th December to 8th January (12th to 25th *Pausa Bk.*); and *lavi Jyaistha* on 13th and 14th May (from 32nd *Vaisakha* to 1st *Jyaistha Bk.*). Out of the three, *Kartika lavi* is the traditional trade fair in which thousands of people throng to it. Till the occupation of Tibet traders from these also used to participate in this fair in large number. The fair is held still but it has lost much of its past glory though the people of this district do take their articles for sale in the *lavi* as no other fair or mela of trade and commercial importance, has yet replaced the *lavi*. With the development of communications traders reach the remote parts of Kinnaur and buy

things at the source. This saves the producers from carting their produce to the *mandi*.

Co-operation in wholesale and retail prices

As a principle, there is a four-tier system of co-operatives for supply and distribution of consumers' goods. At the base are the primary societies which generally handle retail trade in consumers' goods after making their purchases frequently from the District Co-operative Federation or occasionally from the Himachal Pradesh State Co-operative Federation direct, both dealing primarily in wholesale business. These units mostly deal in controlled commodities like wheat, flour, rice, salt, cement, sugar, pulses, tea, vegetable ghee, oils, cloth, etc. Besides the controlled articles they also deal in gur, ghee, kerosene oil, tinned stuff, grams and miscellaneous articles such as onion, biscuits, tobacco, cigarettes, spices and wool. The tahsil unions, as a rule are affiliated to district federation. Unlike other districts, there is at present no tahsil union in Kinnaur. The old Chini tahsil co-operative union was converted into the Kinnaur District Co-operative Federation during the year 1961-62. In the absence of the tahsil union the primary societies which are members of the district federation get from the latter their share of supplies of consumers' goods. Non-member societies cannot avail themselves of these facilities. The district federation is functioning as a wholesale store and supplies consumers' goods and other commodities to the primary societies who further pass these on to the consumers. At the State level is the Himachal Pradesh State Co-operative Development Federation. The main objects of this federation are to co-ordinate the supply and marketing business activities of its affiliated units, to arrange marketing of agricultural produce and bulk supplies, controlled and uncontrolled goods, for trading purposes. The federation being the State wholesale nominee for the procurement and distribution, arranges bulk supply of goods of domestic requirements and agricultural necessities such as foodgrains, fertilizers, salt etc. It handles iron and steel as a controlled stock holder appointed by the Iron and Steel Controller. It also functions as an agent of the Civil Supplies Department for distribution of controlled goods.

On an experimental basis a beginning was also made in 1963-64 in marketing of *chilgoza* which grows abundantly in certain areas and the District Federation marketed this valuable crop worth Rs. 96,259.

There are wholesale dealers along the National Highway at Wangtu, Tapri, Pawari Jhula and Puh. Apart from the Kinnaur District Co-operative Multi-purpose and Supplies Federation, Tapri, which supplies consumer stores to the primary co-operative societies.

State trading

State trading as such is not in existence. The area being deficit in foodgrains, subsidized as well as non-subsidized foodgrains, are procured from outside the district to meet the local demand of the people. Foodgrains and other essential commodities are distributed through fair price shops at comparatively cheaper rates. Such shops are located at Wangtu, Nachar, Tapri, Sangla, Kalpa, Morang, Puh and Kanam. These are supervised by the District Inspector (Civil Supplies) and Circle Inspectors of the Co-operative Department.

With a view to subsidizing the transport charges of foodgrains to far-flung areas of Kinnaur, a transport subsidy amounting to rupees one lakh was sanctioned by the government in 1960-61.

No merchant's association exists so far. Consumers' associations are far fetched even in progressive areas. The labour is mostly imported from outside and is paid very well. They have no labour organisation of their own so far.

Organs for dissemination of trade news

For the dissemination of trade news, radio is a mentionable means. Daily broadcast from All India Radio, Simla, on wholesale prices and weekly review of prices showing their trend, greatly help the producers, the consumers and the traders. A few newspapers in circulation also provide the information about the trend of prices. The agricultural marketing section of the Agriculture Department, Himachal Pradesh, issues a monthly bulletin, for circulation in the district offices, containing information on current wholesale prices, condition of standing crops, price trends of different agricultural commodities etc. A fortnightly bulletin indicating trend of prices is published by the Director of Economics and Statistics, Himachal Pradesh, and finds entry in the district among educated classes. The information however also filters through the educated class to those interested.

WEIGHTS AND MEASURES

Weights

An ancient and indigenous weighing device is *pore* containing three parts. The *poreshing* (lever) marked at equal distances, a knob of stone and *thil* (piece of woollen cloth or skin suspended by means of strings). The marks on the *poreshing* are called *chet*. Gerard says, *"Things are weighed

here upon the plan of the steel-yard and lever, named "Pore" which is a very convenient method, and as far as I observed, is uniform and correct. There is another sort of balance called Tool, used in the lower parts of Busahir. It is on the same principle as the "Pore", with this difference, that the weight is formed in the lever by a knob of iron at the end, and the fulcrum which is a piece of string, is shifted according to the gravity of the thing weighed".

The reckoning of quality in cutcha seer equal to six *chhataks* was also mostly in use. The standard or pukka units of weights of the British period came to be used here at a much later time. Even then the traditional *pore* continued to be in use. The shopkeepers employed the following standard weights.

8 rattis	= 1 masha
12 mashes	= 1 tola
5 tolas	= 1 chhatak
2 chhataks	= ½ pao
4 chhataks	= 1 pao
8 chhataks or	
2 paos	= ½ seer
16 chhataks or	
4 paos	= 1 seer
2 seers	= 1 batti
20 seers	= ½ maund
40 seers	= 1 maund

A rupee coin is considered as a standard weight of one *tola*.

The metric system of weights and measures have now come in vogue. The *Rajasthan Weights and Measures (Enforcement) Act, 1958* was extended to Himachal Pradesh by the Government of India, Ministry of Home Affairs. *The provisions of the said Act, so far as they related to metric weights, were enforced with effect from April 1, 1960 allowing two years time as a transitional period with a view to affording an opportunity to the public, traders, and government departments, etc; to acquaint themselves with the new system and to take preparatory action in switching over to metric weights. After April 1, 1962 the transitional period of two years was to be over and the use of the old weights was to become illegal under the statutory provisions of the said Act. Thus from April 1, 1962 metric weights have been in use in this area.

*Lloyd, Major Sir William & Gerard, Captain Alexander, *Narrative of a journey from Caunpoor to the Boorendo Pass in the Himalaya Mountains*, Vol. II, p. 227.

*Notification No. F. 8/4/58-1-II(I), dated the 30th September, 1958

Measures

The traditional grain measures have been as follows :—

<i>solo</i>	= about 6 <i>chhataks</i>
$\frac{1}{2}$ <i>solo</i>	= one <i>khang</i>
3 <i>solos</i> or 2 <i>khangs</i>	= <i>bre</i> or <i>kod</i>
2 <i>bres</i> or <i>kods</i>	= one <i>tamat</i>
1 <i>tamat</i>	= about two kilograms

Tamat and *bre* are made of iron or wood. *Khang* and *solo* are usually made of wood. All the households kept, as they still continue to keep, the account of measured foodgrains in one of the above mentioned measures, more frequently in *bre* or *kod*.

As regards lineal measures the indigenous basic units were, perhaps *prach* (finger), *dasa* (span), *rin* (arm from the tip of the middle finger to the last being the most in common use for measuring lengths and breadths. Two *rin* were equal to one yard. *Another unit of measure used by the cloth merchants, less than a yard was *girah*. Sixteen *girahs* made a yard. There were large and small yards too, in the Bushahr State. The measures were of two kinds, one yard was equal to sixteen *girahs*, in length, while the other was thirteen only. Things purchased from the zamindars were measured with sixteen *girahs* a yard, while those sold to them were measured with thirteen *girahs*, a yard. For measuring distances inch, foot, yard, furlong and mile were also in use. The use of the standard length measures was made compulsory in this district with effect from October 1, 1962 after making allowance for the operational period of one year, with a view to acquainting the people with the metric length measures.

Until immediate past various systems to measure land were in vogue. To bring uniformity in the land measurements, revenue officials have adopted *karam* as a standard unit of length and the unit of area is the square *karam*. *Karam* is equal to fifty-four inches. The measurement of land is also expressed in bighas the unit of which is called *biswa*.

1 bigha	= 900 square yards	= .186 acres
1 <i>biswa</i>	= 45 square yards	= .009 acre
5.38 bighas	= 1 acre	

The Financial Commissioner, Himachal Pradesh issued instructions to introduce from October 5, 1962 the metric system for revenue records so that totals of the holdings and grand totals of revenue estates in the quadrennial *jamabandis* in the district are shown both in metric units as well as in the local measure.

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*Simla Hill States Gazetteer, 1910, Bushahr State, p. 67.

CHAPTER VII

COMMUNICATIONS

OLD TIME TRADE ROUTES AND HIGHWAYS AND MODES OF CONVEYANCE

Due to the peculiar mountainous situation of the district the means of communications, in the past, were limited to high passes and the valleys of rivers and streams, the principal being the Satluj valley. Before the annexation of Tibet by China the trade with the former was conducted through the road that followed the bed of the Satluj river or by crossing high passes some of which were over 5,500 metres in height. Due to the cessation of trade with Tibet these passes have gone out of use. Beside the passes which lead towards Tibet many other lead towards Uttarkashi in Uttar Pradesh, Rohru area of Mahasu district and Lahul and Spiti district. Mentionable among these are Lamkhaga (4,977m), Borasu (4,877 m), Nalgan (4,542 m), Buran (4,527 m), Shathal (4,724 m), Shakarog Khango (5,100 m), Tari Khango (5,171 m), and Manirang (5,639 m). There was only one mentionable road that led from Simla and entered Kinnaur beyond Sarhan after passing over the high hills of Mahasu district. In Kinnaur the road passed through the villages of Taranda, Nachar, Wangtu, Chagaon, Pangi, Kanam, Sangnam, Hango, Puh and Shipki and thereafter entered into Tibet. This was the main line of communication between Tibet and Kinnaur and the trade was conducted through it. Besides these passes and the above main road, which was termed as Hindustan-Tibet Road, there were other paths which connected one village with the other. Due to the steep ascents and descents travelling through these tracks was not safe at all. Sometime a stone would hurl down from the precipices above with shattering speed and sweep away or wound the traveller, and, sometime landslides would conceal the path putting the traveller in a critical position. To give an idea of the conditions of communications in the early nineteenth century, an account, left by Captain Gerard, is given below :—

*“From the rugged nature of the country, the greater part of the roads, however much pains may be bestowed upon them, can never be good for any length of time. Every year some places are destroyed by the falling of rocks, and it very frequently happens that the paths are so astonishingly rough, as to surprise the traveller how they could have been constructed with so small a population.

“The roads in general consist of narrow foot-paths, skirting precipices, with often here and there rocks, that would seem to come down with a puff of wind, projecting over the head; to avoid which, it is necessary

*Gerard, Capt. Alexander, *An Account of Koonawur, in the Himalayas etc. etc.*, 1841, pp. 36-37.

sometimes to bend yourself double. The way often leads over smooth stones steeply inclined to a frightful abyss with small niches cut or worn, barely sufficient to admit the point of the foot; or it lies upon heaps of gigantic angular fragments of granite or gneiss, almost piercing the shoes, and piled upon one another in the most horrid disorder. Where the rocks are constantly hurled from above, there is not the slightest trace of a path, and cairns of stones are erected within sight of each other, to guide the traveller. There are often deep chasms between the rocks, and it requires a considerable degree of ability to clear them, and no small share of caution to avoid over-turning the stones which now and then shake under you; more than once, I have seen several of enormous size just upon the poise from our weight, and we were obliged to make a sudden and violent exertion to gain another, perhaps not more secure; and it sometimes happened, that the one we had just quitted upset with a dreadful crash, from the impulse it received in our taking a leap to the next. Here and there beds of hard snow, inclined at an angle of thirty to thirty-five degrees, are met with, to ascend or pass along which, it is necessary to cut steps with a hatchet, and to descend them, the easiest and most expeditious mode is to slide down. The worst are the inclined rocks, and great slopes of hard gravel, and small stones rolling under the feet, to a deep and rapid stream; some of them cannot be passed with shoes, and although I only took mine off at one place, yet I have often been obliged to grasp hold of a person's hand.

“The most difficult part I saw, was where ropes were used to raise and lower the baggage, and this did not arise from the path having given way: now and then flights of stone steps occur, notched trees and spars from rock to rock, rude scaffolding along the perpendicular face of a mountain, formed of horizontal stakes driven into the crevices, with boards above, and the outer ends resting on trees or slanting posts, projecting from clefts of the rock below.”

ROADS

Roads can be the only possible life lines in an area like this district as there is no scope for the development of other modes of transport such as railways, airways and waterways. Roads here are necessary not only for speeding up the movement of men and material for accelerating the development activities but are also essential for safe-guarding the national frontiers.

Life in the hills usually depends on roads. Local people in primitive days had to live an isolated existence, for centuries, simply because of no roads. They stood severed from the stream of life that was flowing in the rest of the country. Their economy based on simple human

labour and unaided by the mechanical devices, rolled on at a snail's pace. Extension of social services was not possible for want of transport facilities and they could enjoy limited comforts as all that came from the plains on pack animals and human backs was bound to be costly.

Soon after the Independence, work on construction of roads was started. The strategic position, which the district commands, necessitated all the more an early execution of a network of roads. During the decade ending in 1970, much has been done both by the Pradesh and the Central Governments to improve the means of communications here. The position of roads today is as described hereunder.

MOTORABLE ROADS

The National Highway No. 22

This road extends from Simla to Kinnaur entering the district near Chauhra village at mile stone 101 (162.6 km) measured from Simla. It follows a low alignment along the Satluj valley first up to Wangtu along its left bank, then up to Karchham along the right bank, up to Shongtong along the left bank, up to Dabbling along the right bank and then along the left bank up to Khabo where it crosses the Satluj river to follow the left bank of the Spiti river up to Shyalkhar where again it crosses over to the right bank up to the Sumdo bridge, the northern boundary of Kinnaur. The length of the road within Kinnaur district is 164 km and its width up to Karchham for the first 46.6 km is 7.3 metres and thereafter up to Sumdo (the remaining 117.4 km) is 6 metres. It is designed as an all weather road, still in the process of development. This road was aligned by Public Works Department and by early 1961 was made safely jeepable up to Tapri, while from Tapri to Sumdo a trace had been cut at various points. With the transfer of the road to the Border Roads Development Board early in 1961, the road construction has been carried out by this organisation which functions both under the Ministry of Transport and the Ministry of Defence, Government of India. This road is now fit for heavy vehicular traffic such as buses and trucks up to its terminus at Sumdo.

The Kalpa Link Road

This 4.9 metres wide motorable road links the district headquarters at Kalpa *via* Peo with the National Highway No. 22 whence it takes off from mile stone 140/6 (226.5 km) from Simla at Pangi Khad. It is about 20 km long and climbs from 1,980 metres to 2,835 metres. It is liable to be blocked for short periods by the winter snows between November and May in its upper reaches.

JEEPABLE ROADS

The Upper Hindustan-Tibet Road

This road climbs from the National Highway No. 22 at mile stone 121 (195 km) at Tapri and extends on an upper alignment of an average elevation of 2,740 metres up to Shyaso Khad where it drops down to rejoin the National Highway at mile stone 167/2 (269 km). Its length is 93 km, and it links most of the villages on the right bank of the Satluj between Tapri and Shyaso Khad, such as Urni, Rogi, Kalpa, Pangi, Rarang, Jangi, Labrang and Kanam, in that order. As it was originally until 1960 a bridle path, its gradient is generally steep and its average width is 2.4 to 2.7 metres. This road remains blocked by winter snows between December and early April.

The Nachar Link Road

This road, jeepable at present but being developed to motorable specification (4.8 metres width), climbs at mile stone 110 (177 km) near Sholdang Khad from the National Highway No. 22 up to Nachar, at nearly 2,438 metres elevation. The length of the road is 16 km, the last five kilometres of which follow generally the old Hindustan-Tibet Road alignment. The latter portion between 2,134 metres and 2,438 metres is liable to be blocked by winter snows between December and March. The road follows an easy gradient.

The Karchham-Sangla-Chhitkul Road

This road bifurcates from the National Highway No. 22 near Karchham bridge at mile stone 130/1 (209.5 km) on the left bank of the Satluj and follows the right bank of the Baspa up to the farthest village of Chhitkul *via* Kamru, Sangla and Rakchham villages. Its length is 43 km and it climbs along an easy gradient from Karchham at 1,830 m to Chhitkul at 3,505 metres elevation. At present the road is fit for vehicular traffic up to Sangla village (22 km) and the remaining portion, i.e. 21 km right up to Chhitkul is jeepable. It extends along the sunny south-facing bank of the Baspa valley, and is therefore expected to be blocked for only brief periods by snows in the winter months from December to early April between Karchham and Sangla, and for longer spells as it climbs higher near Rakchham and Chhitkul. The road is expected to be ready by the end of the Fourth Plan.

The Taiti Valley Road

This road enters the Taiti valley from the old Hindustan-Tibet Road about five kilometres beyond Jangi to provide a jeepable link of

5.6 km to Lipa village on an easy gradient. It follows the right bank of the Taiti valley and is 1.8 to 2.7 metres broad. As its average elevation is 2,740 metres, it is liable to be blocked by snows during the winter from December to early April.

The Ropa (or Shyaso) Valley Road

This 15.85 km long jeepable road, 3.66 m to 4.8 m wide, bifurcates at mile stone 167/2 (269 km) of the National Highway No. 22 across the Shyaso Khad and climbs on an easy gradient along the left bank of Shyaso Khad up to the farthest village, Ropa, *via* Sangnam, Rushkalang and Giabong. First portion of 9.20 km is 4.8 m wide and 6.65 km is 3.66 metres wide. The buses ply up to 9.20 km (Sangnam village) and the remaining portion of 6.65 km is also fit for vehicular traffic. As it climbs from 2,590 metres to 3,050 metres, it is liable to be blocked by winter snows between December and April.

The Namgya Link Road

This 5 km jeepable road climbs from the National Highway No. 22 about ten kilometres beyond Puh to provide a link to the last village, Namgya, *via* Khabo on the left bank of the Satluj valley. Its average width is 2.4 to 3 metres. As its average elevation is about 2,590 metres it is liable to be blocked by winter snows between December and April.

The Kilba-Shaung Khad Road *via* Karchham

This 14.5 km jeepable road extends from the Karchham-Sangla-Chhitkul Road by crossing the Baspa river near Karchham over the cantilever bridge where one branch climbs up the left bank of the Baspa valley for 9.5 kilometres up to Shaung Khad, while the lower branch extends for five kilometres up to Kalpa along the left bank of Satluj. Its width is 2.1 to 2.7 metres. The former Karchham to Shaung Khad portion is liable to be blocked by winter snows from December to April.

BRIDLE ROADS

The Upper Hindustan-Tibet Road

This old bridle road enters Kinnaur near Chauhra at Maneoti Dhar 9.6 km from Sarhan and extends to Wangtu *via* the villages of Taranda, Paunda, Sungra and Nachar at an average elevation of 2,130 metres. Its length within Kinnaur is thirty-four kilometres, and its average width is 1.2 to 1.8 metres. It is liable to be blocked by winter snows between December and April.

The Rupi Path

This 14.5 km bridle path drops down to the Satluj from mile stone 103 (165.7 km) on the National Highway No. 22 at Chauhra, crosses over to the right bank of the Satluj river by a suspension bridge and climbs to Rupi village at an elevation of about 2,135 metres. It is usually open throughout the year, except near the village. Its average width is 1.2 to 1.8 metres.

The Wangtu-Natpa Path

This 8 km bridle road links Kandar and Natpa to the National Highway No. 22 at Wangtu, and is generally open throughout the year.

The Rupi-Natpa Path

This 22.5 km forest path extends from Rupi to Natpa *via* Bara Kamba, Chhota Kamba, Gharshu and Rokchang-Kachang, at an average elevation of 1830 to 2290 metres to link the villages of Pandra Bis area of Nachar sub-division on the right bank of the Satluj valley. The path is not fit for equestrian traffic and is closed in the winter from December to April.

The Wangtu-Bhabha Path

This 16 km bridle path links the Bhabha village with the National Highway No. 22 at Wangtu, and is usually open throughout the winter except when heavy snowfalls occur.

The Wangtu-Kilba Path

This 18 km bridle path extends from the National Highway No. 22 at Wangtu up the left bank of the Satluj to Kilba *via* Ramni, Jani and Sholtu. It is generally open throughout the year.

The Shaung Khad-Batseri Path

This 14.5 km forest bridle path extends from the terminus of the jeepable road at Shaung Khad to Batseri *via* Sangla up the left bank of the Baspa valley. It is blocked by winter snows from December to April.

The Shongtong-Kamru Path

This 26 km path extends from mile stone 136 (219 km) on the National Highway No. 22 at Shongtong to Kamru *via* Barang and Mehbar villages and over the 3,658 metres high Haran-ghati shoulder. It remains blocked in the winter from December to April.

The Shongtong-Tirung Khad Path

This 34 km bridle path extends from mile stone 136 (219 km) on the National Highway No. 22 at Shongtong up the left bank of the Satluj valley to Tirung Khad *via* Purbani, Ribba and Rispa. It is generally open throughout the year except the portion between Purbani and Ribba which climbs up to about 3,050 metres and therefore is closed from December to April. The first 14.5 km up to Purbani is jeepable.

The Tidong Valley Path

This 34 km path from Rispa or Morang to Charang *via* Thangi and Kuno is fit only for pedestrian traffic in the summer from May to October.

The Gyanthing Valley Path

This 19 km path extends from mile stone 162 (260.7 km) on the National Highway No. 22 across the Satluj *via* a wire-rope bridge, and thence follows the right bank of Gyanthing valley before crossing the *khad* to Nesang village. It is being developed to jeepable specification. It is generally open throughout the year, except when heavy snowfalls occur.

The Namgya-Chango Path

This 35 km bridle path extends first from Namgya to Tashigang by crossing the Satluj over a bridge called Rani Bridge. From Tashigang it extends to Chango *via* Nako and Malling on the left bank of the Spiti valley. It is open in the summer from May to November.

The Sangnam-Shyalkhar-Sumra Path

This 66 km path extends from Sangnam in the Ropa valley over the 4,420 metre high Hangrang Pass to Hango in the Tirasang subsidiary valley of the main Spiti valley. From Hango it extends to Shyalkhar *via* Chuling and Leo up the right bank of the Spiti river and then crosses the 3,658 metre Lepcha La before dropping to Sumra. It is open in the summer only from June to November, and can be used by local animals only.

The Taranda-Barua Khad Path

This 80 km (approximate) forest inspection track extends through the forest belt at an average elevation of 2,740 metres from Taranda to Barua Khad *via* Paunda, Nachar, Panwi, Ramni, Jani, Kanai, Sapni, all on the left banks of the Satluj and the Baspa valleys. It is closed from December to May.

Vehicles and conveyances

In the primitive days all the transport was carried out with the help of sheep, goats, donkeys, mules, horses, yaks and various types of palanquins. Human labour was also employed for carriage of goods from one place to another. All these modes, except the palanquins, are more or less used even to-day by the people in the areas where vehicular traffic has not yet started serving the people. Description of each is given below :—

The goats as also the sheep go in large flocks, each being laden with a small pack like two saddle-bags; each carrying about 7.4 kilograms. A person generally walks at the head of each flock. The long string formed of sheep and goats winds its dangerous way among the crags, for many a weary kilometres and when at last they reach some quiet nook where they may halt in safety the flocks are turned adrift, the tents are pitched, the goods are stored under canvas, and the encampment is complete.

As beast of burden yak is slow, but wonderfully sure of foot, picking its way in perfect safety over the very roughest ground. Sometimes when a difficulty arises about getting coolies, a traveller can hire quite a little herd of these, which carry his tents, his goods, and even himself if he so wills it. More sure-footed than the surest pony, it carries its load or its rider along pathless mountains, and is most at home on the highest passes. The only point where it fails is in climbing very steep broken ground, where climbing from rock to rock is necessary. Here its very short legs are a serious obstacle, and riders find it necessary to dismount.

During the bygone days rich people or the British officers or foreign travellers were carried by human beings in a conveyance called *dandi*. It consisted of a piece of bamboo about 2.27 metres or 3.04 metres long with two pieces of carpet slung from it one for the support of the body and the other for the feet. One rested on these pieces of carpet, not in line with the bamboo, but at right angles to it with one's head and shoulders raised as high above it as possible and each end of the pole rested on the shoulders of one or two bearers.

The people of Kinnaur are very fond of horses, which seem to be their traditional mount. The *ghoont* or hill breed of horses, is generally small, strongly made hard-mouthed, and sometimes almost unmanageable. In ascending hill faces, or passing along the declivities of mountains, it is best to let them have their own way, for in an intricate passage they often shew more sagacity than the rider; their common pace is a kind of amble, and they stop every now and then to breathe, when no application of the whip will move them; they are sure-footed, and

sometimes halt at the edge of a precipice, to the terror of the rider; they are not so quick in ascending hills as the low country horses, but they descend with double the speed, and endure great fatigue. In summer they feed high on the short grass upon the mountains. They are let loose when not required, and are often difficult to catch. They can go long journeys among the mountains. No doubt the regular hill pony is the best for very bad roads. It can climb like a goat, and nothing seems to stop it. It is wonderful how clever the ordinary horse or pony soon becomes at hill work, and how sure-footed it is if not unduly hurried down the steep bits. A pony that is well-known already is always more dependable than a stranger which may develop a capacity for shying or jibbing just at an awkward moment. Only a well-behaved horse should be taken into Kinnaur, but as a rule, even excitable ones become very careful on hill roads. There is always the danger, of something unexpected—a shower of stones falling from above or a rush of cattle in a narrow place which may alarm a nervous horse.

The mules are handy and brave and carry their loads (of about one quintal) with comparative ease. Articles of merchandise like piece goods, borax, copper wares or woollen stuffs, which are not seriously damaged by the wear and tear of transit, are carried by mules. They are usually purchased from the Spiti area of Himachal Pradesh and Ladakh in Jammu and Kashmir. Muleteers have now formed themselves into a co-operative society catering to demands for these animals. Rates of hire of mules have been fixed by the Deputy Commissioner for the convenience of the owner, society and the hirer.

Donkeys are regarded as undignified means of transport. They serve the same purpose as the mules. They are as hardy and sure-footed as mules but cheaper to buy and feed.

In addition to these beasts of burden, man himself has given a proof of his sturdiness and stamina in this area. On account of paucity of means of communication and transport he has to carry heavy loads on his back for long distances and his adaptability in this matter is nothing short of a marvel. Whereas it may be very difficult for an average man from the plains to merely walk at these heights, the hillman climbs them with a load of forty to sixty kilograms with comparative ease. Man is indispensable where the animals fail.

The modes of transport are primarily dependent on roads which were very much undeveloped in the past. Lack of efficient conveyance, a concomitant of undeveloped roads, was an obvious outcome. As a result of execution of plans for the construction and development of roads in the recent years heavy and light vehicles have now started to

ply on the National Highway No. 22, the old Hindustan-Tibet Road and other roads. Private trucks are allowed to run up to Sumdo. Regular bus services within the district have been extended up to Kalpa, Puh and Sumdo from Tapri. The nearest railway station to the district is at Simla.

Waterways, ferries and bridges

The flow of the water, due to sloping gradient of the beds of rivers and streams in the district is so rapid and the water currents rush down through such bouldery beds as to preclude the possibilities of navigation. Nevertheless timber is floated down the Satluj river. Thus no waterways exist and so also the ferries. In the bygone past there were only a few torn bridges. The main mode of crossing the rivers was *jhula* which consisted of a rope stretched across the stream or river with a cradle running along and beneath it, which was pulled from side to side by guide ropes. Later on, the grass rope was replaced by iron cable and thus the device was made more safe. Now-a-days there are bridges of all kinds over the various rivers, streams and streamlets though *jhulas* are also still in use at many places, particularly in the areas which are very remote and where traffic is sparse. Details of important bridges and their classification are given below :—

(i) On the National Highway No. 22

Temporary Bailey Bridges have been provided over the Satluj at Wangtu, Karchham and Shongtong; one each over Pangi Khad, Kashang Khad and Shyaso Khad; at Dabbling and Khabo and over the Spiti at Shyalkhar and Sumdo for heavy vehicular traffic.

(ii) In the Baspa valley

Cantilever bridges exist over the Baspa river at Karchham, Sangla, Batseri and Rakchham. Another suspension bridge exists at Rutarang, five kilometres downstream of Sangla bridge, all for bridle traffic only.

(iii) Other bridges over the Satluj

Cantilever bridges exist between Chauhra and Rupri and at Sholtu for equestrian traffic, and wire-rope bridges at Nigulsari, Kilba, Pawari, Akpa, Morang and between Kanam and Nesang for pedestrians only. Suspension bridges capable of taking vehicular traffic are proposed at Kharo and Morang.

(iv) Other bridges over the Spiti

The present wire-rope bridges over the Spiti near Leo will

shortly be replaced by a suspension bridge capable of taking vehicular traffic. The wire-rope bridge at Sumra is also proposed to be replaced by a suspension bridge for vehicular traffic.

TRAVEL AND TOURIST FACILITIES

There is as yet no travel agent or travel guide in this district. During the Third Five Year Plan the Department of Public Relations and Tourism, Himachal Pradesh, established an information centre at Kalpa. It is equipped with general publicity literature, journals and periodicals, pamphlets, folders and posters brought out by the said department.

There are so far no really good hotels or restaurants. A traveller taking either the old Hindustan-Tibet Road or the National Highway No. 22 can find, after suitable intervals, some shops which provide ordinary meals and tea.

The Forest and the Public Works Departments maintain a number of rest-houses and dak-bungalows. Of late the Revenue Department has also constructed staging huts at many places. All these are meant primarily for the use of departmental and other government officers on duty. But the tourists and travellers can also get the accommodation facility on request. Details of the existing rest-houses, dak-bungalows and staging huts will be found in Appendix XII.

The whole of Kinnaur is a protected area as it falls beyond the Inner Line and as such the foreigners are required to get the permits for entry into the district.

Under the *Foreigners (Protected Areas) Order 1958*, Inner Line permits can be issued by the Deputy Commissioner Kinnaur and the Himachal Pradesh Government only after prior clearance for foreigners has been obtained from the Government of India, Ministry of External Affairs. Government officers/officials who want to cross into the Kinnaur district from Mahasu district have to get passes from the departmental authorities even if they are on duty. Other travellers are required to take alongwith them necessary identification certificates from the Gram Panchayat to show these to the Sub-Divisional Magistrate at Rampur who then issues them the requisite permits to cross the Inner Line.

Following the enforcement of the *Criminal Law Amendment Act* (23 of 1961), the border area beyond the Inner Line has been declared as Notified Area with effect from 1.6.1962.

POSTS, TELEGRAPHS AND TELEPHONES

During the princely regime there were no adequate postal facilities. In 1910 there were only two branch post offices, one at Nachar and the other at Chini, under the sub-post office at Rampur, now in Mahasu district. All letters, parcels, etc. were carried by dak runners. A western traveller who came across a mail runner while on his way to Kinnaur in the late twenties of this century has left an interesting account which is reproduced below :—

“Presently there is a tinkling of bells, of a lighter sound than mule bells, and there appears round a bend in the road a man who comes on at a jog-trot directly he spies us from afar. He is clothed in the brownish grey native homespun which is more like our jute sacking than anything else. His upper garment is a kind of capote, and he wears trousers of Hindu pattern fitting closely to his skinny legs. He is barefoot and bare-headed with long black hair hanging down to his shoulders. A copper plate is tied with cord to his left arm bearing the words ‘Mail-Runner,’ or postman and in his right hand he carries a spear with a bell on it; for as the post travels by night he might chance to meet a bear or a leopard; the man, who appears to be a semi-savage, approaches us with a profound *salaam* and begins to undo a jute sack which he carries tied to his back. In another moment we catch sight of the pink paper of the Hague Post, and then out came several envelopes bearing the dear old Dutch stamps. How did he know they were for us, we ask? well, he knew the Dr. Sahib was the only person who would have letters in an illegible hand, and so as he could not read the addresses he felt sure they must be for us”.

After the formation of Himachal Pradesh there has been phenomenal expansion of the postal services. The daily mail service for Puh was introduced during 1960-61. By the end of the year 1966 the position of post offices was as under :—

(a) Sub-post offices exist at Kalpa, Karchham, Nachar, Peo, Puh, Sangla and Tapri.

(b) Extra departmental branch offices exist at Akpa, Asrang, Barua, Batseri, Bhabha, Chagaon, Chango, Chauhra, Chhitkul, Chhota Kamba, Dabbling, Giabong, Jangi, Kamru, Kanam, Kilba, Kothi, Kuno, Leo, Lippa, Mehbar, Miru, Morang, Nako, Namgya, Nesang, Nigulsari, Pangi, Paunda, Pawari, Purbani, Rakchham, Ramni, Rarang, Ribba, Rispa, Rogi, Rup, Sangnam, Sapni, Shyaso, Soldang, Sungra, Thangi, Urni

*Van Der Sleen, Dr.W.G.N., *Four Months Camping in the Himalayas*, 1929, pp.57-58

and Wangtu. The table appended below gives an idea of the working of the post offices during the last few years :—

	1.10.1962 to 31.3.1963	1963-64	1964-65
1. Letters and other mail articles received for delivery	23,576	40,118	32,604
2. Number of money orders issued	10,901	22,217	21,943
3. Number of money orders paid	1,781	3,499	3,584

There exist no telegraph office and telephone exchange in the district. Telegrams are, however, received and sent through a wireless telegraph office installed by the Posts and Telegraphs Department at Kalpa. The number of telegraphic money orders and telegrams received and issued through the wireless station is illustrated in the following table :—

	1.10.1962 to 31.3.1963	1963-64	1964-65
1. Number of telegrams issued	747	825	713
2. Number of telegrams received	639	627	580
3. Number of telegraphic money orders issued	422	619	712
4. Number of telegraphic money orders paid	52	72	81

There is no radio station. The number of radio sets, including community listening sets in the district, is about five hundred. The number is on the increase.

First wireless station was opened at Chini (Kalpa) in February, 1961. The necessity of swift means of communications was felt greatly on the formation of Border Security Force in order to maintain effective law and order in the far flung areas. To overcome this inconvenience more wireless stations were opened. Now a network of police wireless stations exists at Kalpa, Puh, Nachar, Leo, Morang, Sangla, Chauhra and Karchham.

No organisation of owners in the field of transport and communications exists, for the transport is a nationalised service in Himachal Pradesh. The Himachal Pradesh Government Transport

Department has established a separate region at Tapri under the overall charge of an Assistant Manager. The regular bus services ply from Tapri to Simla, Rampur, Kalpa, Puh and Sumdo. A Transport Advisory Committee, at the state level, has been formed of late, comprising official as well as non-official members.

CHAPTER VIII

MISCELLANEOUS OCCUPATIONS

Adequate material being not available to justify an entity of a separate chapter, therefore, the information pertaining to this chapter has been treated in the succeeding chapter.

CHAPTER IX

ECONOMIC TRENDS

Livelihood pattern

The earliest written record on the general condition and livelihood pattern of the people is available from the observations made about the year 1814 by J.B. Fraser, a British military officer and traveller.

¹Fraser observed that due to the mountainous and barren terrain little grain was produced in that area. The grain was imported mostly by the shepherds from the plains. In exchange for grain, the Kanauras supplied their indigenous produce like wool, woollen clothes, dry grapes and *chilgoza*. They also supplied salt to the people in the plains, which they brought from Tibet. Sheep and cattle were reared in good number and in remoter parts they bred *suragai* or yak. These animals were used as beasts of burden as well as a commodity of exchange. The people had few occupations which required constant stay at home. They therefore roamed about for establishing commercial links with Tibet as well as with the plains below.

The conditions do not appear to have changed much by 1841, when Capt. Alexander Gerard² wrote about their livelihood pattern. Gerard observed that Kanauras were all traders and their wealth he described as sheep and goats. The people of Kinnaur in those days came down at the beginning of the winter and the first market for the exchange of their commodities was Rampur. They went even as far as Hardwar. Gerard observed that the people of this area visited on trade trips Leh and Garo in summer months. Only a few people stayed at home looking after their vineyards. The flocks left behind used to be sent out for four to five months to high pastures on the mountains. Their occupations during wintry months were weaving blankets, sorting out wool, manufacturing of shoes etc.

Even during the Settlement of 1928 the conditions had almost remained the same except that money-lending among the traders had become known and the number of sheep and goats had increased. The age old system of polyandry remained intact and drinking habits with consequential indebtedness appeared to have taken hold of some people.

1. Fraser, James Baillie, *Journal of A Tour through part of the Snowy Range of the Himala Mountains, and to the sources of the rivers Jumna and Ganges, 1820*, pp. 263-64
2. Gerard, Capt. Alexander, *An Account of Koonawur, in the Himalayas, etc. etc., 1841*, p. 80

During the recent years in spite of the difficult nature of the terrain which involves extra-ordinary labour in cultivation the inhabitants, with their hard labour and surprising ingenuity in eking out their livelihood from the fields, produce grain but not enough to sustain the entire population, necessitating even to-day recourse to import. With the opening up of the area, the people here have increasingly developed taste and demand for such grain, as cannot be produced in the local soil, such as rice, wheat, etc. Whenever stock of foodgrains in a particular family runs short it is customary to get the grains on loan from the granary of the local deity or from a neighbour, returnable, with interest, at the time of next harvest or at a later stage. Thus the traditional methods of making up deficiencies have worked well so far. The occupation of agriculture has, however, been adhered to by the Kanauras although the limited cultivated area with peculiar agro-climatic conditions, has always precluded the possibilities of self-sufficiency, let alone export of grains.

Produce of soil alone being insufficient most of the people have animal-husbandry as the second string to their bow. Among the domestic animals may be enumerated yaks, cows, oxes, ponies, asses, sheep and goats. The last two, particularly mentionable, are found in large numbers imparting a pastoral tinge to the life of the local people. Sheep and goats provide them with milk, meat, wool and skins and, a efficient and effective mode of the transportation of goods from one place to another through tracks and paths running over dizzy heights and awe inspiring gorges. These animals also provide the people with excellent manure of their droppings. The wool and hair have given rise to many subsidiary occupations which may be designated as village crafts or cottage industries, such as carding, spinning and weaving. The surplus produce of wool and hair is a source of adding substantially to the inhabitants. It is due to the production of wool that almost all the local inhabitants are found clad, throughout the year in woollen clothes, obviating to some extent the necessity of importing mill-made cloth. To be reared successfully the sheep and goats have to be taken out either to the Alpine pastures in the summer or to the grazing grounds in the lower hills in the winter. In the lower hills they travel up to the Seoni Sub-tahsil and Arki tahsil of Mahasu district, parts of Mandi, Bilaspur and Sirmur districts. Their destinations are at a distance of many days journey. The shepherds thus roam about from place to place, wherever they can find water and good pasturage for their numerous herds of sheep, goats, yaks and horses. The sheep are large, hardy, and are used in transporting merchandise; they can take up to ten kilograms weight over very bad roads. Generally young persons accompany the flocks leaving aged members of the family behind. In their periodical migrations they look after the flocks and also produce

certain woollen articles including *kherago* gunny-bags etc., spending their nights in the open, cooking their food on the road side and thus braving the hazards of rough weather. A dog or two is a necessary concomitant of the caravan to keep at bay the leopards and panthers attracted by the flocks.

Kinnaur has now become the centre of various handicrafts such as weaving, tailoring, black-smithy, silver-smithy, shoe-making, earthen-ware making, basketry and carpentry. The village craftsman is coming into his own. The increase in developmental activities at a tremendous pace, has attracted a good number of skilled labour from outside the district. Execution of development plans, so vigorously being pursued, need manpower. Of late the local inhabitants have found a ready market in the vicinity of their villages to hire themselves as labourers if there remains nothing else to do for them in the off season. This new avenue of employment is a good utilisation of the spare time of the local people in a profitable manner and adds considerably to their income.

If the nature has been unkind to provide Kinnaur with a difficult terrain it has on the other hand been benevolent to provide culturable soil immensely fertile and climatically suitable for horticulture. Each village may be seen dotted with groves of fruit trees like apricots, peaches, pears, apples and walnuts and some with flourishing vineyards. A good many villages are fortunately situated near the forests of *chilgoza* trees. Yet some are located where cumin is found growing wild in the forest. *Chilgoza* and cumin add a good deal to the income of the people while apricots, peaches, pears, apples, and vines constitute a sizable part of their nutritious diet and drink. With the influx of outsiders and stationing of many government offices in the district these fruits are now marketed locally at a reasonably good price.

Kanauras are by nature hardy, industrious, capable of enduring the hardships of weather and above all are very good traders. Their migratory character which brings them in contact with various types of people in the hills as well as in the plains have endowed them with business acumen and patience for a strong bargaining power. They are generally honest in their dealings and not easy to be duped. The latest position of livelihood pattern is revealed by the decennial census of 1961. According to this census, 67.2 per cent of people were engaged in some type of work and the remaining 32.8 per cent were non-workers. Of the total workers, 66.4 per cent were cultivators, 3.6 per cent agricultural labourers, 0.5 per cent engaged in trade and commerce, 0.5 per cent in transport and the rest 29 per cent in other services.

The Family-wise Economic Survey conducted in 1965 reveals, that there were only a total of 239 Kanaura traders, 114 of whom were

customary traders and 125 were petty traders. The dislocation of the Indo-Tibetan trade has not adversely effected much of Kinnaur's economy. Most of the former traders have assets such as substantial land-holdings for horticulture, pack-animals and sheep and goat and other petty businesses. It has not therefore been difficult for them to rehabilitate themselves in alternate profitable occupations. The said survey reveals that these traders have sought government assistance by way of loans. The main purposes for which loans have been sought are for starting sundry businesses, for developing horticulture and for acquisition of improved breeds of sheep for the production of better and more wool. The government is also considering the question of providing interest free loans to some erstwhile traders.

General level of prices

Prior to the formation of Himachal Pradesh, there was no regular way of maintaining any regular record of price statistics in the district. Generally the trade was conducted on barter basis and very little or insignificant currency was put into circulation. However, in the Land Revenue Settlement, prices of various commodities were reckoned in terms of money. The earliest records, which reflect the ebb and flow of the prices of some agricultural products, are available on the basis of the Land Revenue Settlements of 1853, 1894, 1926 and 1928 as tabulated below, reckoned in seers per rupee.

Commodities	1853	1894	1926	1928
Wheat	—	Increase of 34% over the rates of 1853	6	—
Barley	—		10	—
Cheston	—		10	—
Peas	—		8	—
Rice	4		4	4
Maize	—		6	6
Kangni	9		6	7
Gram	9		8	7
Koda	9		8	7
Bathu	8		6	8
Ogla	10		9	10
Phaphra	14		12	12
Bharat	9		6	6
Mash	5		5	4
Chabru	14		10	10

A glimpse of the prices of some domestic animals, in 1910 can be had from the following account. * "A few yaks are found in the villages bordering Tibet. They are used mainly as beasts of burden and are also priced on account of their tails, which sell for from Rs. 3 to Rs. 15. Yak's milk and *ghi* made from it and described as being a good deal stronger in flavour than that of ordinary cows. The hybrid between a yak and an ordinary cow is much used as a beast of burden being more tractable and docile than the ordinary yak.....ponies are small and fetch from Rs. 40 to Rs. 150. The best are those of the Spiti breed in the village bordering on Spiti.

Mules and donkeys are also small. The price of the former is from Rs. 40 to Rs. 80, and of the latter from Rs. 5 to Rs. 30. Cows fetch from Rs. 10 to Rs. 12, and bullocks Rs. 15 to Rs. 20.....The prices of a goat ranges from Rs. 2 to Rs. 6, and of a sheep from Re. 1 to Rs. 5... .. Rampur is the only grain market in the State. The prices there are 33 per cent higher than in the villages. It is estimated that between the two settlements of 1853 and 1894 the prices of all grains went up by 34 per cent." Kinnaur area used to get their supplies from the market at Rampur wherein quantities of grain were imported from erstwhile States of Suket, Kulu, Bhajji etc. The following is a statement of the Rampur bazar rates for five years:—

Years	Prices current				(Seers per rupees)			
	Wheat (white)	Wheat (red)	Barley	Mixed grain	Rice	Mash	Ghee	Potatoes
1900	8	10	16	13	7	6	1	9
1901	10	12	19	10	9	6	1	12
1902	11	13	19	18	4	7	1	14
1903	10	11	17	17	9	7	1	14
1904	12	13	18	18	10	8	1	14

The Administration Report of Bushahr State for the year 1914-15 contains the following. "In the Chini tahsil very little grain is produced and prices are always considerably higher than in the other two tahsils; the rate averaged just over 5 seers throughout the year".

Even after the Independence, up to the year 1959-60 no figures indicating prices were available. The farm harvest prices of different

*Simla Hill States Gazetteers, 1910, pp. 52-53 & 55

commodities from 1959-60 onward are as follows :—

Farm harvest prices in rupees

Years	Rice	Wheat	Barley	Maize
1959-60	—	40.00	29.00	35.00
1960-61	35.00	37.12	31.00	35.00
1961-62	35.71	44.33	34.00	33.47
1962-63	41.16	43.00	35.00	34.58
1963-64	52.89	45.75	34.07	34.15
1964-65	43.48	44.59	34.90	34.82
1965-66	50.61	44.59	34.46	38.57
1966-67	96.66	162.49	147.90	98.56
1967-68	192.66	122.10	92.92	168.50
1968-69	175.84	116.62	97.61	150.10
1969-70	175.38	127.54	100.41	110.45

per
37.3 kg

per
quintal

Wages

During the princely regime there was no regular practice of maintaining statistics of wages. People rarely hired labourers and if at all they did so the payment was made in kind. Currency was hardly in circulation obviating the scope for payment of wages in cash. Village menials such as cobblers, tailors, blacksmiths, porters, carpenters and the like were also paid in kind. *Gaonsar begar* (forced labour) was prevalent and the villagers had to render their services through the village functionaries to the *Patwaris* and the travelling officials of the state.

Thomas Hutton has said, “*In Kunawur the women often carry quite as much as the men, and several of them marched along with apparent ease under burdens which the effeminate Simla coolies pronounced to be too heavy. One fine stout Kunawuree, whipped up in the scramble four bags of shot, amounting in weight to 56 seers, or 112 lbs, and carried them on his back the whole march, which is hilly and over the worst bye paths I ever saw, even in the hills. Two men had previously brought these same bags from Simla, and grumbled at the weight which was allotted to them, namely 28 seers each. The hardy Kunawuree demanded only two annas for his work, while the Simla men had refused to carry half the weight for three annas a day ... For two months and a half I had occasion to hire daily a number of these men at every stage; not one ever dreamed of asking more than a paolee, or

*Hutton, Thomas Lieut., *Journal of a trip through Kunawur, Hungrung, and Spiti*, 1838, pp. 47-48

two annas, nor was there hesitation and grumbling in lifting their allotted loads; each took his burden on his back and trudged merrily along with it to his journey's end.”

Almost similar conditions prevailed as late as 1929 as would appear from Van Der Sleen's observations. “*I was obliged for the time being to have recourse to man-power as a carrying agency ... I sent the man whom the Rajah had lent me for such emergencies, to the nearest village with a message that I wanted half a dozen lusty fellows the next morning to carry the baggage ... I opened the door of my tent to find my coolies sitting close in front of it in a semi-circle waiting to see what was going to happen. And then to my surprise I discovered one old man, two old women, two younger women, and a girl under fourteen ... After two hours' tramp we reach the next village. Here all packs are deposited on the ground and all hands outstretched. We fail to understand the meaning of this until the mayor, who seems to take it all as a matter of course, tells us that this lot of carriers is not going further. They have done their duty and he must now look out for another set. A nice waste of time, I pay the coolies two pence a head inclusive of tips. Half an hour's interval. Then the coolies arrive without the mayor. Again they are women with only one man to look after them. This coolie transport-service is forced labour which the villagers are called upon to perform by the mayor. You cannot refuse, though you may send your wife or daughter in your place. And this the gentlemen seem only too ready to do.” Forced labour was however stopped by the erstwhile Bushahr State. At present the practice is that the village mates provide the travellers with porters up to the next stage or village. The following rates for porters and pack animals as notified under the *Defence of India Rules, 1962* are effective in Kinnaur district from April 1, 1966.

1. Rates for pack-animals

- (a) For areas upstream of Chhikul, Rispa, Morang, Nesang, Dabbling bridge and above jeepable road in Ropa valley.

Type of animal	Maximum load (kg)	Summer Rate (May-October) in Re./Paise per mile (1.6 km) for load carrying journeys only	Winter Rate (Nov.-April) (1.6 km) per mile journeys only
(i) Mules and ponies	75	1.60	1.80
(ii) Yaks and zos	75	1.60	1.80

*Van Der Sleen, Dr. W. G. N., *Four Months Camping in the Himalaya, 1929*, pp. 103 & 105.

(iii)	Donkeys and asses	37	0.80	0.90
(iv)	Sheep and goats (for rations only)	15	0.32	0.36
(b) For the rest of Kinnaur district				
(i)	Mules and ponies	75	0.80	0.90
(ii)	Yaks and zos	75	0.80	0.90
(iii)	Donkeys and asses	37	0.40	0.45
(iv)	Sheep and Goats (for rations only)	15	0.16	0.18

2. Rates for portorage

- (a) For journeys entirely below an altitude of 3,050 m throughout Kinnaur district.

Maximum load (kgs.)	Summer Rate (May-Oct.)	Winter Rate (Nov.-April)	For distance exceeding 24 kilometres
(In Re./Paise per porter per 1.6 km for load carrying journey only)	0.40	0.45	Add 50% to rate

- (b) For journeys either entirely between an altitude of 3,050 m and 4,250 m or for journeys which may be largely below 3,050 m but in which a point or points *en route* above 3,050 m are attained :—
(In Re./Paise per porter 1.6 km journeys only)

20	0.50	0.60	Add 50% to rate
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- (c) For journeys above an altitude of 4,250 m or those largely below 4,250 m in which a point or points *en route* at 4,250 m or above are attained, subject to a minimum rate of Rs. 6×1 per day per porter for journeys involving large vertical climbs rather than horizontal distances.

Mix. load (Kgs)	Summer rate (May-Oct.)	Winter rate (Nov.-April)	For distances exceeding 24 kilometres
10	1.00	1.50	Nil

3. Rates for enforced halts of animals and porters during journeys

- (a) For pack-animals and riding ponies half the stipulated rate for the preceding stage will be paid per animal per day.
- (b) For porters required to halt *en route* the full stipulated rate for the preceding stage will be paid per porter per day.

¹Among the villages the system called *kol* or *bowara* is employed when extra field labour is required, as for instance at the harvest time. The zamindar, whose crop ripens first, calls in all his neighbours, to help him, and gives them their food during the time they are employed. When the crop is reaped the whole party goes to some one else's field, and so on, until every one has been assisted by every one else. Chamang and Domang who work as labourers, *hales* and *binanes* get food for themselves and their wives and children at the time of important festivals and some share in the crop at each harvest. They receive this fixed proportion of the crop from each such zamindar with whom they are connected. Hired field labourers receive food and about two *kod* (2 kg) of foodgrains per day.

Of late with the opening of numerous avenues for earning cash wages, the practice of *kol* is giving way to hiring labourers on cash wages. Majority of the people adhere to the traditional principle of providing mutual help. Certain agricultural operations such as weeding, harvesting and grass cutting are undertaken by the females who are usually paid in grain than in cash. Since 1959-60 the wage statistics, as collected through the revenue agency and compiled by the Directorate of Land Records, are as follows :—

Agricultural wages (averages for Kinnaur district)

Years	Skilled labour			Un-skilled labour		
	Carpenters	Blacksmiths	Cobblers	Field labour	Other agricultural labour	Herdsmen
	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
1959-60	4. 50	4. 08	6. 00	2. 08	2. 08	1. 25
1960-61	4. 75	3. 48	2. 06	3. 08	3. 27	2. 14
1961-62	5. 50	4. 00	—	3. 50	3. 50	1. 89
1962-63	5. 58	4. 50	—	3. 15	3. 56	2. 25
1963-64	5. 96	4. 42	—	3. 54	3. 54	2. 18
1964-65	5. 79	4. 29	—	3. 50	3. 50	2. 08
1965-66	6. 12	4. 62	—	3. 50	3. 50	2. 20
1966-67	6. 12	4. 62	—	3. 50	3. 50	2. 20
1967-68	6. 12	4. 62	—	3. 50	3. 50	2. 20
1968-69	6. 12	4. 62	—	3. 50	3. 50	2. 20
1969-70	6. 12	4. 62	—	3. 50	3. 50	2. 20

A little more than a century back the standard of living of people has been described below in the words of Gerard. “²Notwithstanding the want of grain, there are no marks of poverty in the country, and the inhabitants are generally so rich, that when two of them belonging to the village of Leedung wished for an advance of 1,000 rupees to purchase wool

1. Simla Hill States Gazetteer, 1910. p. 50

2. Gerard, Captain Alexander, *An Account of Koonawur, in the Himalayas, etc. etc.*, 1841, pp. 78-79 & 85.

for the British Government, the Wuzer in charge of that place, said, he would go security for 10,000 rupees each person. This is by no means a singular instance; for although none of them have large fortunes like the merchants and bankers of the plains, yet the riches are much more equally divided, and the poorest people are never in want, for if even grain be scarce, as if often is, yet their large flocks furnish an inexhaustible store.....

The people are as well clad as they can be, and seem to enjoy a much greater degree of comfort than any of the other mountaineers I have seen; their general dress is a frock of white blanket, often twice folded, reaching to the knees, and having sleeves, a pair of trousers and girdle of the same, a cap of black blanket, and shoes of which the upper part is woollen, and the sole alone leather. Every body has a steel for striking fire, ornamented with brass, hanging from his right side, and they commonly wear a hatchet stuck in their girdle, above which is tied a rope of goat's hair, neatly plaited and extremely strong, which they use in carrying burdens

The dress of the women is much the same, and in front they have a brass clasp called Peechook, in shape like a pair of spectacles, but much larger; they also wear bracelets, ear-rings, and anklets of pewter and silver.

A garment of goat's hair, named Kheear, is sometimes used; it is not so warm as the dress of blanket, but it keeps out rain well..... The household furniture consists of little more than some keloo chests for keeping grain, raisins, and apricots, a weaving apparatus which is very simple, spindles for twisting worsted, back baskets, skins for holding flour, butter, and spirituous liquors, brass and iron cooking pots, wooden plates, a stone mortar for expressing oil from the kernel of the apricot, a hand mill, a lamp or two, a smoking pipe, a tea-pot, and sometimes a few China cups and saucers. Bedsteads are almost unknown; and the earth is of broken granite, unfit for pottery, so they keep water and oil in vessels of different shapes and sizes, made of juniper wood, with iron hoops, and resembling those called cogs by the Scotch Highlanders".

By 1910 too inhabitants were usually well off as would appear from the succeeding account. "The Kanets of Kanawar are on the whole prosperous. They have plenty of cattle and many of them make a fair income from trade, to which agriculture is a secondary occupation.They often pay their revenue from the proceeds of homespun cloth. Those who live in the higher altitudes sell *ghi*, honey, and miscellaneous articles of jungle produce, thus supplementing their income derived from the land itself... The circumstances of Chini tahsil are somewhat peculiar, as in some parts

*Simla Hill States Gazetteer, 1910, pp. 49 & 76

of it sufficient grain is not grown to support the population. The inhabitants of this tahsil are nevertheless on the whole better off than those of Rampur and Rohru. Good profits are made in trading, they have plenty of cattle, and they make a considerable income from fruit and forest products, as well as from wool and homespun cloth.....In Kanawar the possession of fruit trees is distinctly a mark of wealth. A certain income is also to be got from the collection and sale of *zira* (cumin) and *neoza* (edible pine nut) from the forests".

Recent village survey indicates that substantial and swift change affecting the economy is taking place. Due to the development in the means of communication there is definitely an urge among the people of Kinnaur to leave behind their traditional and age old method of living and embrace the values emanating from new ways of life. This change is apparent in their food habits and dress. More marked and which in the long run will make them economically, socially and educationally virile, is dynamism in thinking. Old order changeth yielding place to new is a maxim more suitable in this area. With the active support and sympathetic interest of the government, horticulture is playing a predominant part in this area making them prosperous as fruit growers.

In the context of the modern civilization educational facilities, health services including sanitation, availability of transport and communication, and existence of banking and insurance companies, which constitute the main social services are coming into their own. So also facilities for travel, provision for recreation and aids for all round development of the people are the amenities available. New and fairly good lines of communication are developed. The most important of these is the National Highway No. 22 which follows the Satluj and the Spiti valleys from one end to the other of the district and is fit for heavy vehicular traffic. Valley roads, feeder roads and numerous village paths are being constructed at a huge cost of money and time. Co-operative societies and co-operative banks that have been organised in the recent past are sure to provide long awaited credit facilities and money market. Besides, the Community Development Department is striving to provide better amenities to the general people. Many developmental activities have opened up numerous avenues for earning cash wages. Many local people have captured high ranking posts in the services. Purchasing power has been thus increased. Modern amenities have found their way inside the area. Thus there has been a slow yet decided advance in the standard of living of the people. This has also revealed and is revealing the other side of the picture.

Increasing indulgence in luxuries has brought in its wake many artificialities. The wholesome and nourishing local foods are being substituted

*Simla Hill States Gazetteer, 1910, pp.49 & 76

by cheaper and less nourishing articles, and people are deviating from their traditional dietary habits. From the Family-wise Socio Economic Survey carried out in 1965 the detailed budget of every family in Kinnaur has been recorded. All families have been divided into four categories.

- A. Landless and with no other means of livelihood (income up to Rs. 100 p.m.)
- B. Landowners having up to 4.04 hectares of cultivated land (Rs. 101 to 200 p.m.)
- C. Landowners having above 4.04 hectares but less than 10.11 hectares to cultivated land (Rs. 201 to 350 p.m.)
- D. Landowners with 10.11 hectares and above of cultivated land (Rs. 351 and above).

The Appendix XIII shows the family budget of average family of each category in each of the six tahsil headquarters.

The following statistical details worked out in the Family-wise Economic Survey of 1965 will vividly give an idea of employment position in the district.

1. Total population of Kanauras in 1965	41, 797
2. Total number of families in Kinnaur	6, 359
3. Total population of Harijans	12, 392
4. Total number of Harijan families	1, 975
5. Various occupations in which total population of Kinnaur is engaged:—	
(a) Agriculture	17, 844
(b) Blacksmithy	740
(c) Carpentry	461
(d) Cobblery	25
(e) Masonry	83
(f) Nagal ware	52
(g) Sewing	31
(h) Spinning	2, 099
(i) Weaving	615
(j) Tailoring	275
(k) Wood-carving	13
(l) Labour—	
(i) Agriculture labour	1, 923
(ii) Other labour	1, 608
(m) Business and transport	533
(n) Cattle and sheep rearing	2, 322

(o) Service—	
(i) Government	1, 029
(ii) Private	626
(p) Other occupations	230

6. Percentage of landholdings in Kinnaur:—

(a) Landless families	6%
(b) Families possessing up to 2.02 ha	17%
(c) Families possessing 2.02 ha to 4.04 ha	16%
(d) Families possessing 4.04 ha to 8.09 ha	31%
(e) Families possessing 10.11 ha to 20.23 ha	20%
(f) Families possessing above 20.23 ha	10%

The alround development of Kinnaur since it became a district in 1960 has taken place at a rapid pace with, first and foremost, the opening up of an isolated area by an extensive network of communications. Apart from the National Highway No. 22 the main artery which now extends from one end to the other of Kinnaur, subsidiary roads are being fast extended to provide necessary links to the remotest habitations. These roads constitute the primary prerequisite for any tangible advance beyond the stage of subsistence economy generally prevailing in this tribal-inhabited border area.

Despite many handicaps, headlong progress has been made in the Third Plan towards providing the infrastructure and amenities essential as a base not only for the economic development of the people but also for extending to them equality of opportunity. Among the salient achievements extension of education to every village, medical facility to every panchayat and water-supply to almost every village may be mentioned. The response of the people to the Community and Tribal Development Movement has been very encouraging and much benefit has been derived from the generous financial allocation on this account for already satisfying most of their felt needs as outlined in some detail at the end of this chapter.

The people of Kinnaur have realized, by the silent revolution already taking place at a headlong pace, that economic prosperity can be gained from their subsistence level mainly by resorting increasingly to cash crops ideally suited to their agro-climatic conditions. The foundations for such prosperity have already been laid with the various Horticultural Research Stations providing the momentum for rapidly extending fleshy and dry-fruit and temperate vegetable cultivation. Cultivation of grapes and temperate vegetables, mainly English carrots, cabbage, turnip and sugar-beet for seed purposes will much add to the potential affluence. While this vital transformation proceeds apace, efforts have not been spared

to also extend scientific farming methods for increasing yields of cereals and millets which are the mainstay of the people.

The pastoral section of the population has gained substantially from the measures taken to improve the breeds of sheep while reducing the numbers of the destructive goats among their flocks, and by redistributing pastures within Kinnaur to compensate them for the loss of Tibetan grazing. Adequate and good quality wool for Kinnaur's cold climate has been ensured and with the establishment of a Sheep Breeding Farm and Sheep and Wool Extension Centres, both the quality and yield of wool has much improved towards the goal not merely of self-sufficiency but of eventual export with the proposed development of Kinnaur's handicrafts and woollen industries. While traders displaced by the disruption of the Tibetan trade have been largely rehabilitated in remunerative muleteers and motorized transport co-operative societies, a sizeable number of other petty traders are sought to be assisted with interest-free loans for various commercial or pastoral purposes.

In the sphere of co-operative marketing, the *chilgoza* crop, of which Kinnaur had a monopoly in India, is sought to be marketed by the District Co-operative Marketing and Supply Federation in order to more than double the income accruing to the local people from this natural source. When other crops such as apples, pears, peaches, plums, grapes, almonds, walnuts and temperate vegetable seeds reach marketable proportions, the federation will have a vast field of operation to help growers market their produce on very advantageous terms.

Conservation of soil is a pressing problem everywhere but of more acute concern in the dry zone of upper Kinnaur, where the arid valleys present a picture generally of stark and forbidding desolation often threatening the very existence of their villages. To combat this problem the government is planning additional forest divisions of effectively increase afforestation activity and provide extensive vegetal cover to check erosion. Farm forestry will also be extensively developed to restore a necessary balance in the village economy.

The possibility is now being explored to establish some medium and small-scale industries based on the local timber, fruit and wool resources as a first step to diversify the economy of Kinnaur. Substantial progress will be possible only when Kinnaur's vast hydro-electric potential is fully exploited. Power has so far been extended by transmission lines from Nogli Hydro-electric Station up to Karchham electrifying the Nachar and Sholtu-Tapri and Baspa valley area. Micro-hydel sets at Kalpa and Sangla have electrified the district and tahsil headquarters respectively, and the neighbouring villages, and in the next stage the Puh area will be

similarly electrified. Larger schemes by tapping the large potential of the Satluj, Spiti, Baspa and Bhabha rivers are being investigated.

The extensive present developmental efforts in Kinnaur for uplifting the weaker sections of the tribal community are receiving due care and meanwhile, the poorer people are also benefiting from the training and apprenticeship schemes of the Industries Department as a means for promoting and reviving the fine local traditional handicrafts. Among the other measures designed to develop the economy of Kinnaur are about twenty minor irrigation schemes in various stages of implementation, which by bringing about 223 hectares of culturable waste lands under largely horticultural orcharding will rehabilitate 1,432 landless families or those with marginal holdings that constitute twenty-three per cent of the total population. Subsidies and loans are already being extensively disbursed to the poorer families for building healthier accommodation to replace their old houses, and some of the hamlets which are virtual slums of the poorer castes are being replanned and reconstructed on modern lines. When all the schemes mature in no distant future, poverty will considerably banish from the face of Kinnaur and an era of prosperity will certainly usher in for the 6,359 families that inhabit this great mountainlocked land.

Employment exchange

There is an employment exchange which, to begin with, was established as a sub-employment exchange in May, 1961 at Kalpa. It was upgraded to a full-fledged exchange in January, 1962. An idea about the work done by the employment exchange, since its inception, can be had from the following tables.

Item	Registration and placing work						
	1961 from 5/61 to 12/61	1962	1963	1964	1965	1966	1967
1. Number of employment exchanges at the end of the year	1	1	1	1	1	1	1
2. Number of candidates registered	364	591	673	527	730	736	604
3. Number of vacancies registered	238	616	633	413	540	276	131
4. Number of candidates placed	79	253	282	286	295	133	77
5. Number of applicants on live register at the end of the period	165	225	163	172	144	232	229
6. Vacancies being dealt with at the end of the period	—	324	147	182	108	111	39

Occupational distribution of applicants on live register of Employment Exchange, Kalpa.							
Category		Number of applicants on the live register for employment in					
		1962	1963	1964	1965	1966	1967
1.	Professional and technical	15	13	12	11	3	15
2.	Administrative, executive and managerial	—	—	—	2	1	1
3.	Clerical and allied workers	12	—	1	2	5	4
4.	Transport and communication workers	—	—	3	3	15	9
5.	Craftsmen	—	—	18	11	15	15
6.	Other skilled workers	2	—	2	4	7	2
7.	Un-skilled office workers and other un-skilled workers	196	150	14	15	15	9
8.	Applicants who have no vocational training and job experience	—	—	122	96	171	174
Total		225	163	172	144	232	229

With a view to creating employment opportunity and properly assessing the employment potential, Government of Himachal Pradesh have extended the benefits for this border district by establishing employment exchange. A district committee with Deputy Commissioner as Chairman and comprising heads of the offices in the district as well as member of the Legislative Assembly from this area has been constituted. The committee whose term of office runs into three years is responsible for assessing the availability and requirements for employment of educated, uneducated skilled and unskilled people.

National planning and community development

Community development programme was launched in May 1952. At present there are six Community Development Blocks, and sub-blocks covering the entire district carrying out development activities. No efforts have been spared to associate the local public in the work of these official bodies. The more significant institutions into which non-officials are fully taken into confidence for formulation and implementation of the community development programme include the village panchayats, co-operatives, block development committees at the block level, District Planning Advisory Committee at the district level and, finally, the State Planning Advisory Board at the State level. The prime objective has been and continues to be to benefit the programme as much as possible through constant advice and guidance. The agencies enumerated above have a content of dominant non-official membership along with the officials connected with the institutions. The importance and effectiveness

of these institutions in the matter of planning and development of the district has been appreciable.

It was in October 1956 that the community development/national extension service programme was started with opening a separate block at Chini. Later in May 1960 necessity was felt of having three blocks, one in each sub-division for all-round development within the shortest period possible and on an evenly distributed basis.

Again in terms of what is called, April *1960 allotment the Himachal Pradesh Administration decided to establish the two stage I blocks with two sub-blocks in Puh and Kalpa sub-division with effect from the 1st of April, 1960, in the following manner.

- (a) Puh Block with headquarters at Puh
Morang Sub-block with headquarters at Morang.
- (b) Kalpa Block with headquarters at Kalpa
Sangla Sub-block with headquarters at Sangla.

The then existing Chini stage I block started as far back as 2nd October, 1956 was decided to cover thenceonward the Nachar sub-division only under the name of Nachar Block. The details of blocks and sub-blocks are given in the following table :—

Block	Sub-block	Date of initial allotment as			Date of conversion into			Population according to 1961 census
		N.E.S.	C.D.	P.E.	Stage I	C.D. Stage I	Stage II	
Nachar	Nachar	2.10.56	...	...	...	...	1.4.63	12,120
Kalpa	Sangla	...	...	...	1.4.60	...	...	16,612
Puh	Morang	...	...	...	1.4.60	...	...	13,248

The basis of allotment of blocks as laid down by the Government of India is one block for one hundred villages covering a population of 66,000 but keeping in view the poor means of communications, limited working season and sparse population, the Government of India agreed to relax the above conditions in the district.

Usually a block is put under the charge of a Block Development Officer assisted by a team of experts. The work at the village level is looked after by *Gram Sewaks* and *Gram Sewikas*. In Kinnaur, however,

*The blocks allotted in April, 1960, start functioning actually from November, 1960

Sub-Divisional Officer (Civil) performs the duties of a Block Development Officer in a block with the usual compliment of technical as well as village level staff. The strength of the staff of block agency is given in the table that follows :—

Sl. No.	Name of the functionary	Blocks		
		Nachar	Kalpa	Puh
1.	Block Development Officer (S. D. O. Civil)	1	1	1
2.	Extension Officer Panchayat	1	1	1
3.	Extension Officer Agriculture	1	1	1
4.	Extension Officer Co-operation	1	1	1
5.	Extension Officer Industries	1	1	1
6.	Overseer (Extension Officer) C.D.	3	2	2
7.	Social Education Organiser	1	1	1
8.	Lady Social Education Organiser	1	1	1
9.	Gram Sewaks	11	10	10
10.	Gram Sewikas	2	2	2
11.	Doctor	1	1	1
12.	Progress Assistant	1	1	1
13.	Stockman	1	1	1
14.	Manure Supervisor	1	1	1
15.	Assistant Engineer (Development)	One for all the three blocks.		

The main purpose of the block development agency with all its extension officers is to stretch out and unfold (which is the literal meaning of the word 'extension') the latent tendencies of the people to improve their lot by mutual or self-help. The impact of the extension work in Kinnaur can readily be assessed by the enthusiastic participation by the people in the framing and executing development programmes on a very impressive and encouraging scale.

So far as the sub-blocks are concerned the local Tahsildars function as Block Development Officers. They have not been provided with any extra staff. The actual expenditure during the Third Five Year Plan incurred on the community development programme amounted to Rs. 44,53,769 Under Tribal Development Block programme Rs. 11,99,542 were spent and the expenditure under pilot project programme amounted to Rs. 91,275. The amount spent on the welfare programme stood at Rs. 16,78,030 and expenditure on local development works programme was Rs. 1,48,693. Thus total developmental expenditure under community development/tribal development pilot

project, welfare and local development works programme in the Third Five Year Plan was Rs. 75,71,309.

The main physical achievements under the block and welfare programme during the Third Five Year Plan are tabulated below :—

1.	New drinking water-supply schemes provided	96
2.	Drinking water-supply schemes repaired or supplemented	79
3.	Minor irrigation channels constructed	88
4.	No. of minor irrigation channels repaired	74
5.	No. of tanks constructed	13
6.	No. of bridle paths constructed or repaired	129
7.	No. of jeepable roads constructed	6
8.	No. of bridges constructed	23
9.	No. of <i>jhulas</i> constructed	11
10.	No. of teachers' quarters constructed	14
11.	Pre-matric stipends given	1,013
12.	Aid for books and stationery given	2,744
13.	Mid-day meals (for school boys)	9,885
14.	No. of horticultural nurseries started	2
15.	No. of families to whom housing subsidy given	505
16.	No. of families to whom legal aid given	188
17.	No. of nomadic inns constructed	9

CHAPTER X

GENERAL ADMINISTRATION

The State of Bushahr with headquarters at Kamru, after subjugating a number of *thakurs* who held sway in the Chini tahsil (now Kinnaur district) emerged into a large state. The system of administration was archaic though inexpensive. Every village had a body comprising a *mukhiya*, a *char*, a *halmandi* and a *toknya*. The last two belonged to the Scheduled Caste community. Besides, a sort of panchayat consisted of two or three noblemen, to collect land revenue and settle disputes. *Daroga*, a state official, visited a village every year or two to settle major disputes. Prior to the Gurkha war the rajas held a firm personal grip upon the state affairs and the wazirs occupied their legitimate positions as counsellors. The ablest man available in the area was appointed as a *sarhaddi* wazir, in charge of the frontier and was invested with considerable independent authority. His office was not hereditary. He was practically given a free hand as long as he maintained order. This system continued only till the expulsion of Gurkhas. Next to raja the most noteworthy families were of the three hereditary wazirs belonging to Pawari, Kohal and Shua.

After the repulsion of the Gurkhas the state was restored to Raja Mahinder Singh by the British who thereafter held sway over the administration of the state. ¹Fraser depicts that Bushahr was governed by a raja, whose office was hereditary; and it appeared, that under him different districts were controlled also by hereditary chiefs, assuming the titles of wazir, and exercising authority in their respective districts. He further states that the wazirs assessed and collected the land revenue as well as settled minor disputes. The raja was always looked upon as lord paramount with perfect submission.

²Thomas Hutton while describing the position extant in about 1838 reveals that the raja had three wazirs who managed the affairs of their respective territories and took command of the forces in time of war as it was contrary to the custom for the person of raja to do so. These three wazirs were equal in rank and their offices were hereditary. Below them were several inferior officers also called wazirs, whose offices were not hereditary, but who were elected or rather nominated by the raja annually. The personal attendants or immediate household of the raja, consisted of

two sets of men called *churriahs* and *hazrees*. The *churriah* derived his name from part of his duty which was to carry the *churree*, or silver stick, on occasions of ceremony before the raja. His duties were chiefly those of a chupprassi and he was sent into different *parganas* to collect the revenue, to report any misconduct, and to see that the people were equitably assessed, that is, to point out who was to be taxed heavily, and who was to be excused and, in fact, to ferret out and report to the raja the conduct and circumstances of all his subjects. Those who were smart, and acquitted themselves to the satisfaction of the *churriah* in this system of espionage were usually high in favour, and received occasional substantial presents in token of their flattery. Those who were lukewarm, lazy, or who were wanting in tact, got nothing but their troubles. The raja gave no pay to his servants, their services on the contrary were compulsory. The *churriahs* formed a body from eighty to sixty men, never exceeding the one or falling short of the other number; they had three officers who, in the local dialect, were called *pulsur*, *buttoonggee*, and *nagi*, answering to Subedar, Jamadar and *burkumdanze*. They were exempt from military service and remained with the raja. The *hazrees* were a larger body of men than the *churriahs*, and they sometimes performed the same duties, but in general they acted as Chaukidars or guards to the raja. They consisted of one hundred and forty men, and had one officer called a *gooldar*. Of their number, however, no more than forty or fifty of the smartest were required to be in attendance; the others were to remain at home. They were fighting men, and in time of war joined the forces.

*Captain Alexander Gerard has also recorded a similar account in 1840.

In the year 1895 old panchayats were abolished because they had started giving frivolous decisions and had developed vested interests. They were replaced by the establishment of a tahsil in Chini. At the same time and for the first time some police personnel were also posted there. Chini tahsil was sub-divided into five parganas which stood further sub-divided into fifteen *ghoris*. Each pargana had attached to it a fort located at a central place, with an establishment varying in sizes according to the resources of the tracts and the area of state lands contained in it. In olden times, when the whole state had been parcelled out among a number of hereditary wazirs, a whole pargana was included in a single *wizarat*. The same wazirs, might have more than one pargana allotted to him but in that case they were scattered so as to mitigate the risk of his establishing an independent chiefship. The pargana was sometimes

1. Fraser, James Baillie, *Journal of a Tour through part of the Snowy Range of the Himala Mountains, and to the sources of the rivers Jumna and Ganges*, 1820, pp. 269-70 & 545

2. Hutton, Thomas Lt., *Journal of a trip through Kunawur, Hungrung and Sipti*, 1838, pp. 10-16

*Lloyd, Major Sir William and Gerard, Alexander Captain, *Narrative of a journey from Caunpoor to the Boorendo Pass in the Himalaya Mountains*, Vol. II, pp. 301, 02-04.

identical with *ghori* but as a rule, there were from two to five *ghoris* in a pargana. A *ghori* denoted a collection of villages with a common grazing ground. Chini tahsil was further sub-divided into sixty-three villages. The villages were often mere hamlets of two or three houses.

By 1910 there was a Manager of the whole state at the apex who had full criminal, civil and revenue powers except that sentences of death required the confirmation of the Superintendent, Simla Hill States. Below the Manager there was a *Naib-tahsildar*, in charge of Chini tahsil and invested with class III civil and criminal powers. All appeals from the subordinate courts went to the Manager. At the state headquarters the Manager had a full treasury, a record room, *Kanungo's* office and judicial establishment. There was a field *Kanungo*, and six *Patwaris* in the tahsil along with a small sub-treasury.

For every pargana there was a headman called *dashongi*. He was remunerated at the rate of one per cent of the revenue of his charge. Each village was under the charge of a *char* (watchman) who received one per cent of the revenue of his charge. Each *ghori* was under the charge of a *lambardar* getting three per cent of the revenue of his charge.

In February 1915 the raja was invested with I class criminal and civil powers by the Superintendent, Simla Hill States. Prior to this event the Manager's court was the only court in the state with full powers.

In the days of princely regime and even after the formation of Himachal Pradesh there used to be a *Naib-tahsildar* or a *Tahsildar* in what was come to be known as the Chini tahsil. But later on the border tahsil was converted into a full-fledged district of Kinnaur from 1st May, 1960 the usual resident apparatus of district administration was planted with certain modifications to suit administrative and developmental needs peculiar to the district and different in many respects from certain parts of Himachal Pradesh and much more so from the plains. It has a single-line administration to ensure rapid development of the Scheduled-Tribes. The district originally had three sub-divisions, namely, Puh, Kalpa and Nachar; three tahsils, namely, Sangla, Morang and Nachar and two sub-tahsils, namely, Kalpa and Puh. In 1961 sub-tahsil, Kalpa was made a full-fledged tahsil and one additional sub-tahsil for the Hangrang valley was created. The Puh sub-tahsil was upgraded to the tahsil of the same name on 7th September, 1965. The district comprises seventy-seven villages in all; tahsil Kalpa having twelve villages of *patwar* circles Kalpa, Kothi and Tangling; tahsil Nachar having twenty-two villages of *patwar* circles Ruppi, Natpa, Bhabha, Urni, Ramni, Nachar and Paunda, tahsil Sangla having eleven villages of *patwar* circles Sapni, Sangla and Kamru, tahsil Morang having fifteen villages of *patwar* circles Morang, Akpa, Lippa and Thangi,

tahsil Puh having nine villages of *patwar* circles Puh, Giabong and Kanam and sub-tahsil Hangrang having eight villages of *patwar* circles Chango and Leo.

Prior to the attainment of Statehood, there existed at the state headquarters a special unit directly under the Secretary to the Lieutenant Governor who functioned as the ex-officio Secretary (Border) and maintained liaison with the district administration on the one hand, and with all the departments of Himachal Pradesh Government and the Central Government which concerned the border affairs on the other. On attainment of Statehood on January 25, 1971, this set up at the State headquarters changed and the functions of various agencies in the district are looked after by the General Administration and now the Heads of Departments correspond directly with their respective district level officers. Likewise, the district officers correspond direct with their respective heads of departments. In some cases of sufficient importance the heads of departments as well as the district officers route their correspondence through the Deputy Commissioner. Important communications between the heads of departments and the Deputy Commissioner have to be brought to the knowledge of the State Government.

In formulating Five Year Plans and the Annual Plans the District Planning and Development Committee of which the Deputy Commissioner is the Chairman is consulted. The Deputy Commissioner can convene the meeting of this committee as often as he considers necessary but generally this is held quarterly. After technical sanctions have been obtained, subject to the availability of funds, the Deputy Commissioner may allocate priorities. Previously for minor emergent work of repairs of Public Works Department budget, the Deputy Commissioner was competent to issue financial and administrative sanctions and in the aggregate, however, all such sanctions issued by him at the end of the financial year was not to exceed Rs. 5,000 to which extent the Chief Engineer was to make available the funds. Similarly, for emergent works or special repairs works pertaining to different departments the Deputy Commissioner was empowered to authorise the Executive Engineer to prepare estimates prior to the sanction of the heads of the departments concerned.

The Deputy Commissioner is the pivot round whom the entire administration revolves. He wields wider administrative and financial powers than other Deputy Commissioners in Himachal Pradesh under the system which is known as Single-Line Administration introduced in December, 1963. Under this system the Deputy Commissioner has the power to write the annual confidential reports of all the district-level

officers of various departments. In 1965 the Deputy Commissioner was delegated powers to transfer within the district class III and IV employees of all departments in consultation with the head of offices concerned. This enabled the Deputy Commissioner to ensure co-ordination of all departments including the pooled departments. He is empowered to sanction casual leave and also to approve the tour programmes of all the district level officers. The development schemes of various departments have also to route through the Deputy Commissioner but as the functioning of the district is being normalised to bring at par with other districts except for security matters the schemes of various departments now route through normal channels as in any other district.

The Deputy Commissioner works as the District Magistrate. Besides he exercises the powers of Collector in respect of land revenue administration and that of the Registrar under *the Indian Registration Act 14 of 1908*. He is a Marriage Officer under *the Hindu Marriage Act 1966 (Act XXX of 1965)*. He exercises powers of the Commissioner under *the Workmen's Compensation Act, 1923*. He exercises powers to try civil cases as a Sub-Judge up to the pecuniary jurisdiction of Rs. 2,000.

The district is sub-divided into three sub-divisions of Kalpa, Nachar and Puh. Nachar sub-division comprises Nachar tahsil; Kalpa comprises of Kalpa and Sangla while Puh sub-division comprises Puh and Morang tahsils and Hangrang sub-tahsil.

The Sub-Divisional Officer (Civil) works as Sub-Divisional Magistrate also. Till recently the Sub-Divisional Officer (Civil), Puh, used to be the Additional District Magistrate within his own sub-division. The Sub-Divisional Officers (Civil) are Revenue Assistants of their own sub-divisions exercising powers of Assistant Collector Ist Grade under *the Himachal Pradesh Land Revenue Act*, and *the Himachal Pradesh Land Reforms Act*. They exercise powers of the Block Development Officers within the sub-division. In fact, this is the most important part of their duties in this border district. The Sub-Divisional Officer (Civil) also exercises powers of Sub-Judge for trial cases up to pecuniary jurisdiction of Rs. 2000 and this varies in case of the incumbents of the post in view of their background and experience. The Sub-Divisional Officer (Kalpa) is the Land Acquisition Officer for the whole district.

All the tahsildars in the district are invested with the powers of Magistrate II Class. They are Assistant Collectors II Grade under *the Himachal Pradesh Land Revenue Act*, and *the Himachal Pradesh Land Reforms Act*. For partition cases they exercise powers of Assistant Collector I Grade under *the Himachal Pradesh Land Revenue Act*. At

Nachar and Puh where sub-treasuries exist the tahsildars are Sub-Treasury Officers. They are Sub-Registrars under *the Registration Act* and also the Compensation Officer under *the Himachal Pradesh Land Reforms Act*. Tahsildars, Sangla and Morang, are also invested with the powers of Sub-Judge up to pecuniary jurisdiction of Rs. 500. The Naib-tahsildar, Hangrang wields powers of Assistant Collector II Grade under *the Himachal Pradesh Land Revenue Act* and Magistrate III Class for trial of criminal cases.

The following table shows the other district level officers.

Sl. No.	Department	Designation	Headquarters
1.	Police	Superintendent of Police	Kalpa
2.	Medical and Health	District Medical Officer	"
3.	P. W. D.	Executive Engineer Kinnaur Division	"
4.	Panchayat	District Panchayat Officer	"
5.	Forest	Divisional Forest Officer Kinnaur Forest Division	Nachar
6.	Agriculture	District Agriculture Officer	Kalpa
7.	Horticulture	Horticulture Development Officer	"
8.	Co-operative	District Co-operative and Supplies Officer	"
9.	Industries	District Industries Officer	"
10.	Education	District Education Officer	"
11.	Employment	District Employment Officer	"
12.	Animal Husbandry	District Animal Husbandry Officer	"
13.	Public Relations and Tourism	District Public Relations Officer	"
14.	Welfare	District Welfare Officer	"
15.	Home Guards	Commandant, Home Guards	"
16.	Transport	Assistant Regional Manager	Tapri
17.	Treasury	Treasury Officer	Kalpa

Various organisations of the Government of India with offices in the district include, the Postal Department, Intelligence Bureau, the Area Organiser of the special Security Bureau, the Held Publicity Officer of the Ministry of Information and Broadcasting and the Indo-Tibetan Border Police.

CHAPTER XI

REVENUE ADMINISTRATION

LAND REVENUE ADMINISTRATION

History of land revenue settlement

James Baillie Fraser has left on record that during the princely regime the land revenue administration in the erstwhile Bushahr State was in the hands of the hereditary wazirs. ¹He observed that the revenue of Bushahr was limited, and was far from being levied proportionately. The mode of assessment was indefinite. It was sometimes collected in cash and at others in kind. The sundry household expenses of the raja were defrayed out of the state revenues which at that time presented a fluctuating picture because of its irregular and arbitrary mode of collection.

²Gerard has specifically observed about Kinnaur—that this particular area was always favoured by the Bushahr rulers. The people were lightly assessed and were happy and contented. The cultivated land at that time constituted so small a proportion to the population, that it was scarcely taken into account, and therefore, the assessment was levied at the rate varying from eight to twelve rupees upon each family. The whole revenue of Kinnaur was about rupees 15,000.

It is said that the assessment of the revenue was comparatively lighter because the raja and ranee took refuge here and were cordially treated and their suzerainty recognised when the Gurkhas held their sway in other parts of Bushahr. The hardy Kanauras were almost only soldiers who stood with the raja till the last and by destroying the bridges, and throwing other obstacles in the way of the Gurkha army succeeded in warding off their occupation of this area.

The only available recorded source of information thereafter consists in the *Punjab States Gazetteer, Volume VIII-Simla Hill States* which was published in 1910. This gazetteer has quoted Mr. Coldstream, for the following observations contained in his review of the settlement report of the Rampur tahsil of the erstwhile Bushahr ³State, 'at that important era

in the history of Bushahr Government, it is well that I should record something of the past fiscal history of the State, which presents many remarkable features and is as remarkable an instance as could well be found of the prevalence of archaic and irregular customs, of grasping greed and oppression on the part of the administration, and of the crying need of the reforming hand of a just administration. 'Before the Settlement of Sambat 1910 (Sham Lal's Settlement of 1854) the cash revenue of this tahsil amounted to Rs. 5,372. In addition to this each land-holder (*asami*) in the State had to pay according to his means certain other things mentioned further on, which were called 18 *karahads* or *habubs*. Their number was unlimited and large; separate officials had been appointed for the collection of them (*habubs*), who went about with a few men with them for the purpose. They also realised their share for their services in addition. When a fair took place at Rampur in the month of Poh, all the officials assembled there, and made over all their collection to the Wazir of the *pargana*, who, after deducting his share, paid the balance into the State treasury. If the above income fell short of the State expenses, the deficiency was made up by collecting it proportionately from among the agriculturists. There is no record of the account of the State income for that period from which the total amount of income could be ascertained.'

'The above articles appear of very little value, but the amount really collected by the officials was practically unlimited. Moreover, there was no proper supervision on the part of the higher officials for the purposes of checking oppression. The value of articles collected by the officials as their share amounted to twice or even thrice as much as collected for the State as *karahads*. When the State officials went to any village for collection of the revenues and the 18 *karahads*, each of them was followed by about 15 or 20 followers, called *piadas* (peons) who in their turn collected something from the subjects as their share, in addition to what is mentioned above. Even this did not satisfy them. They also exacted from each cultivator separately their food expenses, etc. The cultivators were consequently obliged to complain against the management of the State to the Deputy Commissioner. With the consent of the subjects an order was accordingly issued in 1851, for the introduction of a new system of management.'

What follows now is an account derived from the said gazetteer and, in some part, from the Assessment Reports of the Rohru and Chini tahsils for the revised settlement which was concluded in 1928.

In the first place, the raja was the owner of all land, and every subject of superior caste had land allotted, in order to enable him to meet part of his allegiance he owed to his ruler, by the transference of his allotment. This personal character of the relations between the ruler and

1. Fraser, James Baillie, *Journal of a Tour through part of the Snowy Range of the Himala Mountains, and to the sources of the rivers Jumna and Ganges, 1820, pp. 270-71*

2. Gerard, Capt. Alexander, *An Account of Koonawur, in the Himalayas, etc. etc., 1841, pp. 83-84*

3. Letter No. 2937, dated November 17, 1893, to the Chief Secretary, Punjab Government.

the ruled appears to have been far stronger than the bond created by the holding of land, and to have had greater influence on the development of institutions. It invaded all departments of the administration, and, in the case of feudatories, often survived long after the petty chief had ceased to exercise jurisdiction and to be the owner of all land. Revenue collection was based on the sovereign's right to share in the profits of every kind of activity in which his subjects engaged. The members of artisan castes had to give a part of earning in their handiwork; workers in bamboo supplied baskets; *kumhars* gave earthen pots; charcoal-burners provided fuel; Kolis gave ropes or shoes; professional musicians discoursed music.

The principle was logically applied to all products of the country, whether animals, mineral, or vegetable. The flocks supplied wool and meat, while the herds gave ghee. The state took a share of the iron, smelted in certain parganas of the Rohru tahsil; and claimed the main portion of the gold dust obtained from the Satluj. Imposts were levied on every kind of agricultural produce. The Kanauras had to give wine made from their grapes, while the residents of other parts had to contribute liquor, whether brewed from grain, honey, or the fruit of wild trees. A quota was taken of the oil pressed from the kernels of wild apricots, while the men of certain parganas were held responsible for the collection of honey from the forests. The number of *karahads*, or levies in kind, tended continually to increase, and a list prepared by Sham Lal at the middle of last century enumerated as many as sixty-four items. Some of these were purely local, while the distinction between others appeared to be nominal. It is clear that any source of income, however trivial, could not escape taxation. The incidence of particular taxes or levies varied between wide limits according to the circumstances of the *malguzar*. For instance, the minimum levy of one grain tax was twelve seers, while the maximum was four maunds.

A few taxes were collected in cash, but coin was a scarce commodity and monetary levies were made for special purposes only, such as the payment of the government tribute, or the extraordinary expenses of the raja's court. As far as possible, the ordinary demands were met from the resources of the then state.

System of begar—The right of the ruler to share in all available assets was to such an extent that a man's physical powers belonged to the raja. It was obligatory on every household to supply an able-bodied man to labour for the state for half the year. More than one man from each household could hardly be demanded without detriment to the system of agriculture. As it was, the strain was felt so severely that large households were encouraged by putting a veto on partition.

Estimate of the ancient system—Such were the main features of the ancient system, which if honestly worked, was not ill-adapted to the needs of the then state and the circumstances of the people. Under a strong ruler, the burdens were equitably distributed, and the principles underlying their imposition were in harmony with the people's conception of their duties. The trouble was that there were a few strong rulers. Power was gradually usurped by the wazirs until at length they became the judicial, executive and revenue administrators of the state. As collectors of the numerous imposts, they took more for themselves than for the state. They employed a host of unscrupulous subordinates, who robbed the people in all directions. The only remedy the latter had was to organise a periodical *dum*, an institution which had many features including an effective method of "peaceful picketing" in common with the modern sympathetic strike. Nevertheless, the old system died hard, and the repeated failure of new measures bears testimony to its popularity with the people, as well as to the strength of vested interests which opposed reform.

First summary settlement of Sham Lal (1854)

The first summary settlement of Chini tahsil was conducted by Sham Lal in 1851 and 1852 on the lines adopted in Rampur and Rohru tahsils of the then State of Bushahr. The assessment was based on the quantity of seed and the area. On ascertaining these the *khassra* and *khewat* were prepared, and the demand was fixed. Eighteen *karahads* (cesses) which then existed, were abolished. The settlement lasted only for two years. The fact was that a cash assessment and abolition of the *karahads* with the unlimited opportunities for exploiting the people did not suit the wazirs and *jagirdars* and they got it cancelled. From 1853 to 1928 there have been in all six settlements within a space of seventy-five years. This lack of continuity of earlier four settlements can be traced to the constant struggles between Raja Mahinder Singh (1850-1887) and his wazirs. The following table gives the various assessments of the area.

	Cash	Cesses	Total
	Rs.	Rs.	Rs.
Before Sham Lal's assessment	7,809	18 <i>karahads</i>	—
Sambat 1910 (1854)			
Sham Lal's assessment	16,655	2,664	19,319
Sambat 1912 (1856)			
Lord Wm. Hay's Settlement	10,797	1,728	12,525
Sambat 1916 (1859)			
Mr. Barne's Settlement	7,809	18 <i>karahads</i>	—

Sambat 1933 (1876) Mr. MacNabb's Settlement	12,892	1,363	14,255
Sambat 1951 (1894)* Tikka Raghunath Singh's Settlement	10,422	2,593	13,015
Sambat 1985 (1928) Chatur Bhuj's Settlement	17,257	4,314	21,571

Lord W. Hay's assessment

After the cancellation of Sham Lal's assessment, in 1856, new rates were fixed at a conference held at Simla-at which the then Raja Mahinder Singh and representatives of the people were present. The new *jama* was reduced by Lord W. Hay from twenty-five per cent of the gross produce as fixed by Sham Lal to fifteen per cent. The assessment amounted to Rs. 10,797 for the then Chini tahsil, cesses were fixed at Rs. 1,728; total Rs. 12,525.

Although the assessment was extremely light, yet it was distasteful to the wazirs, who had always objected to money assessment, because, as said above, cash assessment at once stopped their indirect gains which formerly swelled their incomes. The raja professed to approve the money assessment, but secretly encouraged the wazirs to oppose it. On the outbreak of the Indian struggle for freedom in 1857, the raja issued orders in favour of reverting to the old system of collecting the revenue. He justified this action by saying that the principal god of the then state had expressed holy indignation and that the epidemic of cholera, which was then raging, was solely attributable to the money assessment. Both systems co-existed for some time, and the accounts fell into confusion. The feeble raja again espoused the money assessment. The wazirs resisted it in their personal interests; and the question of the assessment was one of the principal points in the disputes which distracted the state. On a reference to the British Government the Superintendent Simla Hill States was directed to explain to the raja that the Commissioner objected to the coercion of the wazir, or to enforce the money assessment, howsoever advantageous such a system might in reality be to both parties.

In August 1858 the zamindars petitioned the Superintendent on eleven points, one of which was that the assessment should be reverted to the old settlement.

In April 1859 Mr. Barnes visited Bushahr with a view to composing the discordant elements in the state. The complaint of the people as to the land revenue administration, he thus summarised;

*1890-1891 as given at p. 8 of *Assessment Report of Tarmim bandobast*, by Chatur Bhuj.

" Their statements were unanimous. They said that their country was wild and secluded. Except along the valley of the Satluj there was no traffic, and the substance of the people consisted of their crops and their flocks, which, owing to the want of markets, they could not readily convert into cash. Money was a scarce commodity except along the line of trade and their dealings among themselves were almost limited in exchange. In consequence of these incidents of their country the Government revenue had always been levied partly in kind and partly in cash. They could easier pay a heavy revenue in this way than a light consolidated sum in money. From the earliest days of the Bashahr principality the state had been supported by this primitive mode of revenue. The Raja had kept his court, and the people had lived contented under a system which, however rude and complicated to British ideas, was yet the best adapted to the necessities of the country. In 1851 the British Government, considering that the present Raja was a minor, had deputed an experienced Tahsildar, by name Sham Lal, to make a land settlement in money, consolidating all miscellaneous imposts and fixing upon each peasant a sum in cash proportioned to his means and the extent and quality of his land. From this time the revenue has been thoroughly disorganised. They themselves were reduced to poverty. The Raja's treasury was notoriously empty. Constant demands were raised against them; revenue emissaries were always harassing them, and they were in utter perplexity, ignorant of their accounts, and never feeling secure that their obligations were discharged. Of late years conflicting orders have been issued. At one time Sham Lal's settlement has been set aside and a partial return made to the old system, with the difference that the tribute to the British Government of Rs. 15,000 a year, which is levied ratably from all the *zamindars*, was increased 50 per cent or to Rs. 22,500 a year, in order to raise funds for the State expenditure. They had paid this assessment for a year without complaining but, seeing that the Raja was no richer, while they were ground to the dust, they had determined to rise, partly to obtain a complete return to the ancient system of revenue, and partly to punish those *kardars*, who had spared neither them nor the Raja, but had plundered both." People, it appears, made certain demands for the future.

"It was after much discussion and many public meetings that these demands were elicited. The Raja sat by my side, while the people narrated their grievances, and seemed to take an interest in the proceedings. With his consent the wish of the people for a return to the old system of revenue was conceded, with this proviso that, if the income proved insufficient for the expenses of the State, the people should make good the difference by a ratable levy, for which the fixed character of Government tribute already assessed upon them afforded a

good foundation. The people themselves proposed this rule, anticipating apparently that there would be a deficit."

"This system is avowedly rude and cumbrous. The revenue is made up of various imposts, which would be intolerable to any land-holder in a more civilized part of India. But we must not judge of Bashahr by ordinary rules of political economy. There can be no comparison between the advantages of a fixed money assessment and multiplied cesses, levied partly in cash and partly in kind. But, in the first place, a barbarous race of mountaineers in a remote and secluded part of the Himalaya is not able to discriminate correctly between conflicting systems of revenues. They prefer what they are best accustomed to, however opposed to their real interests. Moreover, it is not possible to work a foreign system by such means as Bashahr can supply. A money assessment to be popular must be fairly and evenly distributed, not only between different parganas and villages, but between man and man. We can effect this object with our elaborate machinery and the people appreciate the advantages of a fixed and definite demand. But when so much depends upon equality of rates and a careful classification of soils, we cannot trust the loose, unscrupulous and uneducated agents of a State like Bashahr. The fact is abundantly proved by the disorder that has prevailed ever since the attempt was made. Add to this the rude and inaccessible character of the country, the imperfect circulation of coin, the strong attachment of the people to the old system, the opposition of all classes, and it will be seen that Bashahr is not prepared for a money assessment; or, if such a system must be introduced, we must appoint our own officers and entirely sweep away the native agency. One of two alternatives lies before us, either we must adopt the ancient system of the country and administer it by native officials, or we must be prepared to assume the entire management of affairs, to supersede the Raja and his Wazirs, and to import our own agents. A mixed system will not be successful, as the result of the last eight years has proved".

Barnes's assessment

"Government approved of Barnes's proposals to revert to collection in kind.

While it was then considered necessary, in order to quiet the apprehensions of the people and to lay anew the foundations of settled government in this distracted State, to revert to the old and cumbrous assessment of the revenue in kind (to a large extent) it was confessedly a stop of a temporary and provisional character. Mr. Barnes, while he admitted that the exertion made to uphold Sham Lal's assessment of 1851 was one of the principal causes of the rebellion, and stated that the people there "shudder at the very name of *paimaish*", and connected the idea

with oppression and misrule, yet distinctly declared "that at a more opportune time the experiment should be renewed", and was, in his opinion, the one thing necessary for the complete organisation of Bashahr. "But the measurements", he added, "must be made under proper superintendence, the returns must be well tested, and above all the demand must be distributed with great caution".

In 1859, Mr. Barnes's settlement in respect of Chini, it appears was Rs. 7,809 cash and the 18 *karahads*, of which the value in money was not worked out. He said, "no man's burden is grievous, although some are much lighter taxed than they should be".

In 1874 Mr. J. W. MacNabb issued orders for a new settlement, which was carried out under the supervision of the wazirs, who were to be assisted by six respectable men from six *khunds*, or remote parganas of the erstwhile Bushahr State, viz., Athara Bis, Pandra Bis, Bhabha, Rajgram, Shua, and Tukpa. This is known also as the settlement of *sambat tentis*, or *bandobast waziran* and remained in force up to the introduction of settlement of 1894 by Tikka Raghunath Singh.

Mr. MacNabb's assessment amounted to Rs. 12,892 and Rs. 1,363 as cess, total Rs. 14,255. In this settlement only five *karahads* were retained, viz., *mel* including *soja*, or a cess in kind of wheat, rice, *mash*, *bagra*, a cess on all other (inferior) grains; *pinti*, or a cess in kind of ghee, and *khora*, a cess in kind of *gur*. The value of five payments in kind thus detailed was in each case calculated and the zemindar had the option of making these payments in kind, or in the fixed cash equivalent. It would appear that the *jagirdars*, not content with the five *karahads* gradually imposed all other thirteen *karahads* on their tenants - a striking instance of their high-handedness.

Tikka Raghunath Singh's settlement of 1890 and 1891

The first regular settlement in the Chini tahsil was carried out in 1890 and 1891 by Mian Durga Singh, Settlement Superintendent, under the supervision of Tikka Raghunath Singh. The survey was conducted in accordance with the principles then obtaining in Punjab. A *shajra kishitwar* (field map) and a *misal haqiyat* (standing record) were prepared. The settlement report was compiled without dealing with the *muafis* and preparing the *wazib-ul-araz* (village administration paper). Unfortunately, the said report could not be procured. The assessment report of the revision of settlement done in 1928 mentions that a copy of an English review made by E.B. Steadman, Superintendent, Simla Hill States was then traced, but this too has proved untraceable now. This first

regular settlement operation was incomplete in the sense that even the *shajra kishtwar* and the *misal haqiyat* did not fully and duly bear signatures. It appears that some interested parties incited the ignorant people. Rumours were spread that even bee-keeping would be assessed to revenue. The Settlement Superintendent, could not even inspect the revenue estates to judge the assessable capacity. The result of this settlement, however, was on the whole, beneficent. People with foresight saw this though many of the simple masses continued to be restless for some time. The outcome of the settlement was that the *athwara* (forced labour) was reduced from six months to one month. All the burdensome cesses, commonly called as eighteen *karahads*, were abolished. The landowners were granted *adna malkiat* (inferior proprietary rights) while previously even their rights of mortgage and transfer of land were restricted.

The Revised Settlement of 1928

The term of this regular settlement was fixed at twenty years. Mr. Emerson, I.C.S., who was, at that time manager of the Bushahr State while the new raja had not yet been invested with full powers, submitted his proposal to the Superintendent, Simla Hill States, to the effect that Rampur and Chini tahsils had considerable *nautors* and that after their measurement and classification of their soils, on the principles followed in the Rohru tahsil, they should be entered in the revenue papers. The Superintendent, Simla Hill States, on March 9, 1914 accepted the said proposal. Mr. Emerson, after concluding the revised settlement of Rohru tahsil, relinquished charge of his post to Mr. Mitchell who accomplished the revised settlement of Rampur tahsil. His view regarding Chini tahsil was that there were insignificant *nautor* lands. The distances between the culturable lands from one place to another were abnormal and, therefore, a review of files would be of no use; rather it would be spoiling the *musawis*. Therefore, he suggested, a detailed *jamabandi* might be prepared. Besides, he opined that the newly empowered ruler would have to encounter difficulties at the very outset if the settlement operation in Chini was commenced. He stressed the comparative advantages of the preparation of detailed *jamabandis*. This proposal was accepted on January 13, 1917. But the work of preparing the detailed *jamabandis* was not taken in hand. The zemindars of tahsil Chini submitted an application in November, 1921 requesting that the settlement operation of their tahsil should be commenced. Consequently the sanction of the settlement operation was accorded by the then raja about the beginning of December, 1921. Some paper-work was started, very soon, but further progress got interrupted and it was postponed till the end of the following year. Before it could be resumed, the people

requested for a further postponement and the request was accepted by the ruler. This petitioning for postponement and the acceptance of the petitions continued during the next two years.

At last in 1926 settlement work was started on the lines proposed by Mr. Emerson, under the supervision of the wazir, who functioned as the Settlement Officer. To begin with the parganas of Bhabha and Rajgram were surveyed. The Rajgram pargana alone showed 715 bighas of encroachments. At this stage there was again a short interruption of the operation as a result of yet another petition from the people requesting postponement of the settlement. On a review of the position, continuance and the completion of the operation was deemed essential, if for nothing else, for the sheer correction of the records. The *shajra parcha* (the *Patwari's* copy of the field map), which as mentioned earlier, suffered from the initial flaw of having been based on record in which some documents had remained unsigned, had grown so soiled, worn out and spoiled through repeated use during the intervening thirty-five years, that these maps had become largely useless for practical purposes. It would not do either to prepare fresh copies from the original *musawi* maps, for the grants of land made subsequently during all those years had not at all been incorporated into those maps. Because considerable area in the aggregate, out of the state waste, was suspected to have been taken into illicit cultivation by the farmers, a substantial increase in land revenue was tacitly anticipated even if the revenue rates were not to be enhanced.

The well known plain table system of survey by triangulation as is also generally followed in Punjab and is suitable for the hilly areas was adopted in the last settlement of 1928 which is still operative.

Assessment

The system of assessment in Himachal Pradesh is not different from that obtaining in Punjab. In this district at the time of the last settlement the following were the detailed rates of assessment circlewise classification of soil:—

Serial Number	Name of assessment circle	Classification of soil	Rate of assessment (per bigha) Rs. As. Ps.
1	Ghori Rupi-Kamba	1. <i>Bakhal awal barani</i>	-/3/9
		2. <i>Bakhal doam barani</i> and <i>bagicha</i>	-/3/8
		3. <i>Karali awal barani</i>	-/1/10
		4. <i>Karali doam barani</i>	-/1/8

2	Ghori-Natpa	1. <i>Bakhal awal abi</i>	-/4/-
		2. <i>Bakhal awal barani</i>	-/3/-
		3. <i>Bakhal doam barani</i>	-/3/-
		4. <i>Karali awal barani</i>	-/1/1
		5. <i>Karali doam barani</i>	-/1/6
3	Ghori-Taranda	1. <i>Bakhal awal barani</i>	-/3/6
		2. <i>Bakhal doam barani</i>	-/3/-
		3. <i>Karali awal barani</i>	-/1/6
		4. <i>Karali doam barani</i>	-/1/6
4	Ghori-Bari	1. <i>Bakhal awal barani</i>	-/3/6
		2. <i>Bakhal doam barani</i>	-/3/-
		3. <i>Karali awal barani</i>	-/1/7
5	Ghori-Sungra	1. <i>Bakhal awal barani</i>	-/4/-
		2. <i>Bakhal doam barani</i>	-/3/9
		3. <i>Karali awal barani</i>	-/1/8
		4. <i>Karali doam barani</i>	-/1/6
6	Ghori-Nachar	1. <i>Bagicha chuli</i>	-/10/-
		2. <i>Bakhal awal barani and bagicha</i>	-/3/6
		3. <i>Bakhal doam barani</i>	-/3/3
		4. <i>Karali awal barani</i>	-/1/8
		5. <i>Karali doam barani</i>	-/1/6
		1. <i>Bagicha angur</i>	-/6/-
		2. <i>Bagicha chuli</i>	-/5/-
		3. <i>Bakhal awal abi</i>	-/3/7
		4. <i>Newal</i>	-/5/-
		5. <i>Bakhal doam abi</i>	-/2/3
7	Pargana Bhabha, Rajgram, Tukpa and Shua	6. <i>Bakhal doam barani</i>	-/1/9
		7. <i>Karali awal abi</i>	-/2/10
		8. <i>Bakhal awal barani</i>	-/2/10
		9. <i>Karali awal barani</i>	-/1/6
		10. <i>Ghasni</i>	-/1/3
		1. <i>Bagicha angur</i>	-/6/-
		2. <i>Bagicha chuli</i>	-/5/-
		3. <i>Newal</i>	-/5/-
		4. <i>Bakhal awal abi</i>	-/4/-
		5. <i>Bakhal doam abi</i>	-/3/3
		6. <i>Karali awal abi</i>	-/2/-
		7. <i>Ghasni</i>	-/1/3
8	Pargana, Shyalkhar		

The following salient features of the existing settlement are indicated as follows :—

(a) Uncultivated lands and government pastures have not been measured and assessed to land revenue as effort and cost involved was

perhaps not commensurate with the economic benefit of such extensive coverage of uncultivated lands.

(b) Water-mills and oil-mills were treated as state property. The rent for *kohlu* was paid to the state at the rate of -/10/8 per *kohlu* per year. The rent for *gharats* (water-mills) known as *ghartangna* was as follows :—

i) Mills working for 12 months	Rs. 2/- per year
ii) Mills working for 6 months	Re. 1/- per year
iii) Mills working for 3 months	Re. -/12/- per year

(c) Rights of irrigation etc. were duly recorded for each estate.

(d) Common lands: *Shamlats* (common lands) were recorded for common use for such purposes as fairs, burial-grounds etc., which were not liable to be partitioned.

(e) Forest waste lands: The raja was recorded as the owner of all forest and waste lands both measured and unmeasured. Where deodar and *neoza* forests lay within village-lands extensive rights of users were accorded. A nominal tax was levied on trees growing in village waste lands and no new lands could be broken up without permission by way of *nautor* grant. The forests of the entire Bushahr State were, however, managed by the British Government on behalf of the raja against payment of lease money.

(f) *Abadi*: Areas under *abadi* were not subject to land revenue and actual possession was considered the criterion for ownership of such sites.

(g) Mines, quarries and streams: The ownership for all mines, quarries and streams and rivers vested in the state. Fishing was, however, permitted under licenses.

It is recorded in the assessment report of 1928 that during the last (1894) settlement, revenue was not assessed circlewise. In pargana Shyalkhar, however, which is an area situated along both banks of the Spiti river and contiguous to Tibet and Spiti, where the cultural pattern of the people is different from that of rest of Kinnaur and the inhabitants whereof are usually called Jad Kanaitis of Mongloid origin, the incidence according to kind was kept distinct and the same has been allowed to remain in this (1928) settlement also.

At the time of the last settlement there were sixty-four *chaks* in the former Chini tahsil, but now due to some administrative changes there are seventy-seven revenue estates in the district. Although the majority of the people are followers of Buddhism yet each *chak* has its own deity which is regarded as a tutelary god unlike Rohru and Rampur where a deity belongs to a *ghori*.

Collection of land revenue

Unlike the old system the land revenue is collected now entirely in cash through the village headman locally called *chares*, who receives five per cent of the land revenue collected by him. The collection is made in equal instalments twice in each year i.e. for *rabi* in the month of July and August and in respect of *kharif* during January and February. All the *bachh* papers are prepared by the *Patwari* immediately after the *kharif girdawari* which ends by October, 31. If necessary he corrects the *bachh* papers, at the second harvest inspection which comes to a close by June, 15 to make them agree with the events that have occurred since their preparation in the beginning. *Patwari* prepares the holdingwise list called *fard bachh* in which the land revenue of each payer is entered. He prepares two copies of it, one copy called *dhal bachh* to be given to the village headman for collection of land revenue etc., and the other to be kept by him for his record. The Field *Kanungo* carefully checks the *Patwari's* copy with the last *jamabandi* and mutation register and signs it in token of its correctness. Similarly he compares the copy intended for the use of the *lambardars* and signs the same after he has satisfied himself about its correctness. The superior revenue officers are also required to check some of the entries and sign them. Each *lambardar* (*chares*) then takes charge of his *bachh* papers and starts collection of the land revenue. When revenue collections are in progress the *Patwari* must furnish any information or explanation of accounts that may be required by the *lambardars* to facilitate the collections though he is forbidden to receive payment or take any part in the collections of the revenue. On the collection of the land revenue the *Patwari* prepares another document, called *arz-irsa* and hands that over to each headman on the basis of which the amount is deposited in the treasury.

The *lambardars* may seek assistance of revenue officers for the recovery of arrears. The revenue officers take necessary measures to recover the arrears according to the modes of recovery prescribed in the *Himachal Pradesh Land Revenue Act*.

The tahsilwise land revenue and local rate for the year 1969-70 was as under.

Name of tahsil	Land revenue	Local rate
Morang	4113.50	804.04
Sub-tahsil Hangrang	1551.70	276.34
Nachar	6532.93	1480.45
Sangla	4375.77	884.28
Puh	2772.00	469.83
Kalpa	4507.45	865.83

Kistbandi

As soon as possible after September, 1 in each year, the *Tahsildar* prepares in his own office the vernacular demand statement or *kistbandi* of fixed land revenue, commutation and cesses of the ensuing agricultural year, entering each increase and deducting each decrease which has been sanctioned in the interval, and appending a memo of the changes in which the orders authorising them are quoted.

This is tested in the district office by the *Sadr Wasil Baqi Navis* (Revenue Accountant), in company with the Revenue Accountant of the tahsil. The Head Vernacular Clerk supervises this process, and lays the papers, when ready, before the Collector, who after satisfying himself by personal examination of the correctness of the changes, sanctions and countersigns the demand statement, and before October, 1 forwards the fixed land revenue roll of the district detailing the demand for each month of the year, to the Financial Commissioner under cover with a forwarding letter explaining the changes. The sanction of the Financial Commissioner to the rent-roll is communicated in due course to the Collector.

Jagirdars and muafidars

Jagirs or revenue-free-grants of land were bestowed by the ruler to the members or dependents of the ruling family, to wazirs or to other subjects of the erstwhile Bushahr State in lieu of services rendered by them and, to a member of village temple. Among other things, assignees were exempt from *begar*. How these jagirs and *muafis* were regulated during the princely regime is not known. After the formation of Himachal Pradesh certain general principles relating to the administration including resumption of *muafis* and jagirs were laid down. One of the principle was that the new government would not be legally bound by the grants of revenue made by the previous regime. In the cases of grants for service, the primary test prescribed was whether grantee was, and would be any longer rendering any service to the public or the state (as distinct from service to the ruler). In respect of charitable grants, the criterion was whether the grant was and would be, still in public interest. Grants purporting to be in perpetuity were to be considered in the light, firstly of the fact, that perpetuity had little of its true meaning in practice during the previous regimes, notwithstanding what sanads and other papers said, the tenure of every so called perpetual grant being tacitly subject to renewal at the will of every new ruler, and, secondly, of the consideration that modern trends were not much in favour of perpetual grants of public revenue. In deserving cases, some leniency might be shown as a matter of grace. These principles still continue to be in operation.

There are at present three grades of *muafidars*, namely, the first grade, including permanent *muafidars*, the second grade comprising conditional *muafidars* and the third grade taking in its fold the assignments to temples. In the first grade there are only three assignees with an area of assignment measuring about 73 hectares assessed to a land revenue of Rs. 127.42 of which Rs. 89.30 represent the amount of assignment. Under the second grade are included 70 conditional *muafidars* with an area of assignment measuring about 244 hectares assessed to a land revenue of Rs. 459.37 of which Rs. 141 are assigned. The number of assignees under the third grade is 104. The area of assignment is about 1243 hectares assessed to a land revenue of Rs. 2,268.30 out of which Rs. 1,580.33 are assigned. It may be added that all *jagirdars* and *muafidars* were made liable to pay fairly moderate new cesses, as applicable in the neighbouring province of East Punjab¹, as per orders of the then Chief Commissioner, Himachal Pradesh to all the Deputy Commissioners.

LAND REFORMS

No concrete evidence is available to reveal the relationship between the landlord and the tenants in the past. But it can be inferred from the existence of tenants at present and from some general remarks made in the assessment report of Rohru tahsil drawn in 1914 that the tenants did exist. What were their relations and terms of tenancy with the landlords cannot be precisely said. The following extract from the assessment report of Rohru though strictly speaking applies to Rohru tahsil only, yet from its general nature can be construed to hold good in respect of Kinnaur area too.

²"The third description of land entered in the name of the Raja consists of small areas scattered about in various *chaks*. The occupiers were sometimes entered as occupancy tenants and sometime as tenants at will, but in the vast majority of cases they paid revenue rates whatever their status. The tenants at will had in many cases been in long possession of land, from which no attempt had ever been made to eject them, nor had the rent ever been enhanced. It was not possible to discover, in every case how these holdings came to be regarded as the Raja's property, but a number of them represent the holdings left by heirless owners. In dealing with this class of cases it was felt that the most satisfactory solution would be to grant the tenants security of tenure, and at the same time secure for the State the payment of a fair rent. Where occupancy rights at fixed rates had not previously been granted, these have now been offered to sitting tenants at double the revenue rates, but with no powers of alienation

1. Conveyed in memo. No. R-74-1/48, dated June 23, 1948

2. Assessment Report of Rohru tahsil of the Bushahr State, 1914, para 41

without the sanction of the State. The offer has been accepted without demur, so that the enhancement of rent thus effected will yield a considerable revenue".

According to the existing settlement, there are three kinds of tenancies in Kinnaur viz., (a) occupancy tenants, (b) non-occupancy tenants (tenants-at-will), and (c) tenants *bila-sift*. Tenancies of the first kind were regulated by the *Punjab Tenancy Act, 1887* for the purpose of ejectment, inheritance etc. Tenants *bila-sift*, which were unclassified during the settlement, were not liable for ejectment as during the settlement operations their status could not be established for lack of adequate enquiries. Their status was left to be determined by courts in case of any dispute between the tenants and the landlords.

Rents are classified as follows :—

- (a) rent in kind (*batai*),
- (b) rent in cash in terms of land revenue or its multiple, and rent in lumpsum cash (*bilmukta*) and
- (c) rent in terms of service, under which tenants of religious temples were subject to payment of instruments during worship, sowing of fields for the deity, carriage of the deity etc. Generally, rent in kind was half of the produce from which the *bhoosa* was left to the tenants.

The *Punjab Land Revenue Act of 1887* and the *Punjab Tenancy Act, 1887* were made applicable to this area long ago, and even after formation of Himachal Pradesh these Acts continued to be enforced till the enforcement of the *Himachal Pradesh Land Revenue Act* and the *Himachal Pradesh Abolition of Big Landed Estates and Land Reforms Act of 1953*. Before the enactment of these legislations, the Himachal Pradesh Government provided an interim relief to the tenants and passed the following Orders and Acts :—

(1) *The Punjab Tenants (Security of Tenures) Act, 1950* was extended to Himachal Pradesh in 1951. With the extension of this Act, a ceiling of 250 bighas was imposed on the holding of a landlord and the tenants, especially tenants other than occupancy-tenants or tenants with holdings for a fixed term, were given a sense of security for at least four years and those ejected between the 1st and the 30th May, 1950, were made entitled to restoration of their possession.

(2) *The Punjab Tenancy (Himachal Pradesh Amendment) Act, 1952*, whereby Section 25 (A) was added to the *Punjab Tenancy Act*, under which maximum rent chargeable from tenants was fixed at one fourth of the produce.

(3) *The Himachal Pradesh Tenants (Rights Restoration) Act, 1952*, provided more security for the tenants. Section 45 of the *Punjab Tenancy Act* was deleted and the tenants were given a right of pre-emption in respect of their tenancies.

(4) *The Arable Land Order of 1950* was also introduced which also increased the cultivation to a great extent.

(5) By the notification No 357 I.C. dated the 24th November, 1948 of the then Ministry of States, Government of India, *bethus* were recognized to be occupancy tenants under Section 5 of the *Punjab Tenancy Act*. This notification also provided an opportunity for the *bethus* on government land to acquire proprietary rights on payment of a sum equal to ten times the land revenue and the cesses on their lands.

According to the instructions of the Chief Commissioner and the Financial Commissioner the entry of *sirkar* as *alamaliks* (superior landowners) was substituted by the *adnamaliks* (inferior landowners) through mutations. In the erstwhile Bushahr State the entry of *alamalik* was invariably recorded at the time of last settlement and it was through the order of the Financial Commissioner that this entry of *alamalik* was expunged.

In 1953, the Himachal Pradesh Legislative Assembly enacted the *Himachal Pradesh Abolition of Big Landed Estates and Land Reforms Act*, for the security of the interest of all the tenants. Today the position is that a tenant cannot be made to pay any higher rent than one-fourth of the produce. He can become the owner of his holding on payment of a certain amount of compensation prescribed by laws and would be liable to ejection only under Sections 53 and 54 of the Act. A tenant with occupancy rights shall not be ejected from his tenancy except that the land in possession is rendered unfit by him for the purpose it was originally held. The tenant can also be ejected if he fails to cultivate the land according to the customs in the locality of the land. Apart from it the tenant can be ejected for subletting the holding without the consent of the landlord. A person serving in the army, an unmarried woman divorced or separated from husband or a widow, a minor, a person suffering from physical or mental disability, a person prosecuting studies in a recognized institution and a person under imprisonment or any other hindrance for cultivating the land himself, shall not be liable to ejection. He will be at liberty to sublet the holding or a part thereof without the consent of the landlord. But he should possess and should be cultivating the land before joining the armed forces and would undertake to cultivate it himself on his ceasing to be member of the armed forces.

Up to March 31, 1965, under Section 11 of the Act, as many as 1,002 persons had acquired ownership rights on an area measuring 218.53 hectares and the total amount of compensation paid by them amounted to Rs.14,423.30. Under Section 27 (4) 1,892 tenants had secured the proprietary rights on an area of 659,638 hectares. There were in all ten landowners each paying annual land revenue exceeding Rs. 125.

The following statement shows the volume of work involved/ progress and achievements made in the implementation of the provisions of Section 11 and 27 of the *Himachal Pradesh Abolition of Big Landed Estates and Land Reforms Act, 1953*, in Kinnaur district up to February 28, 1966.

1. Total number of tenants to acquire proprietary rights	8,302
2. (a) Total number of tenants who have acquired proprietary rights	1,161
(b) Area involved for granting proprietary rights	237.95 hectares
Section 27	
1. Total number of landowners affected by Section 27 (1)	10
2. Total area vested in the state government	374.76 hectares
3. Total number of tenants	2,785
4. Total number of tenants involved in proprietary rights under Section 27 (4)	1,996
5. Total number of tenants on whom proprietary rights were to be conferred on 30.11.1965	789
6. Amount of compensation realized from tenants	Rs. 18,064.37
7. Amount of compensation to be realized from tenants	Rs. 6,333.48
8. Amount of compensation paid to the landowners against their land vested in the state government as compensation (paid to 5 landowners only)	Rs. 21,029.06
9. Amount of compensation to be paid to the landowners against their land vested in the state government	Rs. 5,475.75

The produce has increased to a great extent and the poor peasant who once was thought to be economically as well as socially most backward has now improved his economic condition and has been able to make a marked change in his standard of living. The land reforms legislative

measures recently introduced have provided an incentive for more intensive cultivation of land and a better sense of security and a sense of ownership in land among the tenants. There was a feeling among the tenants, who mostly belonged to the Scheduled Castes, that they were being exploited and unjustly treated by the upper-caste landlords enjoying the lions's share of the land produce. With the fixation of the maximum rent at one-fourth of the produce, there has appeared a sense of social justice among the actual tillers of the soil and even some of the landlords have been made alive to the importance and value of manual labour in the form of self-cultivation of land. All this is certainly helping to increase production, and in consequence the standard of living and the social position of the former tenants generally.

Agrarian movements of early times

No evidence has come to hand to show any agrarian movement that might have taken place in the past except agitation, for postponement of land revenue settlement as mentioned earlier.

Bhoodan movement was initiated by Acharya Vinoba Bhave for acquisition of land through voluntary gifts. The *Bhoodan Yajna Act* is in force. The Himachal Pradesh *Bhoodan Yajna* Board stands constituted since 1965. It is a body corporate having perpetuate succession and common seal with power to acquire, hold, administer and transfer property both movable and immovable and to enter in contracts and can, by the said name, sue and be sued. It administers all land vested in it for the benefit of the *Bhoodan Yajna*. A person, owning a transferable interest in the land, can donate and grant such land to the *Bhoodan Yajna* by a declaration in writing to the board which, if considers the donation or grant acceptable, sends the declaration to the revenue officer, having jurisdiction in the tahsil or village where the land is situated. The revenue officer publishes the same for objections, and makes a summary enquiry as to the right, title and interest of the donor is such land. The board or such other authority or persons, as the board may with the approval of the state government specify either generally or in respect of the area may, grant land which has vested in it to a landless person, and the grantee to the land acquires the rights and liabilities subject to such conditions, restrictions and limitations, as may be prescribed. All grants have to be made as far as the case may be in accordance with the purpose of *Bhoodan Yajna*.

About 0.80 hectares of land have been donated by the landowners to the board so far. Nothing out of the donated land has yet been distributed among landless persons. The future prospects of this movement seem rather dim, more due to its remote location and scarcity of land than due to the willingness of the people.

Rural wages and the condition of the agricultural labour

The practice in Kinnaur generally is that the landless villagers or those with marginal holdings, who may have an underemployed number in the family, usually work for the better section of the cultivators with large holdings which they are unable to manage within their own limited resources of manpower. The current wages for such agriculture labour for a 10-hour day's work in terms of cash is a total of Rs. 5.50 for men engaged in most strenuous field work, Rs. 4 for women engaged in weeding, manuring etc., and Rs. 2.50 for children engaged in miscellaneous field work. Such agriculture labourers are fed thrice daily and allowed one-and-a-half kilograms (equivalent in cash to Rs.1.50) for men and women, and one kilogram (equivalent in cash to Re.1) for children. Thus out of a total daily cash wage of Rs.5.50, a male labourer would expect to receive Rs. 4 in cash and one-and-a-half kilograms of ration valued at Rs.1.50, woman labourer would expect to receive Rs.2.50 in cash and one-and-a-half kilograms of ration valued at Rs.1.50 which a child would receive Rs.1.50 in cash with one kilogram of ration valuing at Re.1. The rates are increasing as elsewhere in the wake of general rise in prices.

Earnest attempts are now being made to allot 0.40 hectare plot of land for horticulture, with temperate vegetable inter-cropping in the initial non-productive period, to all landless people and those with marginal holdings, on the basis of a detailed familywise economic survey which has been completed. This has been made possible with the construction of new irrigation channels which will bring large areas of barren lands under cultivation. With this measure it is likely that a large section of the poorer agriculture labour will be diverted to the new lands being granted to them, in which case the cost of agriculture labour for the wealthier landowners will inevitably appreciate substantially.

Administration of other sources of revenue central as well as state

Apart from the principal sources of revenue such as land revenue and forest there are other sources that add to the state revenue. More important out of these are described below :—

Excise—Various kinds of spirits and beers are procured by the local people. These are made from fruits like grapes, apricots and peaches as also from foodgrains including *tag* (*barley*), *kodro*, *rad* (*Panicum miliaceum*) and *bras* (*Fagopyrum esculentum*) besides honey. Fruits and foodgrains are consumed as such and often made into spirits. This has been the age old practice. All these ingredients are first fermented and the spirit is then distilled. The first distilled bottle is called *moree* and the subsequent distillation goes under the name of *rashi*. Spirit made from

fruits is called *phasur* that made from foodgrains is known as *chhwa phasur* and the one prepared from honey is called *wass phasur*. A drink akin to beer locally called *shudung* is brewed either from foodgrains or from honey. At the time of land revenue settlement (1894) of Chini, Rs. 19,000 were estimated to be spent annually on liquor with an average of Rs. 3.73 per head of the male population. There was no special excise establishment. The work was done by the ordinary revenue staff.

On the formation of Himachal Pradesh, tahsils of Rampur and Chini formed a single excise circle. One Excise Sub-Inspector with his headquarters at Rampur was in-charge of this circle. The statistics of excise revenue and figures of liquor consumption of both these tahsils were, therefore, maintained collectively. In the year 1962-63 Kinnaur district was separated from tahsil Rampur for the purpose of excise revenue when the shops of liquor at Kalpa and Nachar were auctioned for Rs. 60,000 and in the subsequent year the auction money was Rs. 39,500. In the year 1964-65 excise policy for the whole of the state underwent a change with a single contractor for the whole Pradesh. During the year 1969-70, country liquor (L-14) and Indian made foreign liquor (L-2) had their shops one each at Kalpa, Arn, Puh, Nachar, Sangla, and Tapri. The total excise revenue for this year amounted to Rs. 53,855.35. It is also worthwhile to mention that subsequent to the year 1966, local inhabitants under *the Punjab Excise Act, 1914* were granted a license with an annual fee amounting to Rs. 25 for distilling the liquor for their own consumption.

The Punjab General Sales Tax Act, 1948, the Central Sales Tax Act, 1956, the Himachal Pradesh Passengers and Goods Taxation Act, 1955 are applicable. During the year 1969-70 a sum of Rs. 54,330.80, Rs. 2,030.51 and Rs. 1,20,806.20 accrued to the state coffer, from the enforcement of these taxes respectively. The Excise Inspector has been invested with the powers of an assessing authority within his jurisdiction of Kinnaur district under the Act pertaining to taxation.

In about 1910 the stamps were managed in accordance with *the Court Fees Act (VII) of 1870*. Labels were not used. Judicial sheets were impressed with the various values locally. The court fee stamps of the denominations of one anna, six annas, eight annas, twelve annas and from one to twenty-five rupees.

Non-judicial stamped sheets of the same values were impressed in the same way and issued. Receipt stamps were issued for the values of one, two, four, eight and twelve annas and from one to five rupees.

The impression of stamps was done with special dyes, and in different colours for each description of stamp. The state postage stamps

were manufactured by the same process, and there was a large stock of these in the treasury. Certain number were sold from time to time to stamp collectors and dealers but they had little value, as although further manufacture was supposed to be prohibited, the original dyes had not then been broken up.

By 1915 an abnormal increase of stamps occurred owing to the introduction of *the Limitation Act*. Many cases were registered in the court of the *Naib-tahsildar*, Chini.

Since the formation of Himachal Pradesh the stamps, non-judicial and judicial are being regulated under *the Indian Stamps Act* and *the Indian Court Fees Act*. The following table will give an idea of the income by way of sale of postal and non-postal stamps in the district.

Year	Court fee stamps	Non-judicial stamps	Revenue stamps	Service postage stamps	Public postage stamps
	Rs.	Rs.	Rs.	Rs.	Rs.
1965	12,854.80	3,595.25	18,006.60	41,323.86	45,180.30
1966	11,172.60	7,281.50	15,667.40	36,629.52	48,672.15
1967	11,495.55	3,709.25	15,567.80	39,467.34	45,786.65
1968	8,097.65	2,362.50	13,596.00	43,216.30	51,114.10
1969	8,785.60	2,474.20	12,612.70	44,471.68	55,538.50
1970	9,495.45	2,704.50	11,681.20	41,519.79	57,724.40

CHAPTER XII

LAW AND ORDER AND JUSTICE

Incidence of crime

To appreciate low or high incidence of crime in an area it is necessary to consider the general character and propensities of the mind of the people. The earliest written record of 1815 by James Baillie Fraser depicts the character of the inhabitants of Kinnaur as brave, hardy, independent, open, courteous, hospitable, honest and sincere. They commanded unbounded confidence and the principal officers of the erstwhile Bushahr State were chosen and selected from this area. The oath or promise was perfectly secure, which they confirmed by joining hands or by swearing on the religious books or placing an image of their idols on their heads. Disputes were settled by arbitration. Captain Alexander Gerard subsequently in 1841 visited this area and confirms the above verdict. He observed that cheating, lying and thieving were unknown. The people of Kinnaur could be trusted with money or any message of importance. By about 1910, theft and murder were unknown and the commonest suits were of the unsecured loans. In 1915 the crime situation was light and the cases in courts were of miscellaneous nature concerning illicit *nautors*. Dr. Van Der Sleen who visited Kinnaur in 1929 observed about crime and character of the people. He says, "There are no cases of theft except the theft of woman, and, as every one knows, all is fair in love and war. The penalty for such misdemeanours is always decided by the votes of the neighbours, and is as a rule paid promptly. Neither are there any murders, because if you happen to kill anybody in a fit of temper or drunkenness, that is a misfortune, not a crime. One source of frequent squabbles is the right to land and crops. Water rights too are a special bone of contention, such as who may or may not tap the supplies of certain springs. Lucky mortals who are troubled neither with the existence of a legal code nor with lawyers! Here law is simply law, and swift at that. Whether it be always justice I have no doubt. Anyhow, the Rajah rules supreme and everybody has to bow to his decree, no matter what it may be." Dr. R. N. Saksena describes the Kanauras as a highly moral tribe and women; in particular, were very loyal to their husbands. ³Rahul Sankrityayan likewise has stated that theft was little known in Kinnaur.

1. Van Der Sleen, *Four Months Camping in the Himalayas, 1929*, pp. 44-45
2. Saksena, R.N. Dr., *Social Economy of a Polyandrous People*, p. vii
3. Sankrityayan, Rahul, *Kinner Desh*, 1956, p. 218

Time has changed rapidly and Kinnaur is no more an isolated area to the same degree as in the past whether the same characteristics obtain now or whether with the advance of time these have changed, we can at least discern the incidence of crime specifically on account of the keeping of statistics of the crime situation.

Generally heinous crimes do not exist and the nature of the offences committed include theft, house breaking, offences under Excise Law and the Arms Act. Keeping in view the population vis-a-vis the crime committed it can safely be inferred that crime incidence is negligible and calls for no special remark. The slight increase in theft and house breaking cases can be attributed to the general poverty of the people. The following two tables will further illustrate the statistics of crime in general and of important crimes in particular from 1960 onwards.

Table I

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
I. Cases reported to police	24	55	59	65	77	87	209	194	187	170	102
II. Cases disposed of											
a) Reported	24	55	59	65	77	87	209	194	187	170	102
b) Convicted	2	27	27	23	21	29	143	111	120	115	54
c) Acquitted	1	3	8	8	4	6	8	4	6	0	9
III. Percentage of convicted to reported	8.4	49.9	45.76	35.38	27.27	33.33	68.42	57.22	64.17	67.65	52.94

Table II

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Murder											
Reported	—	—	1	—	—	—	1	1	1	1	—
Convicted	—	—	—	—	—	—	—	—	1	1	—
Acquitted	—	—	1	—	—	—	—	1	—	—	—
Robbery											
Reported	—	1	2	1	—	3	1	—	3	—	1
Convicted	—	1	1	1	—	—	—	—	—	—	—
Acquitted	—	—	(1 cancelled)	—	—	—	—	—	—	—	—
Rioting											
Reported	1	2	3	—	2	5	2	2	1	2	2
Convicted	—	—	2	—	1	2	—	—	—	1	—
Acquitted	—	(2 cancelled)	1	—	(1 case untraced)	—	1	—	—	1	—

Theft

Reported	6	11	15	21	23	10	22	31	2	14	11
Convicted	—	6	8	12	8	2	6	8	1	5	3
Acquitted	1	2	1	2	2	3	5	1	1	3	—

(2 can- (5 can-
celled) celled)**House breaking**

Reported	11	19	19	19	20	17	15	17	15	12	11
Convicted	2	10	10	8	7	17	13	5	7	4	3
Acquitted	—	6	4	1	1	—	2	—	4	2	3

Kidnapping

Reported	—	—	4	1	2	1	—	2	1	1	1
Convicted	—	—	—	—	1	—	—	1	1	1	—
Acquitted	—	—	3	1	—	—	—	—	—	—	—

**Serious mischief
and cognate
offences**

Reported	—	1	2	—	3	—	1	1	2	1	3
Convicted	—	—	(1 can- celled)	—	—	—	—	—	1	—	1
Acquitted	—	—	1	—	—	—	1	1	1	—	1

(1 un-
traced)**Organisation of the police force**

In 1910 there were twelve Constables and a Sergeant of the Punjab Police stationed at Rampur (now in Mahasu district). They were under the over-all control of the Manager, erstwhile Bushahr State. No other state police or *thana* existed. If a serious crime occurred the matter was reported by the local Tahsildar and the police stationed at Rampur investigated the case.

In 1915 the erstwhile State of Bushahr of which the district was then a part maintained no actual police force. Enquiries in the former Chini tahsil were conducted by the tahsil *daffadars*.

Subsequently, during the pre-Merger days, this area was under one police station at Rampur manned by one Assistant Sub-Inspector, two Head Constables and eight Constables. After the formation of Himachal Pradesh, Kinnaur, then a part of the Mahasu district continued to be served by one police station at Chini manned by a Sub-Inspector, four Head Constables and eighteen Constables including the strength of treasury and escort guards. After the creation of the district in 1960 the

police force was properly organised and now the head of the police administration is the Superintendent of Police. The subordinate strength below him as it stood on 31.3.1971 was as under :—

	Inspectors	S.Is.	A.S.Is.	H.Cs.	Constables	Steno.
Civil Police						
Permanent	1	5	4	30	126	1
Temporary	—	4	—	4	19	—
Armed Police						
Permanent	—	—	5	16	135	—
Temporary	—	—	3	8	57	—
Prosecution Staff						
Permanent	—	1	—	2	2	—
Temporary	1	—	—	—	—	—

The number of the police stations and police posts and the distribution of staff as it stood on 31-3-1971 is tabulated below.

	S.I.	A.S.I.	H.Cs.	Constables
1. Police station, Kalpa	1	—	2	10
2. Police station, Puh	1	—	2	10
3. Police station, Nachar	1	1	2	10
4. Police station, Sangla	—	—	1	4
5. Police post, Morang	—	—	1	4
6. Police post, Leo	—	—	1	4

There are also eleven check posts. Their primary function is to check the passports and inner line position and to register the entry of new comers in this restricted area. The table that follows gives an idea of the police check posts and the staff employed in each.

	Sub-Inspector	Head Constables	Constables
1. Check post, Rupri	—	1	2
2. Check post, Nigulsari	—	—	2
3. Check post, Natpa	—	—	2
4. Check post, Buran Ghati	—	1	2
5. Check post, Karchham	—	—	2
6. Check post, Wangtu	1	—	2
7. Check post, Dabling	—	1	2
8. Check post, Shyalkhar	1	—	2
9. Check post, Sumra	—	1	2
10. Check post, Tapri	—	—	2
11. Check post, Yadung	1	—	2

There are also eighteen check posts of bridge guards to protect the bridges and control the traffic movements on the National Highway No. 22 and the old Hindustan-Tibet Road. These posts are manned by the Himachal Pradesh Armed Police personnel as given below.

Names of guard	Strength	
	Head Constables	Constables
1. Khabo	1	6
2. Dabbling	1	8
3. Shyaso	1	4
4. Kirang	1	4
5. Kashang	1	6
6. Shongtong	1	6
7. Shongtong Nullah	1	4
8. Karchham	1	6
9. Sholtu	1	4
10. Bhabha	1	6
11. Wangtu	1	6
12. Kanam on N.H. 22	1	4
13. Panwi	1	4
14. Chango	1	4
15. Kirang Khad on upper H.T. Road	—	2
16. Shyalkhar Nullah	1	6
17. Sumdo	1	8
18. Tidong	1	4

The police force is being maintained on the modern lines as elsewhere in Himachal Pradesh. The annual expenditure amounted to Rs.1,18,453 from May to December 1960, to Rs.3,93,170 in 1961, to Rs. 3,79,201 in 1962, to Rs.1,49,585 in 1963, to Rs.15,30,378 in 1964, to Rs. 13,03,933 in 1965, to Rs.17,10,490 in 1966, to Rs.19,56,627 in 1967, to Rs.19,26,220 in 1968 and to Rs.23,64,674 in 1969.

Sporadic fire accidents occur occasionally but there is so far no fire service organisation. In November 1960, a big fire broke out in the government high school building at Kalpa. The building, furniture, books and other articles were gutted. The loss was estimated to the tune of Rs.76,637. In 1961 property worth Rs.4,000 was damaged, in 1962 the loss due to fire was estimated at Rs.4,325, in 1963 property of the value of Rs.56,146 was gutted by fire, in 1964 property worth Rs.38,573 was damaged in fire, in 1966 property worth Rs.1,800 was lost, in 1967 the loss was estimated at Rs.1,700, in 1968 the loss was negligible i.e. Rs.480 and in 1970 the destruction due to fire was at Rs.15,97,960.

Primary functions of the anti-corruption unit established on February 27, 1964 include investigations and enquiries into complaints pertaining to corruption, and to collecting intelligence about corruption. The staff of the unit comprises an Inspector and a Constable. Since its inception

thirteen enquiries were taken up by this unit, out of these two related to the year 1963, seven to the year 1964 and four to the year 1965. Till the month of June 1965 nine enquiries had been completed out of which five were found baseless and in the remaining four departmental action was recommended. Four enquiries were lying pending.

By July 1965 the Himachal Pradesh Home Guards had raised one battalion in the district. Basic training to all the volunteers had been imparted and few companies had also attended an intensive training camp.

With gradual opening up of the district for vehicular traffic and the whole area being mountainous and rugged the occurrence of vehicle accidents is but natural. Nevertheless, as compared with the awe-inspiring precipitous ascents and frightening descents through which the roads pass the number of accidents is not alarming. In October 1960 a military jeep bound for Puh plunged into a rivulet resulting in five deaths. In 1961 two accidents occurred in which four persons were killed and fifteen were injured. In 1962 seven accidents took place in which four persons lost their lives and eighteen suffered injuries. In 1963 thirteen accidents occurred in which nine persons were killed and ten sustained injuries. In 1964 eighteen accidents took place in which seventy-two persons lost their lives and five suffered injuries. In 1965 forty persons were killed, two sustained injuries and property worth Rs.1,80,000 destroyed. In 1966 eleven persons lost their lives, nine seriously injured and property to the tune of Rs.2,70,000 spoiled. In 1967 thirty-one persons succumbed to their injuries, twenty-four injured and property worth Rs.2,10,000, perished. In 1968 seventeen persons were killed, two seriously injured and loss to property was estimated at Rs.1,80,000. In 1969 five persons were killed, fourteen seriously injured and property worth Rs.1,50,000 was lost. In 1970 eight persons were killed, thirteen injured and property worth Rs. 1,80,000 destroyed.

During the princely regime there obtained what was known as *mate* system which still continues. The *mates* only manage for the transportation of luggage and for securing accommodation for such touring officials as are in need of their assistance. They are not governed by the Punjab Laws and Acts and as such it is not obligatory on them to give timely information or other help to the police in respect of cognizable offences. *Chowkidar* system as obtains in other districts has been organised in this district too.

The village defence societies have been created to develop a spirit of self-defence among the people, to create better understanding and co-operation between them and the police and to make them realise the importance of rendering help, in matter of prevention and detection of crime. The number of defence societies stood at 51, 59, 63, 64, 87, 55, 79.

79, 79, and 79 in 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969 and 1970 respectively. Their membership was 776, 866, 960, 960, 945, 904, 584, 1162, 1162, 1162 and 1162 during the aforesaid years respectively.

Jails and lock-ups

During the princely regime there were two jails one at Rampur (now in Mahasu district) and the other at Kamru a village in Kinnaur. The jail at Kamru is mentioned by Rahul Sankrityayan. ¹For keeping prisoners there was a well-like jail at Kamru in which they were made to descend and dwell and bread and water was passed on to them through a rope.

Before the formation of district the culprits were either kept at Rampur judicial lock-up or sent to Kasumpti judicial lock-up and the convicts sentenced to imprisonment by the courts were sent to the sub-jail at Solon or the central jail at Nahan. Subsequently the judicial lock-up at Kalpa was also declared as a sub-jail to be used for the detention of prisoners from May 1, 1963 onwards. It is located in the ground floor of the building used as police station. The judicial lock-up-cum-sub-jail consists of two small rooms. One of the rooms is used as judicial lock-up for females under-trials. The accommodation in the judicial lock-up and for the under-trials remanded for the judicial lock-up is likely to be extended with the construction of a proper sub-jail at Kalpa when the master plan for the development of the town is implemented. The judicial lock-up is manned by the judicial police guard consisting of one Head Constable incharge and four Constables. For want of sufficient and suitable accommodation for housing the prisoners, at present the convicts sentenced to imprisonment by the courts, are generally sent to the sub-jail at Solon or to the central jail at Nahan, according to one's term of imprisonment.

Arrangements for housing women prisoners and for vocational or educational facilities are non-existent but would be ensured and provided for when a proper sub-jail building of the desired design and standard is constructed.

Civil and criminal courts

According to Thomas Hutton the following procedure was adopted in the past to punish the offenders. ²For crimes and misdemeanours, fines are levied according to the nature of the offence and the circumstances of the offending parties, these fines though nominally amounting to a certain number of rupees are always levied in goods.

1. Sankrityayan, Rahul, *Kinner Desh*, 1956, p. 313.

2. Hutton, Thomas Lt., *Journal of a trip through Kunawur, Hungrung and Spiti*, 1838, pp. 15-16.

Thus when the village of Junggee in Kunawar neglected to furnish me with coolies to carry my baggage, the Rajah ordered a fine of one hundred rupees to be levied on the inhabitants, which was to be realised in anything they had to give. The same punishment would have been inflicted on the Churriah who accompanied me to Spiti, had he refused to go. When the Rajah ordered him to prepare for the journey, he was on his way to Simla, to be present at his master's interview with the Governor General, and having already been in Spiti he felt no desire to return to it, consequently he declined going, and offered to pay a fine of five rupees if the Rajah would excuse him and appoint some body else; but the Rajah turning to him said, No, no, if you disobey my orders I shall not ask for five rupees, but make you pay one hundred. This was enough, far bad as was the prospect of a journey into the dreary district of Spiti, far worse for the Churriah would have been the infliction of such a fine, and he therefore departed without another word."

During the time of the rajas up to 1887 when Tikka Raghunath Singh succeeded the management of this part of state was left practically in the hands of hereditary wazirs. It was only in 1887 after the accession of Tikka Raghunath Singh that the powers of the hereditary wazirs were taken away. He ruled till 1898 after which the state passed on to the charge of a Manager, one Rai Sahib Mangat Ram designated as Chief wazir, appointed by the British Government in India.

The Manager thus appointed had full criminal, civil and revenue powers except that the death sentences passed by him required the confirmation of the Superintendent, Simla Hill States. In former Chini tahsil (Kinnaur) he was assisted by a *Naib-Tahsildar* with III class civil and criminal powers. Above the *Naib-Tahsildar* was one Mian Padam Singh who had II class civil and criminal powers. All appeals from the subordinate courts went to the Manager. At the headquarters the Manager had a treasury, a record room, *Kanungo's* office and judicial establishment under him.

In 1909 the *Indian Limitation Act* had been extended to the state. The procedure of the *Punjab Redemption of Mortgages Act IV* of 1918 was introduced in 1915. The introduction of the *Limitation Act* gave rise to a very large increase in the number of cases. One gratifying sign was the readiness with which litigants applied to the courts of the raja, showing that he had obtained the confidence of his subjects. Till 1915 no legislation was undertaken by the erstwhile State of Bushahr, but from time to time such laws of British India as were suitable to the locality were introduced by executive order. No appeals in criminal cases were filed at all either in the Manager's court, or in the court of the

Superintendent, Simla Hill States against convictions in the Manager's court. The raja was invested by the Superintendent, Simla Hill States with I class civil and criminal powers in February 1915.

No historical record is available for the subsequent period which can show the administrative set up of the civil and criminal justice in the erstwhile State of Bushahr. After Merger the state became a part of the newly formed Mahasu district and continued to be administered as such up to May, 1960. At present the following civil and criminal courts are functioning.

Civil courts and sessions courts	Powers	Jurisdiction
1. The Court of Senior Sub-Judge-cum-Assistant Sessions Judge, Mahasu, and Kinnaur districts, at Simla	1. Unlimited powers in civil cases 2. Under the <i>Small Causes Courts Act</i> 3. <i>The Rent Restriction Act</i> 4. <i>The Guardian and Wards Act</i> 5. <i>The Indian Succession Act</i> 6. <i>The Provincial Insolvency Act</i> 7. <i>The Hindu Marriage Act</i> 8. Assistant Sessions Judge	Local limits of Mahasu and Kinnaur districts
2. The Court of District and Sessions Judge Mahasu, Sirmur Bilaspur and Kinnaur districts at Simla	1. The powers of District Judge 2. The powers of Sessions Judge	Within the local limits of Mahasu, Sirmur, Bilaspur and Kinnaur districts
The Court of Sub-Judge (D.C.) Kalpa	Powers up to Rs. 5,000	Within the local limits of Kinnaur district
4. The Court of Sub-Judge Nachar	Powers up to Rs. 500	"
5. The Court of Sub-Judge Puh	Powers up to Rs. 2,000	"
6. The Court of Sub-Judge S.D.O. (C) Kalpa	Powers up to Rs. 2,000	"
7. The Court of Sub-Judge (T.O.) Kalpa	Powers up to Rs. 500	Within Kalpa sub-division
8. The Court of Sub-Judge Morang	Powers up to Rs. 500	Within Morang Tahsil

Criminal Courts

1. The Court of District Magistrate Kinnaur	i) D. C. ii) Collector iii) D.M. iv) M.I.C. v) Commissioner under the <i>Workmen's Compensation Act 1923</i> vi) Registrar under the <i>Registration Act, 1908</i> vii) Marriage Officer viii) Authority under the <i>Payment of Wages Act, 1936</i>	Within the local limits of Kinnaur district
2. The Court of M.I.C. Kalpa	M.I.C.	Within the local limits of Kinnaur district
3. The Court of M.I.C. (T.O.) Kalpa	M.I.C.	"
4. The Court of M.I.C. Puh	i) M.I.C. ii) A.D.M.	" Within Puh sub-division
5. The Court of M.I.C. Nachar	M.I.C.	Within the Kinnaur district
6. The Court of Tahsildar Kalpa	M.I.C.	Within the Kinnaur district
7. The Court of Tahsildar Sangla	M.I.C.	Within the Kinnaur district
8. The Court of Tahsildar Nachar	M.I.C.	Within the Kinnaur district
9. The Court of Tahsildar Morang	M.I.C.	Within Morang tahsil
10. The Court of Tahsildar Puh	M.I.C.	Within the Kinnaur district
11. The Court of Naib-Tahsildar Hangrang	M.I.C.	Within Hangrang sub-tahsil
12. The Court of Naib-Tahsildar Kalpa	M.I.C.	Within Kalpa tahsil
13. The Court of Naib-Tahsildar Nachar	M.I.C.	Within Nachar tahsil

Note :— 1. Besides the powers of M.I.C., the S.D.O. (C) Kalpa, Puh and Nachar have been declared S. D. Ms. (Incharge of thier respective sub-divisions) and conferred with the powers to try summarily within the local limits of their sub-divisions, offences specified in Section 260 Cr. P. C.

2. All the Tahsildars of this district have also been conferred with the powers under Section 167 Cr. P. C. for detention of a person in police custody during police investigation.

The First Class Magistrates can exercise the powers throughout the district. But they have been assigned particular *thanas* which are inter-changed from time to time by the District Magistrate. The Magistrates, besides acting as criminal courts, have to perform various administrative duties and are generally assigned the functions of the Collector, Compensation Officer, Land Acquisition Officer, Registering and Licensing Authority for motor vehicles under *the Indian Motor Vehicle Act, 1939*, Assistant Returning Officer, Treasury Officer, Civil Sub-Judge and General Assistant to the Deputy Commissioner. A Magistrate is not required to perform all the functions but the work is distributed proportionately among all the Magistrates keeping in view the local situations and administrative convenience.

Appellate and revisional courts	Powers
The District Magistrate Kinnaur at Kalpa	As in the Criminal Procedure Code
The Court of the Sessions Judge, Mahasu, Sirmur, Bilaspur and Kinnaur districts at Simla	As in the Criminal Procedure Code
Himachal Pradesh High Court at Revens Wood, Simla	Highest Court of original, appellate and revisional powers and jurisdiction within the territory of Himachal Pradesh

Supervisory and administrative control over the subordinate magistracy is exercised by the District Magistrate and also by the District and Sessions Judge, under the over-all superintendence of the Himachal Pradesh High Court.

Eighteen *nyaya* panchayat circles were established in the year 1958. At present there are twenty-seven. After the election of *Panches*, *Sarpanches* and *Naib-Sarpanches* had been conducted and training imparted to them, these bodies started functioning in the beginning of the year 1959. These panchayats have been empowered under Section 57 of *the Himachal Pradesh Panchayat Raj Act, 1952*, to entertain and adjudicate all criminal cases (offences) detailed in schedule I of the said Act, to hear and decide applications for maintenance under Section 488 of *the Criminal Procedure Code* and to ask any person to furnish security and bond for a period of fifteen days. Powers under this Section have been given to the panchayats in view of the special local conditions. They are empowered to impose a

fine not exceeding one hundred rupees but they are not empowered to inflict a sentence of imprisonment in any form. Their civil pecuniary jurisdiction extends up to one hundred rupees which can be extended further by the parties to the suit by mutual agreement. The territorial jurisdiction of each *nyaya* panchayat is conterminous with the territorial limits of the *gram sabha* circle for which a *nyaya* panchayat has been established.

The *nyaya* panchayats can hear suits for money due on contract other than a contract in respect of immovable property, suits for the recovery of movable property or for the value thereof, suits for compensation for wrongfully taking or injuring a movable property, suits for damages caused by cattle trespass, and suits under clauses (j) and (n) of sub-Section (3) of Section 77 of *the Punjab Tenancy Act 1887* as applied to Himachal Pradesh. The *nyaya* panchayats are also empowered to deal with certain revenue proceedings on a reference being made to them by the Tahsildars.

Appeals against the decision of the bench of *nyaya* panchayat lie to the full bench. Revisions in respect of civil and criminal matters lie to the Sub-Divisional Judge and in respect of revenue matters to the Sub-Divisional Officer within whose local limits the *nyaya* panchayat is situated. The administrative and supervisory control over the *nyaya* panchayats is exercised by various departmental officers including a Director, a Deputy Director, an Assistant Director, a District Panchayat Officer and Panchayat Inspectors.

The tenure of each *nyaya* panchayat is three years as provided under Section 50 of *the Himachal Pradesh Panchayat Raj Act, 1952*. The benches function during the life of the *nyaya* panchayat. No difficulty has been experienced in the normal functioning of *nyaya* panchayats.

Nature of cases handled

Nature of criminal cases handled by the police and various criminal courts have already been discussed. The following statistical tables illustrate the number and nature of civil suits instituted in and handled by the courts, during the period commencing after the formation of the district. Suits for money or movable property and immovable property are by far the numerous.

Disposal of suits

Years	1960	1961	1962	1963	1964	1965
Suits for money or movable property	51	39	19	29	30	21
Suits for immovable property	14	20	15	21	19	21
Suits for specific relief	8	—	5	3	—	—
Mortgage suits	—	—	—	—	—	—
Matrimonial suits	—	—	2	—	3	—
Other suits not falling under any of the preceding heads	—	—	1	—	7	5
Total	73	59	42	53	59	47
Value of civil suits instituted (in rupees)	18,079.20	42,880.69	23,372.00	12,104.00	25,187.91	26,408.75

Nature and number of disposal of suits

Years	1960	1961	1962	1963	1964	1965
Previous balance	33	15	35	33	34	46
Total institution	73	59	44	53	58	46
Total for disposal	106	74	79	86	92	92
Disposed of after trial	43	13	14	14	12	23
Disposed of in default	29	12	17	17	12	27
Decided otherwise without trial	—	4	2	1	4	1
Exparte decree	11	5	2	5	9	9
Decreed on admission of claim	1	2	3	5	4	2
Compromised	1	3	6	9	4	1
Reference to arbitration	—	—	—	—	1	2
Transferred	6	—	2	1	—	1
Total	91	39	46	52	46	66
Balance	15	35	33	34	46	26

Civil appeals

Year	Nature	Opening balance	Total instituted	Total for disposal	Total disposed of	Balance
1960	Regular	3	—	3	2	1
	Miscellaneous	—	—	—	—	—
1961	Regular	1	3	4	2	2
	Miscellaneous	—	—	—	—	—
1962	Regular	2	3	5	2	3
	Miscellaneous	—	—	—	—	—
1963	Regular	3	1	4	3	1
	Miscellaneous	—	2	2	1	1
1964	Regular	1	3	4	1	3
	Miscellaneous	1	—	1	1	—
1965	Regular	—	—	—	—	—
	Miscellaneous	2	1	3	3	—
1966	Regular	6	12	18	9	9
	Miscellaneous	—	1	1	—	1
1967	Regular	9	—	9	8	1
	Miscellaneous	1	10	11	1	10
1968	Regular	1	7	8	5	3
	Miscellaneous	10	8	18	16	2
1969	Regular	3	6	9	6	3
	Miscellaneous	2	6	8	4	3
1970	Regular	3	4	7	3	4
	Miscellaneous	4	2	6	5	1

No Bar Association is functioning in the district.

CHAPTER XIII

OTHER DEPARTMENTS

The organisational set up at the district level of departments that does not find space elsewhere in this volume is described below.

Public Works Department

During the princely regime there was not much need to establish a Public Works Department. Soon after the formation of the Pradesh the Government, realising that economic salvation of the hills was entirely dependent upon the development of roads and means of communications, entrusted this work to the newly organised Public Works Department of the Pradesh. This department is responsible for the execution and maintenance of works of all classes required for all civil departments as also the departmental work. It undertook electrical and irrigation works until the creation of Multi-purpose Projects and Power Department in March, 1964. It also offers advice to various other departments on technical matters to expedite all round development in this field in the area.

This district falls under the charge of a Superintending Engineer, in charge of the II Circle with headquarters at Simla. Kinnaur Division, under the charge of an Executive Engineer also designated as the Divisional Officer, with headquarters at Kalpa is under this circle. There are five sub-divisions under this division namely Karchham, Kalpa, Pangi (Kalpa), Puh and Morang. Each sub-division is under the charge of an Assistant Engineer commonly called the Sub-Divisional Officer. The sub-divisions are further divided into section each in charge of a Sectional Officer.

At the lowest rung of the departmental hierarchy in the district stands the Sectional Officer. His main functions are, preparation of plan estimates for all constructional works, guidance and supervision of all construction work, posting of measurements in the measurement book and ensuring that technical standard in connection with the building works are maintained. He is required to issue completion certificates in respect of finished works. He is responsible to the Assistant Engineer.

Next above in rank to the Sectional Officer (Overseer) is the Sub-Divisional Officer; in charge of the sub-division as also a professional adviser on engineering matters to all administrative departments. He is

assisted by the overseers working under him. He is responsible to the Divisional Officer for the management and efficient execution of works in the sub-division. He is required to maintain the initial account records of cash and stores under his charge as well as works abstracts, with certain accompaniments under the rules for the time being in force. He has to submit correct accounts returns, punctually to the Divisional Officer. He has to see to the advance recovery of the value of stores, in cash, sold to the public and issues made to contractors for private use under the orders of the competent authority. He is further responsible for clearance from works accounts, of all outstandings against contractors on account of recoverable value of materials issued and services rendered to them by charge to works. To scrutinise the muster roll and measurement book and to ensure that these are written up neatly and the postings made therein are in accordance with the prescribed rule with a view to avoiding all doubts about their authenticity is yet another important function of this officer.

At the top in a division, being the executive unit of the department, is the Divisional Officer. He is responsible to the Superintending Engineer for the efficient execution and management of all works within his division. It is one of his functions to organise and supervise the execution of works and to see that they are suitably and economically carried out with materials of good quality. He being the primary disbursing officer of the division is responsible not only for the financial regularity of the transactions of the whole division but also for the correct maintenance of the accounts of the transactions. He is, therefore, required to take the necessary steps for obtaining cash for the works under his control, to keep accounts, and to submit them punctually to the Audit Officer under the rules. He is further responsible for the arrangements for accounts keeping, in which matter he is assisted by the Divisional Accountant, and he sees to it that the accounts are posted from day-to-day and Accountant carries his duties regularly and punctually. The responsibility for the correctness, in all respects, of the original records of cash and stores, receipts and expenditure, and also for seeing that complete vouchers are obtained, rests on his shoulders. He, before submitting the monthly accounts, carefully examines the books, returns and records from which the same are compiled. He is responsible to inspect, at least once a year, the more important buildings and works in his division, and is further responsible to see that proper measures are taken to preserve them and to prevent encroachment on government lands in his charge. He has to keep accurate plans of all such lands and has to take care that his subordinates make themselves acquainted with the boundaries and see that they are respected. It is also his duty to administer the grant made for public works in his division and, with this object, to keep a close watch over the progress of expenditure against it, with a view to seeing that no excess is permitted

to occur. He is also responsible to keep himself informed of such circumstances as may effect the progress of expenditure in order to take timely steps for obtaining extra funds or surrendering probable savings, as may be necessary. He reconciles the expenditure recorded in his books with that in the books of the Audit Officer in the prescribed manner. He receives orders only from the Chief Engineer, Additional Chief Engineer, Superintending Engineer or the Himachal Pradesh Government.

The next higher administrative unit of the department is a circle under the charge of a Superintending Engineer. He performs certain administrative functions, wields various financial powers and exercises extensive supervisory control. He is responsible to the Chief Engineer for the general professional and administrative control of the department within his circle. He can correspond direct with any of the local authorities, civil or military, within his jurisdiction. He inspects the divisional offices at least once a year and records results of such inspections on the prescribed forms. He has to satisfy himself, from time to time, that staff employed in each division is actually necessary and adequate for its management. He further examines the books of Divisional Officer, posted in his circle, and their subordinates to see that matters relating to the primary accounts are attended to personally by the Divisional and Sub-Divisional Officers and that the accounts fairly represent the progress of each work. It is necessary for him to examine the register of works, and if he so considers, may require a Divisional Officer to report to him monthly or at longer intervals, total expenditure to date under each sub-head of a work with the sanctioned estimates. He is also supposed to investigate excesses over sub-head with a view to deciding whether or not a revised estimate is required for the work and if so, it is his duty to ensure its timely submission to the sanctioning authority. Inspection of various works in progress within his circle, to satisfy himself that the system of management prevailing is efficient and economical is a part of his duty. To see that different stores are duly verified according to the rules laid down, and that there is no accumulation of stock in any one of the division beyond its requirements, is his responsibility. He is also responsible that no delay is allowed to occur in the submission of completion reports. He, so far as may be possible, inspects periodically all important public buildings and other works within his jurisdiction. During his tours he sees that measurement books are carefully kept and measurements properly recorded, and that they are complete records of the actual measurements of each kind of work done for which certificates have been granted. He also sees that any orders of the Himachal Pradesh Government regarding check measurements are duly

observed. On the works side he is assisted by a Surveyor of Works (Executive Engineer).

The design work is divided into two parts, namely, the architectural and structural. The architectural design is entrusted to the Architect who is the technical head of the architectural side responsible for the architectural designing, and town planning. He is assisted by an Assistant Architect of the rank of an Assistant Engineer and by a few Architectural Draftsmen. The architectural side works in close collaboration with the Surveyor of Works Organisation and Electrical Engineers to co-ordinate structural soundness of designs, efficient provision of services and landscaping. It takes into consideration while preparing designs, aesthetic, functional, structural and service requirements of a building with due regard to economy of cost, availability of materials and, specifications. The architectural side also carries out field inspections in respect of new constructions and advises the field staff to ensure that work is carried out according to architectural plans and designs.

The Surveyor of Works Organisation attends to the structural designs. This organisation is also meant to exercise a qualitative and quantitative control and check on the execution of all projects and, to introduce internal concurrent and continuous technical audit. Other functions of the organisation are to plan and design various projects and to prepare their preliminary and detailed estimates. It deals also with structural designs and hydraulic designs, draws up standard schedule of rates for all buildings, roads, runways, water-supply, drainage, sewerage, electrical works, fair-wages and specifications, and, drafts contract documents with particular reference to rates and specifications. It formulates budget proposals, watches and compiles progress reports for all works, examines deviations and departures from the contracts, scrutinizes agreements and advises the executive formations on arbitration cases and legal issues arising out of contracts. The separation of planning and designing functions from the executive has increased the efficiency of the department. A Superintending Surveyor of Works of the rank of Superintending Engineer looks after the functions of his organisation. He enjoys the compliment of staff including Surveyor of Works of the rank of Executive Engineer and four Assistant Engineers (Planning and Design).

Chief Engineer's functions are primarily three-fold viz., administrative, financial and technical. He is the head of the department. He is responsible to the Secretary to government for the efficient administration of the department. He has full technical and supervisory control over Superintending Engineers, Superintending Surveyor of Works, Architect and all other officers working under him.

CHAPTER XIII

OTHER DEPARTMENTS

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At the lowest rung of the departmental hierarchy in the district stands the Sectional Officer. His main functions are, preparation of plan estimates for all constructional works, guidance and supervision of all construction work, posting of measurements in the measurement book and ensuring that technical standard in connection with the building works are maintained. He is required to issue completion certificates in respect of finished works. He is responsible to the Assistant Engineer.

Next above in rank to the Sectional Officer (Overseer) is the Sub-Divisional Officer; in charge of the sub-division as also a professional adviser on engineering matters to all administrative departments. He is

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At the top in a division, being the executive unit of the department, is the Divisional Officer. He is responsible to the Superintending Engineer for the efficient execution and management of all works within his division. It is one of his functions to organise and supervise the execution of works and to see that they are suitably and economically carried out with materials of good quality. He being the primary disbursing officer of the division is responsible not only for the financial regularity of the transactions of the whole division but also for the correct maintenance of the accounts of the transactions. He is, therefore, required to take the necessary steps for obtaining cash for the works under his control, to keep accounts, and to submit them punctually to the Audit Officer under the rules. He is further responsible for the arrangements for accounts keeping, in which matter he is assisted by the Divisional Accountant, and he sees to it that the accounts are posted from day-to-day and Accountant carries his duties regularly and punctually. The responsibility for the correctness, in all respects, of the original records of cash and stores, receipts and expenditure, and also for seeing that complete vouchers are obtained, rests on his shoulders. He, before submitting the monthly accounts, carefully examines the books, returns and records from which the same are compiled. He is responsible to inspect, at least once a year, the more important buildings and works in his division, and is further responsible to see that proper measures are taken to preserve them and to prevent encroachment on government lands in his charge. He has to keep accurate plans of all such lands and has to take care that his subordinates make themselves acquainted with the boundaries and see that they are respected. It is also his duty to administer the grant made for public works in his division and, with this object, to keep a close watch over the progress of expenditure against it, with a view to seeing that no excess is permitted

to occur. He is also responsible to keep himself informed of such circumstances as may effect the progress of expenditure in order to take timely steps for obtaining extra funds or surrendering probable savings, as may be necessary. He reconciles the expenditure recorded in his books with that in the books of the Audit Officer in the prescribed manner. He receives orders only from the Chief Engineer, Additional Chief Engineer, Superintending Engineer or the Himachal Pradesh Government.

The next higher administrative unit of the department is a circle under the charge of a Superintending Engineer. He performs certain administrative functions, wields various financial powers and exercises extensive supervisory control. He is responsible to the Chief Engineer for the general professional and administrative control of the department within his circle. He can correspond direct with any of the local authorities, civil or military, within his jurisdiction. He inspects the divisional offices at least once a year and records results of such inspections on the prescribed forms. He has to satisfy himself, from time to time, that staff employed in each division is actually necessary and adequate for its management. He further examines the books of Divisional Officer, posted in his circle, and their subordinates to see that matters relating to the primary accounts are attended to personally by the Divisional and Sub-Divisional Officers and that the accounts fairly represent the progress of each work. It is necessary for him to examine the register of works, and if he so considers, may require a Divisional Officer to report to him monthly or at longer intervals, total expenditure to date under each sub-head of a work with the sanctioned estimates. He is also supposed to investigate excesses over sub-head with a view to deciding whether or not a revised estimate is required for the work and if so, it is his duty to ensure its timely submission to the sanctioning authority. Inspection of various works in progress within his circle, to satisfy himself that the system of management prevailing is efficient and economical is a part of his duty. To see that different stores are duly verified according to the rules laid down, and that there is no accumulation of stock in any one of the division beyond its requirements, is his responsibility. He is also responsible that no delay is allowed to occur in the submission of completion reports. He, so far as may be possible, inspects periodically all important public buildings and other works within his jurisdiction. During his tours he sees that measurement books are carefully kept and measurements properly recorded, and that they are complete records of the actual measurements of each kind of work done for which certificates have been granted. He also sees that any orders of the Himachal Pradesh Government regarding check measurements are duly

observed. On the works side he is assisted by a Surveyor of Works (Executive Engineer).

The design work is divided into two parts, namely, the architectural and structural. The architectural design is entrusted to the Architect who is the technical head of the architectural side responsible for the architectural designing, and town planning. He is assisted by an Assistant Architect of the rank of an Assistant Engineer and by a few Architectural Draftsmen. The architectural side works in close collaboration with the Surveyor of Works Organisation and Electrical Engineers to co-ordinate structural soundness of designs, efficient provision of services and landscaping. It takes into consideration while preparing designs, aesthetic, functional, structural and service requirements of a building with due regard to economy of cost, availability of materials and, specifications. The architectural side also carries out field inspections in respect of new constructions and advises the field staff to ensure that work is carried out according to architectural plans and designs.

The Surveyor of Works Organisation attends to the structural designs. This organisation is also meant to exercise a qualitative and quantitative control and check on the execution of all projects and, to introduce internal concurrent and continuous technical audit. Other functions of the organisation are to plan and design various projects and to prepare their preliminary and detailed estimates. It deals also with structural designs and hydraulic designs, draws up standard schedule of rates for all buildings, roads, runways, water-supply, drainage, sewerage, electrical works, fair-wages and specifications, and, drafts contract documents with particular reference to rates and specifications. It formulates budget proposals, watches and compiles progress reports for all works, examines deviations and departures from the contracts, scrutinizes agreements and advises the executive formations on arbitration cases and legal issues arising out of contracts. The separation of planning and designing functions from the executive has increased the efficiency of the department. A Superintending Surveyor of Works of the rank of Superintending Engineer looks after the functions of his organisation. He enjoys the compliment of staff including Surveyor of Works of the rank of Executive Engineer and four Assistant Engineers (Planning and Design).

Chief Engineer's functions are primarily three-fold viz., administrative, financial and technical. He is the head of the department. He is responsible to the Secretary to government for the efficient administration of the department. He has full technical and supervisory control over Superintending Engineers, Superintending Surveyor of Works, Architect and all other officers working under him.

He is assisted on the planning and designing side by the Superintending Surveyor of Works and, on the administration side, by an Administrative Officer of the status of an Under Secretary and an Engineer Officer of the rank of an Executive Engineer. A Financial Adviser of the cadre of Assistant Accounts Officer advises him and the Superintending Engineers in financial matters. The Executive Engineers, Investigation and Designing, working under the direct control of Superintending Surveyor of Works, is responsible for the investigation of irrigation and water-supply schemes.

The Chief Engineer along with the Audit Officer exercises concurrent control over the departmental officers in connection with the maintenance of accounts and extends due support to the Audit Officer in enforcing strict attention to the regulation concerning of accounts. Though he has no authority over the Audit Officer in regard to audit matters, yet has a claim on him for assistance and advice in matters relating to accounts and finance. He also arranges that the Audit Officer is kept fully cognizant of all departmental proceedings and proposals, to enable the latter to fulfil his functions. He prepares annually a portion of the budget estimates relating to the works under his control and administers the grant, keeps a close watch over progress of expenditure against it to see that no excess occurs and that if additional funds are necessary, application for the same is made in time. He is also responsible to see that the grant is fully utilised in a manner consistent with general economy, that the rush of expenditure in the last months of the year is avoided as far as possible, and, that any fund unlikely to be needed during the year is immediately surrendered so as to allow of its appropriation for other purposes by the proper authority. The Chief Engineer is responsible to the government through the Secretary of the Public Works Department.

The Himachal Pradesh Government established a separate Department of Multi-purpose Projects and Power in 1964. Investigations are being carried out for medium generating schemes on the Bhabha and Baspa streams, and for certain other micro-hydel schemes in Kinnaur. An electricity circle with five divisions was functioning under the Chief Engineer, Himachal Pradesh Public Works Department till the creation of the Department of Multi-purpose Projects and Power, when the circle was placed under its control.

The Electricity Department in Kinnaur is managed by the 2nd Hydel Electrical Circle under a Superintending Engineer, with headquarters at Solon. The electrical works in Kinnaur form a part of the Hydel Division whose Executive Engineer is stationed at Rampur. Under him there are two electrical sub-divisions, one with headquarters at Tapri and the other with headquarters at Kalpa. The civil works pertaining to power schemes

are controlled by the Superintending Surveyor of Works, attached to Chief Engineer's office, Department of Multi-purpose Projects and Power, Simla. Under him, with headquarters at Simla, is the Executive Engineer, Investigation and Designing (Electrical) Division. Under the Executive Engineer there are, in Kinnaur district, two sub-divisions of Investigation and Designs (Electrical), one at Karchham and the other at Kalpa.

At present the electricity branch consists of two circles (Sundernagar and Solon) controlling seven electrical divisions. The multi-purpose branch comprises of six divisions on investigations and surveys of the multi-purpose and hydel schemes in the entire Pradesh. Within the district, there are two Assistant Engineers busy with investigation of schemes, with headquarters at Kalpa and Karchham. Both are responsible to and controlled by the Executive Engineer, Investigation and Designs (Electrical) Division, Simla.

The Chief Engineer is assisted by an Engineer Officer in administrative matters and by a Superintending Surveyor of Works, three Surveyors of Works and five Assistant Surveyors of Works in preparing project reports, drawings, designs, etc. He is responsible to the government through the Secretary under whose overall charge this department falls.

Welfare Department

This department was organised in the year 1955, primarily to look after the interests of the backward classes (Scheduled Castes and Scheduled Tribes). At the initial stages, the work was entrusted to the Director of Public Relations and Tourism in addition to his own duties. In the year 1958 a separate directorate was established. At the formative stages, no separate field staff, in the district, was appointed. During the first two plans the work relating to the execution of the welfare programme was implemented either through the district level staff of the various departments or through the Deputy Commissioner.

Now at the district level the District Welfare Officer functions as the head of the office with headquarters at Peo. He controls the affairs of the Welfare Department at his level. He has to undertake tours to watch timely and economical implementation of various welfare programmes and projects undertaken by the department; to assist in the planning of schemes in close collaboration with the officials of voluntary agencies in furtherance of the welfare programme; to co-ordinate the activities of various offices implementing schemes of the Welfare Department, and, to watch the progress of the schemes. An Assistant Welfare Officer, assists the District Welfare Officer in the discharge of his day-to-day duties.

A post of Welfare Overseer has also been provided under the District Welfare Officer for rendering assistance in preparing estimates of works, supervising construction work, offering technical guidance to the panchayats and issuing completion certificates in respect of welfare schemes.

Department of Economics and Statistics

Located at Peo, this office was established during July, 1961. The initial staff consisted of a District Statistical Officer, a Statistical Assistant, a Clerk and a Peon.

Broadly the functions of the District Statistical Officer assisted by his staff are to co-ordinate the statistical activities of different departments at the district and lower levels; to ensure that the data collected by different district agencies are furnished in time and conform to certain minimum standards; to undertake on-the-spot investigations for the collection of data; to impart periodic training to primary reporters of data; to collect such economic and statistical data (through regular and *ad hoc* surveys) which are either not available at present or are extremely meagre, inadequate, unreliable and for which there is no suitable agency; to maintain data relating to district schemes and progress in the execution of such schemes; and to meet such other demands for economic and statistical data as may arise from time to time for administrative and policy need.

Despite its late establishment, the office has by now developed necessary working relationship with all the district offices / organisations and their counterparts at the lower level. It has made a beginning in co-ordinating the statistical activities of different departments at the district level and in bringing about necessary improvement in the range, quality and usefulness of various statistical data emanating at the district and lower levels. Also as a start towards its development into a storehouse of all statistical information, the office has undertaken compilation of various publications including *Statistical Handbook, Facts and Figures of Kinnaur District, Statistical Abstract, Basic Statistics* relating to economy. Of these, the first issue of the brochure '*Facts and Figures of Kinnaur District*' has since been published.

This office has so far been associated with the conduct of (a) annual census of Himachal Pradesh employees (b) various socio-economic surveys and enquiries including case studies for State income estimation, annual sample census, 1963 village index cards, and sample survey relating to area brought under improved agricultural practices. A preliminary socio-economic survey of the district has already been conducted during

1960-61 while major part of the field work connected with the evaluation study of Kinnaur district has been completed. This office also recently assisted the Deputy Commissioner, Kinnaur in undertaking a family-wise economic survey of the district.

As in other districts, since July 1961 all periodic progress reports in respect of community development blocks are being routed through this office. The District Statistical Officer scrutinises them and prepares consolidated reports for the district. A start has also been given to the registration of Plan schemes at the district level and preparation of Annual Plan Progress Reports in respect of both C.D. Review and Five Year Plans.

The District Statistical Office has been actively associated in the conduct of these surveys by way of exercising necessary supervision over the field work, by imparting necessary training to the field staff, by scrutinising the filled in schedules and by undertaking preliminary tabulation of data thus collected.

Department of Public Relations

A District Public Relations Officer, an Assistant Public Relations Officer, three Radio Mechanics and two Project Operators comprise the team for carrying out the work of public relations in the district. There is also an information centre supervised by the Assistant Public Relations Officer.

Main task of the Public Relations Officer is to keep informed the people about the facts and figures as also about the plans and the programmes of the government and progress made in various spheres of development. Another main function of the District Public Relations Officer is to frequently tour the interior in order to come into direct contact with the local people. There he holds group discussions with the people which, in view of Kinnaur being a border district, are important. Principal points covered in these discussions usually are the Plan projects with special emphasis on the development of horticulture, agriculture, communications etc. Other prominent topics that figure in these face-to-face discussions are the family planning, national savings scheme, life insurance, people's co-operation, panchayats and other matters of socio-economic nature. The significance of these group discussions lies in the fact that the District Public Relations Officer has to assess the public reactions to the utility of various development projects. He also gives information to the public on government loans and advances, stipends and scholarships as also about the various important events both inside and outside the territory. Then he has to report various events occurring in the area to get them published in the press. He is also charged with the task of

promoting cultural activities. He is supposed to write special features and articles touching not only the developmental activities but also the social and cultural life of the local people. In addition, he looks after several schemes like community listening, exhibitions, songs and dramas, mobile cinema unit and information centre.

The community listening scheme aims at providing facilities to the people in the villages to listen to the daily news and other broadcasts from the Simla station as also other selected stations of the All India Radio. This is implemented, among others, by the Radio Mechanics, responsible for installation and maintenance of the community listening sets. Suitable places for the establishment of community listening centres are selected by the Block Development Committee on the recommendations of the respective *gram* panchayats.

Under the mobile cinema unit scheme the District Public Relations Officer periodically arranges cinema shows in all important local places where new documentary films produced by the Union Government, and the Directorate of Public Relations, Himachal Pradesh, are screened to educate the local people.

In the District Information Centre located at Kalpa, newspapers, periodicals and general information books are kept. The Assistant Public Relations Officer attached to District Information Centre also provides information on various subjects of tourist interest.

On various important fairs and festivals, the district office organises exhibitions in which pictures, posters, charts and working models of various projects are exhibited to educate the people.

Animal Husbandry Department

There is an elaborate district level staff comprising fifty persons, excluding class IV employees, to look after the animal husbandry work being carried on, under different schemes.

For sometime after the formation of Kinnaur district, it remained under the dual charge of the District Animal Husbandry Officer, Mahasu. A full-fledged District Animal Husbandry Officer, with his headquarters at Kalpa, was appointed in 1961. He is responsible at his level for all departmental activities including the general supervision of the veterinary institutions, implementation of departmental schemes, co-ordination in carrying out the various Plan schemes in the development blocks and the administrative control over the staff of the veterinary institutions. He has been equipped with special financial powers due to the introduction of single-line system of administration. He is assisted by

twelve Veterinary Assistant Surgeons, twelve Veterinary Compounders and twenty-four Stock Assistants.

There are nine veterinary hospitals located at Leo, Pub, Jangi, Ribba, Kalpa, Nachar, Sangla, Bhabha and Kilba, each in charge of a Veterinary Assistant Surgeon, a Veterinary Compounder and a Stock Assistant. Besides, there exist twelve veterinary dispensaries located at Chango, Giabong, Rakchham, Pawari, Nigulsari, Chhota Kamba, Ruppi, Lippa, Peo, Barua, Sholdang and Morang, each in charge of a Stock Assistant, assisted by class IV employees. A yak breeding farm is functioning at Sangla under the charge of a Veterinary Assistant Surgeon with one Stock Assistant. Two poultry extension units at Tapri and Peo are functioning and each is looked after by a Stock Assistant. Five sheep and wool extension centres are also located at Ramni (Kaksthal), Jangi, Peo, Bhabha (Katgaon) and Sangla. The first two centres are looked after by a Stock Assistant each while the remaining three are controlled each by a Veterinary Assistant Surgeon and a Stock Assistant. The sheep breeding farm at Karchham is managed by a Manager and a Veterinary Assistant Surgeon and two Stock Assistants. Five sheep and wool extension centres functioning at Kaksthal, Bhabha, Sangla, Peo and Jangi were closed after achieving the object and in their place the Veterinary Department started under the charge of a Veterinary Compounder at Lippa, Barua, Peo, Sholdang and one outlying dispensary at Ruppi converted into a regular dispensary.

Panchayat Department

The work is looked after by the District Panchayat Officer who is the head of office and responsible for the effective and efficient working of the panchayats. He performs administrative, executive and supervisory control over all the panchayats. He inspects the work of Panchayat Inspectors, renders them advice, guidance and help in the disposal of various public representations.

Education Panchayat Officer primarily imparts training to panchayat functionaries and is also responsible for the inspection of the *gram* and *nyaya* panchayats. He comments upon the inspection notes of panchayats recorded by the Panchayat Inspectors. He helps in the organisation of panchayat *sammelans* and assists the District Panchayat Officer in his day-to-day work. Inspector is the technical advisory to the local panchayats on all matters. His methods are primarily educative. He helps the panchayats in framing the budget and in the fixing of priorities in the programme. He is responsible for all activities concerning the panchayats including the supervision and inspection. He inspects and exercises control over the work of the Sub-Inspector. Sub-Inspectors primarily visit the panchayats and help them in proper maintenance of

records. District Audit Officer for panchayats is responsible for the working of the field audit staff and re-audits the accounts of the *gram* and *nyaya* panchayats. He issues instructions for the proper keeping of the account and conducts enquiries in cases where funds have been embezzled and misappropriated. Auditor audits the accounts of the panchayats under his charge, and assists the District Audit Officer during his audit.

Co-operative Department

At the district level the work is looked after by the District Co-operative and Supplies Officer with headquarters at Kalpa. He is responsible for the effective and proper working of all types of societies. Besides exercising all the statutory functions like registration of new societies and making amendments to the bye-laws of the existing societies, conducting enquiries and inspections etc., he controls and regulates the work of all the executive staff under him. On the audit side the District Co-operative and Supplies Officer is assisted by a District Audit Officer and a Junior Auditor with their headquarters at Kalpa. A District Inspector (Civil Supplies) also assists the District Co-operative and Supplies Officer exclusively on the civil supply side. Further to assist him there are three Inspectors posted at Kalpa, Nachar and Puh and four Sub-Inspectors with headquarters at Kalpa, Nachar, Puh and Morang looking after the work of civil supplies as well as co-operatives.

District Audit Officer looks after the working of the field audit staff and conducts audit of all the large sized co-operative societies. He also conducts a certain percentage of re-audit work. Junior Auditor audits the accounts of all the primary co-operative societies, except large ones, under his charge. He also assists the District Audit Officer during his audit of large co-operative societies. District Inspector, Civil Supplies, is exclusively responsible for all the activities concerning the civil supplies work and has supervisory control over the Inspector and Sub-Inspectors of co-operative and supplies. Inspector co-operative and supplies is responsible for all the activities concerning the co-operative and civil supplies including supervision and inspection of all the primary societies at the block level. He checks and exercises control over the work of the Sub-Inspectors and Junior Auditors. Sub-Inspector co-operative and supplies, supervises the societies in a *Kanungo* circle.

Industries Department

The District Industries Officer being the head of office, controls the affairs of the Industries Department in the district. He performs the work of industrial survey and makes enquiries regarding loans for industrial purposes. He exercises administrative and financial control over the

Extension Officers (Industries) of all the development blocks, and over various training-cum-production centres functioning in the district. Each development block has an Extension Officer (Industries) who is under the administrative control of the Block Development Officer and under the technical control of the District Industries Officer. The Extension Officer, as far as possible, guides artisans, societies and individual concerns, in their technical and other difficulties and tries to rejuvenate such dying traditional industries as may be inherently sound and may conform to the industrial policy of the government.

There is a Textile Expert and a Sericulture Expert, stationed at Mandi, with technical jurisdictions in respect of the textile industry and sericulture for the whole Pradesh. They work under the guidance of the District Industries Officer of the district concerned under directions from the Director of Industries.

There is also an Employment Officer at the district level, in charge of employment exchange. He is responsible to the Director of Industries through the Employment Information Officer.

Another officer called the Superintendent, Rural Industrial Training Institute, has his headquarters at Kalpa. Independent of the District Industries Officer he is directly responsible to the Director of Industries. A Labour Inspector for Mahasu and Kinnaur districts with headquarters at Kasumpti and an Inspector of Weights and Measures, posted at Kalpa, complete the district level staff.

Forest Department

The whole of Himachal Pradesh, for the purposes of forest management, is divided into four circles. Kinnaur district falls within the Bilaspur circle. This circle, is further divided into forest divisions. The district is covered by Nachar forest division with six ranges. Ranges are further sub-divided into blocks. In all there are sixteen forest blocks. The smallest unit in which the block is split up is called a beat. There are sixty-one beats.

The chief duties of the Forest Guard, incharge of a beat, include full knowledge of his beat; to be fully acquainted with, and to possess, a list of the rights, privileges and concessions that may be exercised by the people in the forests of his beat, to observe rules for detecting forest offences, to carry out, under orders of the Range Officer, repairs to boundary pillars, roads and buildings; to maintain fences; to look after regeneration areas and plantation; to ensure weeding out of undesirable plants from young plantation; to obtain the Range Officer's sanction before incurring expenditure in these works; and to see that the shooting rules are observed and illegal shooting and trapping are stopped.

Above the Forest Guard is the Block Officer of the status of a Forester or a Deputy Ranger. He assists the Range Officer in carrying out the departmental work. He carries out all the orders and instructions given to him by his superiors and brings all important happenings to the notice of the Range Officer. He has to understand thoroughly the rules regarding forest offences and to observe them strictly. Except as laid down in these rules, he is forbidden to take money from the offenders. He has to mark trees to the right-holders and to realise the price thereof; and also to prevent the Forest Guards, under his control, from abusing their authority and harassing the people.

The Range Officer, commonly called the Forest Ranger also, holds the over-all charge of a range and controls all the works being carried out according to the sanctioned schemes and budget grants placed at his disposal. He is responsible for all cash disbursements and expenditure. All payments to establishment and labour, as far as possible, are made personally by him. He is personally responsible that labour is not employed longer than is necessary and that disbursements are made in time. He is supposed to communicate all orders and instructions, from higher authorities, to his subordinates and see that they understand and carry them out. He checks and controls all works within the range and ensures that government funds are used in the most economical and efficient way. He is expected to manage the forests with an eye on the highest possible revenue consistent with the best possible conservancy of the resources on a long range basis and with the reasonable domestic needs of the people in accordance with prescribed policies and rules. Besides all routine office work, he collects, checks and consolidates all returns and registers in order to prepare the monthly accounts. He prevents any misuse of authority by subordinates especially in compounding forest offences.

Next above the Forest Ranger, is the Divisional Forest Officer who is responsible for the proper management of the forests and the finances of his division. His functions are administrative, executive as well as technical. Subject to the provision of working plan and any directions he may receive from his superiors, he controls the silviculture and is further held responsible for the correctness of all technical operations. He is supposed to have a vast knowledge of the people with whom he has to deal, to maintain sympathy for their modest and genuine requirements, and to carry out the forest policy prescribed for them with fairness and common sense. He must understand that he is put in charge of the forests to administer them in the interest of the people in so far as these do not conflict with the larger interest of the community as a whole.

The next higher rank in the departmental set up is that of a Conservator. He exercises general control in forest matter and makes frequent extensive and intensive tours of inspection and visit once a year, as many of the forests under his control as possible. During the course of his tours he pays particular attention to the following points and, if necessary, makes special reports to the Chief Conservator of Forests. Survey and settlements, made or in progress, and their cost and extent to which they are still required, nature and adequacy of the maps and settlement records prepared; and results of working under the settlements in force, working plans already made or in progress, and their cost and extent to which they are still required and results of working of the plans in force, forest boundaries, their nature and state of repairs; demarcation work in progress and its cost; and demarcation work still to be done, roads, buildings and other similar works, in existence or under construction, their cost and state of repairs and new roads, buildings or other works required, executive and projective staff, their efficiency and state of discipline, etc., condition of the forest, methods of treatment employed; natural growth and regeneration and causes which interfere with it, protection of the forests from injury, by man, by cattle, by fires, etc., and breaches of the forest rules with their frequency and causes, works of re-production and cultural improvement; extent, condition and cost of plantations made; conditions of nurseries; new sowings or plantings required; and thinning, creeper cutting, including the extent to which carried on and required, methods of working and management in force, with the advantages and disadvantages of these methods; expenditure incurred on the outturn of the forests; and financial results, and timber depots, with their situation, condition and adequacy or inadequacy; and the state of the records kept up in connection with the depots. He is further responsible to see that all money transactions are conducted in accordance with the rules in force; and he should examine the cost of current works, as well as of those which have been spread over several years. He should also ascertain that the Divisional Forest Officers and other members of the controlling staff are conversant with their duties, that discipline is maintained and their work is properly supervised. In the case of sales and other matters the Conservator of Forests consults and takes orders of the Chief Conservator of Forests.

Wild Life Wing

The Wild Life Wing of the Forest Department, Himachal Pradesh, came into being only in 1957. The officers of this wing in the district are a Divisional Wild Life Inspector, a Wild Life Forester and four Wild Life Guards, all under the administrative control of the Divisional Forest Officer, Nachar. The headquarters of Divisional Wild Life Inspector and the Wild Life Forester are at Kalpa and Nachar respectively. The Wild Life Guards are posted at Chhitkul, Lippa, Puh and Nachar. There are two

game sanctuaries namely Rakchham-Chhitkul and Lippha-Asrang in the district. The main duties of the Divisional Wild Life Inspector are to supervise his subordinate staff; to bring to book illegal shooting cases; to assist the higher authorities in the development of game sanctuaries and pheasantries and in other technical matters, and, to collect scientific data pertaining to the management of wild life. The chief duties of the Wild Life Forester and Wild Life Guard are to look after the sanctuaries and pheasantries etc., and to detect the poachers. At the higher level the Wild Life Warden is his technical advisor to the head of department.

Fisheries Department

District level officer of the department previously known as the Assistant Warden of Fisheries, was subsequently re-designated as the Fisheries Officer. His headquarters are situated at Sangla where a trout farm has been established. His functions, include adoption of conservancy measures to safeguard the fishery, to issue fishing licenses within his jurisdiction, to check the incidence of illegal fishing, to prosecute the offenders and to propagate fish through cultural practices. Below him are two Field Assistants posted at Sangla. These Field Assistants control the waters within their jurisdiction against the incidents of illegal fishing and take conservancy measures under the guidance of the Fisheries Officer.

Agricultural Department

At the district level the chief among the staff is the Horticultural Officer with headquarters at Sharbo (below Kalpa). His functions are to exercise technical and administrative control over various seed multiplication farms; to hold the supply line to development blocks by arranging distribution of improved fruit plants, improved crop seeds, fertilizers, plant protection equipment, insecticides and fungicides, and improved implements; to distribute improved seeds on subsidized rates; to enforce enactments in connection with agricultural development; to introduce improved agricultural practices; to grant subsidy and loans in connection with horticultural development and for purchase of fertilizers; also to supervise, conduct and carry the findings of research to the fields and *vice versa*; to disseminate knowledge of modern methods of cultivation and to exercise day-to-day control and supervision over the district level organisation concerned with the agriculture activities. In technical matters and in the preparation of periodical returns, he is assisted by an Assistant Horticulturist for research and District Agricultural Officer, Kinnaur for development activities. The Agricultural Inspectors posted in the development blocks are meant to implement the agricultural

programme in the block. On the plant protection side, a Plant Protection Assistant assists the Horticulture Development Officer at district level. The Horticultural Assistant assists him in the horticultural development works. Besides, there is an Assistant Soil Conservation Officer with his headquarters at Puh and an Assistant Botanist (Vegetables) at Kalpa.

Education Department

The Education Department came into existence on October 15, 1948. In April 1949 the office of the District Inspector of Schools, Mahasu, started functioning with two Assistant Inspectors of Schools with their headquarters at Simla. Kinnaur at that time being a part of Mahasu district, had to share the same administration. Schools up to middle standard were under the control of District Inspector of Schools. Subsequent to the creation of Kinnaur district the District Inspector of Schools, Kinnaur, with headquarters at Kalpa, assisted by three Assistant District Inspectors of Schools, with headquarters at Kalpa, Puh and Nachar, started functioning from June, 1960. The schools are under the control of the District Education Officer.

CHAPTER XIV

LOCAL SELF GOVERNMENT

RURAL SELF GOVERNMENT

There are so far no Municipalities, Small Town or Notified Area Committees in the district. The only local government institutions are the panchayats.

Panchayats

Regularly constituted panchayats never existed in Kinnaur. The law courts of the ruler and other competent officers were not within the easy access of the residents. They had, therefore, devised their own method of settling disputes and conflicts whenever they arose. The aggrieved party would invite two or three persons, called *sianas*, of the village, to look into its complaint. The *sianas* would usually assemble in a *santhang* or at any other convenient place where, both, the complainant and the defendant were sent for. The *sianas* afforded opportunity to both the parties of relating their respective cases and thereafter adjudged the truth or otherwise of the complaint. On reaching upon a definite conclusion they would pronounce their verdict which was very seldom challenged. The *sianas* used to be paid by both the contending parties a trifling amount in consideration of the time they spent to adjudicate upon the matter. The common belief was that the *sianas* were mostly honest, impartial and fair in the matter of dispensing justice.

After the integration of the erstwhile states arrangements to organise village panchayats and to equip them with necessary power and authority were made. *The Himachal Pradesh Panchayat Raj Act, 1952* came into force in 1953. As a result, legally constituted panchayats were established in the area during 1954. Only nine *gram* panchayats were constituted to begin with. This number increased to sixteen in 1958 and to twenty-seven in 1962 due to the re-organisation of *gram sabha* circles. Elections to these bodies were held in 1954, 1958 and 1962. The term of office of each *Panch* being three years. The following table depicts the number of panchayats and the tahsil/sub-tahsil in which they are located.

Tahsil or sub-tahsil	Name of <i>gram</i> panchayat	Number of members
Morang	Merang	13
	Thangi	7
	Charang	7
	Rarang	11
	Lippa	13
	Ribba	11
Puh	Puh	11
	Kanam	13
	Giabong	13
Hangrang	Chango	9
	Leo	11
Kalpa	Kalpa	13
	Pangi	11
	Kothi	13
	Pawari	9
	Barang	11
Sangla	Sangla	13
	Kamru	13
	Rakchham	9
	Kilba	13
Nachar	Ramni	11
	Urni	15
	Bhabha	13
	Paunda	13
	Nachar	13
	Rupi	11
	Natpa	11

Organisation and structure—Each *gram sabha*, on the basis of adult franchise, elects from among its members, a President and a Vice-President and an executive committee called the *gram* panchayat. The number of members of the executive committee varies from seven to fifteen in addition to the President and Vice-President. Some seats are reserved for Scheduled Castes and women in each *gram* panchayat though the electorate is joint. During the elections of 1962, as many as 104 Scheduled Castes (82 males and 22 females) and 28 women out of the total membership of 311, were elected, members to various panchayats in the district.

The Presidents wield powers to constitute *samjhauta samitis* under Section 37 B of the *Himachal Pradesh Panchayat Raj Act 1952* for effecting conciliation in petty cases through amicable settlement between the parties. It is only in a few cases that the *samjhauta samitis* fail, and the cases are referred to the *nyaya* panchayats.

Under Section 48 of the *Himachal Pradesh Panchayat Raj Act*, every *gram sabha* also elects on the basis of adult franchise, fifteen adults ordinarily residing within its jurisdiction for the *nyaya* panchayat of that circle. The elected members select under Section 49 of the said Act, from amongst themselves a *Sarpanch* and a *Naib-Sarpanch* of the *nyaya* panchayat. The *Sarpanch* or, in his absence the *Panch* approved by him to act on his behalf, for the trial of each case, suit or proceedings, forms a bench of five *Panches* in the prescribed manner. So far there are as many *nyaya* panchayats as the *gram* panchayats mentioned earlier.

Unlike in other districts of Himachal Pradesh, there neither exist tahsil panchayats nor a *zila parishad*.

A whole time Secretary maintains records of the *gram* panchayat as well as the *nyaya* panchayat. The Secretaries are given intensive training on the subjects connected with their duties. Every *gram* panchayat has also a Chowkidar who is not merely a watchman, but in addition he is the process messenger, and the general factotum.

At the tahsil and district levels, panchayat conferences called panchayat *sammelans*, are held periodically to provide an opportunity to the office bearers to meet and discuss their problems and exchange views. These *sammelans*, further, provide a teaching forum to the office bearers of the *gram* and *nyaya* panchayats through lectures delivered on these occasions by departmental officers on various subjects.

Powers and duties—The compulsory duties of the panchayats are construction, repair, maintenance of public streets, medical relief; sanitation including curative and preventive measures in respect of infectious diseases and epidemics; upkeep, protection and supervision of any building or other property which may belong to the *gram sabha* or which may be transferred to it for management; registration of births, deaths and marriages; removal of encroachments on public streets, public places and property vested in the *gram sabha*; regulation of places for the disposal of the dead bodies of human beings and animals and of other offensive articles; regulation of fairs and markets except those managed by the State Government; establishment and maintenance of primary schools for boys and girls; establishment, management and care of common grazing grounds and land

for the common benefit of the persons residing within the panchayat jurisdiction; construction, repair and maintenance of public wells, tanks and ponds for the supply of water for drinking, washing and bathing purposes; regulation of the construction of new buildings; assisting the development of agriculture, commerce and industry; taking steps to prevent fire and rendering assistance in extinguishing when it occurs as well as protecting life and property at such times; maintenance of such records relating to cattle census, population and other statistics as may be prescribed; maternity and child welfare; allotment of places for storing manure; maintenance and control of waste, water channels and drinking places; managing the panchayat forests according to the rules made in this behalf; maintenance of all those roads, water courses and hydro-electric installations the management of which has been undertaken by the panchayat with the sanction of the government; necessary financial or labour contribution for the construction of public roads, or water courses within the *gram sabha* area under the development programme of the government; filling in of insanitary depressions and levelling of land; and fulfilling any other duty or obligation imposed by any other law on a *gram sabha*.

The discretionary functions include planting and maintaining trees along the public streets and in other public places; improving animal husbandry; organising a village volunteer force for watch and ward, for assisting the *gram* panchayat or *nyaya* panchayat in the discharge of their functions and for the service of summons and notices issued by them; assisting and advising agriculturists in obtaining government loans, in making repayment thereof, in the liquidation of old debts and generally in the establishment of a sound credit system according to law; extension of the *abadi* establishment and maintenance of an *akhara* or a club for physical exercise e. g., wrestling or other place for recreation and games; regulating the collection, removal and disposal of manure and sweepings; prohibiting or regulating the curing, tanning and dyeing of skins and hides within about two hundred metres of the *abadi*; setting up organisations to promote goodwill and social harmony between different communities; dealing with public radio sets and gramophones and other measures of public utility calculated to promote the moral, social and material well-being or convenience of the villagers; construction of food storages; and undertaking any work the expenditure on which is declared by the government, or by the prescribed authority, with the sanction of the government, to be an appropriate charge on the fund of the *gram sabha*.

A *gram* panchayat may make to the proper authority any representation concerning the welfare of the persons residing within its jurisdiction and any recommendation for the appointment, transfer or dismissal of a Guard of the Forest Department, a *Patwari*, a *Lambardar*

290

KINNAUR

or a Chowkidar serving within its jurisdiction. The *gram* panchayat may also make a recommendation for the grant of timber for the construction of a house or for fuel, the grant of a loan or subsidy for economic betterment, the grant of a license for possessing a fire-arm and for shooting, and the grant of a *nautor* land for cultivation, to any applicant residing within its jurisdiction. Besides these, the panchayats are free to take up works designed to promote the development of the villagers. Moreover, the panchayats are the executing agencies of many development works done in their areas. It has been decided that small works like construction of school buildings, water channels, ponds, sources of drinking water etc. should be executed through panchayats and not through contractors. The government has, further, taken the following steps to make these bodies effective:—

1. All heads of departments in the government have been desired to give due weight to the recommendations of panchayats.
2. Supervision in the matter of the distribution of foodgrains has been entrusted to the panchayats.
3. Distribution of timber is made through the panchayats.
4. *Nautor* lands are granted generally on the recommendations of the panchayats.
5. Panchayats are being encouraged to establish panchayat forests and common grazing lands for the benefit of the residents of their areas by giving them necessary land, plants and technical aid.

Financial resources—Financial resources of the panchayats are so far inadequate, because of the poor economic condition of the people. The panchayats cannot, therefore, resort to taxation on any appreciable scale. Only four panchayats have, so far, imposed taxes on birth, transfer of immovable property, and construction of new buildings and house tax. The only source of income of the panchayats at present is grants-in-aid from the government. This amount, on an average comes to Rs. 5,400 per annum, meaning, annual average income of two hundred rupees per panchayat. The government also gives grants-in-aid to meet expenditure on account of pay of Panchayat Secretaries and Chowkidars. The government has also started a scheme, 'creation of remunerative assets' under which the panchayats are given grants by the government for raising orchards. This will provide to the panchayats a regular source of income enabling them to perform the functions assigned to them under the Act.

The yearwise expenditure on the plan as well as the non-plan side is given as under :—

Year	Grant-in-aid Rs.	Expenditure Rs.
Plan		
1962-63	24,600	24,582
1963-64	62,000	61,984
1964-65	60,200	56,344
1965-66	44,245	44,245
1966-67	21,840	21,400
1967-68	34,330	28,180
Non-Plan		
1962-63	64,566	64,658
1963-64	79,200	77,150
1964-65	91,728	91,728
1965-66	26,018	26,018
1966-67	44,867	44,867
1967-68	35,024	35,024
1968-69	43,244	43,244
1969-70	44,112	44,112
1970-71	59,769	57,151

Under the Plan scheme the amount was expended on items like pay of Panchayat Secretaries, grants for the construction of panchayat *ghars*, for the supply of tools to panchayats, grants for raising community orchards, expenditure on training to the functionaries of *gram* panchayats and payment to the staff.

Under the non-plan scheme the amount was spent on pay etc. of eighteen Panchayat Secretaries and twenty-seven Chowkidars. Grants-in-aid were also given to the panchayats.

Special achievements

The panchayats have executed the following development works :—

CHAPTER XV

EDUCATION AND CULTURE

Historical background

There is no evidence to show that there ever existed any regular indigenous system of imparting secular teaching, before the advent of modern education. Here and there, the head of a family might have taught reading and writing (in *Tankri*) to his children at his whim and will whenever he found leisure hours. In some of the villages the Buddhist monks, during winter season, used to teach and preach Buddhist religious education in the precincts of the Buddhist temples to such persons who cared to learn and, thus, they prepared a band of monks and nuns locally known as lamas and *jomos* respectively. The village lama used to be the religious head of a village or in a particular area. Gradually these adventurous pioneers penetrated even the most remote and obscure areas and spread their type of religious education among the people, not only in Kinnaur but also in Lahul and Spiti. The credit for modern education must go to a band of foreigners, namely, a Moravian Mission who started a school at Chini and another at Puh. A padre, Bruske, had opened a school for boys at Puh in 1899. It was closed when the Missionaries left Puh selling their entire property to the Salvation Army for Rs. 9,000. In May 1900, Rev. J.T. Bruske and Mrs. Bruske began work by erecting two small houses at Chini village near Kalpa. In 1900 a school was started there which was pretty regularly attended by twelve boys, all very eager to learn. At present there is no Mission school left in Kinnaur.

The first primary school on regular lines was started at Chini (now Kalpa) perhaps in 1890 and another at Puh in 1899. The school at Chini was upgraded to lower middle standard in 1920, to middle school in 1944 and to high standard in 1952. By 1914 another primary school was started at Kilba. The District Inspector of Schools, Simla generally arranged for regular inspection of these schools. The chief difficulty experienced by the erstwhile state of Bushahr was inadequacy of trained teachers. The state had very largely increased its expenditure on education. Trained teachers from the plains were rather reluctant to come to the hills except on high salaries. To overcome this difficulty several teachers were sent to training colleges and normal schools, at state expense, and matters gradually improved on their return.

Raja Padam Singh of Bushahr took a keen interest in education and established many schools in larger villages of Kinnaur. Apart from

the middle school at Kalpa, primary schools were located at Nachar, Yangpa, Kilba, Morang, Giabong, Hango, Kanam, Sangla and Puh. Urdu was adopted as the medium of instruction in the primary schools. *Tankri* was also taught in some schools. Later on Urdu was replaced by Hindi and, *Tankri* also disappeared. The then existing institutions, except the middle school, were housed in private buildings. Fifty per cent of the teaching staff was trained. Adequate provisions were made for the training of teachers in Junior Vernacular and Bachelor of Teaching courses. The scales of pay sanctioned to the trained and untrained teachers in the erstwhile Bushahr State were much below the Punjab scales but their services were secure and pensionable. The aim of the parents in sending their children to schools was only to prepare them for government service. Enrolment in the schools was not high. Students after passing middle standard used to go to the high school at Rampur. Raja of Bushahr used to grant stipends and scholarships to poor and deserving students of this area for the pursuit of studies. The period after Independence saw rapid expansion in the field of education. At the time of merger of Bushahr State a middle school and nine primary schools were functioning. Thereafter, the Education Department, the Welfare Department, the block agency and some voluntary social organisations vied with each other in opening schools and raising the number of these institutions still further.

At the time of formation of the district there were two high schools, four middle schools and sixty-two primary schools. Besides, there were two co-educational *ashram* schools located at Rogi (Thakkar Bapa Kinner Ashram) and at Leo (Mahatma Gandhi Ashram, Hangrang). The students on their rolls were forty and fifty respectively. A similar institution was started, in 1960, at Natpa (Pandra Bis Kalyan Ashram) with thirteen students. Two more such schools at Shyaso and Mehbar also came into being later. All these schools, to begin with, were run by the Parvatiya Adim Jati Sewak Sangh, but now have been taken over by the Education Department. Boys are taught from first to fifth class and a hostel is attached to each school. Inmates of hostel are provided free board and lodging. They also receive clothes, shoes, beddings, woollen sweaters etc., ex-gratis. Daily time-table for the students is framed, giving due place for the mental, the intellectual, the hygienic and the physical practices. Tailoring craft is taught in Leo and Rogi institutions. In 1965 there existed in all as many as four high schools, ten middle schools, seventy-three primary schools and one pre-primary school as against eight high schools, sixteen middle schools, seventy-nine primary schools and one pre-primary school in 1970. School level examinations, previously conducted by the Punjab University, are conducted by the Himachal Pradesh State Board of School Education, since its inception in 1969-70. This Board also works on the improvement of curriculum, courses of study, text books etc. Recently, (in 1970) Himachal University has been

established replacing Punjab University which upto now had jurisdiction in Himachal Pradesh. All the educational institutions and higher education within Himachal Pradesh have been taken over by the Himachal University.

For encouraging this development of local dialect a school for teaching Kinnauri was started in 1962. Mainly government employees, not belonging to this district, attended the classes which were held three days in a week. This school, however, was closed in 1964.

The standard of literacy and education has been comparatively poor. Census of 1951 recorded as many as 1,599 literates (1,244 males and 355 females) out of the total population of 28,972 persons. Literacy percentage at that time was 5.5 of the total population. According to 1961 census, 5,503 males and 787 females, out of the total population of 40,980 were found literate raising literacy percentage to 15 (26.4 in respect of males and 3.9 in respect of females). The increase in literacy percentage is encouraging though much remains still to be achieved. Literates (without education level) were enumerated as 3,944 persons, including 3,308 males and 636 females; at the primary and junior basic level were to the tune of 1,855 persons (including 1,720 males and 135 females); and at matriculation level and above were 491 persons (including 475 males and 16 females). Out of the total population of 49,673 according to the provisional figures of 1971 census, 13,031 persons (10,819 males and 2,212 females) were counted literates forming a percentage of 26.23 (41.22 for males and 9.44 for females) in the district. Poor and deserving students receive many benefits. Free books are distributed to the students, year after year, up to tenth class. Under the mid-day meal scheme students get mid-day meals during three to four months a year. This scheme is in force since 1960 involving an annual expenditure of Rs. 40,000 to Rs. 42,000 borne jointly by the Departments of Education and Welfare.

As regards education among girls it was at the initiative of Mrs. Bruske that an attempt was made for the first time to impart education to the girls of the area in 1900. But all her efforts to win over the girls and women failed as it was not customary then for girls to learn reading and writing. Now, of course, every school in the district provides for co-education. In order to encourage women education free school uniforms, stipends and scholarships are being given every year. Girl students are provided with free uniforms and free stationery. Hill/backward-area scholarships to the girl students studying outside five miles distance from their homes are awarded.

For adult education the Parvatiya Adim Jati Sewak Sangh started night classes sometime after the Merger. Later on, the Sangh

established primary schools (already described) and also started providing residential facilities to the students near some of the government schools. Development blocks also took up the task of adult literacy in 1960 and did very useful work. Adult literacy work was taken over by the Education Department in 1964 and after that the department opened some adult literacy centres in which about 100 adults, so far, have been made literate.

General education

Each of the seventy-seven villages has at least one school. The primary schools have now been converted into basic primary schools and provided with at least one basic trained teacher as also craft materials, agricultural implements and carpentry tools. Small pieces of land have been attached to each of these school. Efforts are afoot to provide, at least, five bighas of agricultural land to each school. Students are imparted instructions in spinning, gardening, knitting and chalk making. In this district free primary education has been introduced. During the Third Plan period alone nineteen new junior basic primary schools were opened and thirty-nine junior basic teachers were appointed. In all there are seventy-nine primary schools and one pre-primary school. Total number of students in the primary classes being 1229 in 1961 rose to 3,288 in 1965-66 and to 4,000 in 1970-71. Number of pupil at the high school level was 48 in 1961, 91 in 1965 and 280 (200 boys and 80 girls) in 1970-71.

During the Third Plan period a pre-primary school was also opened at Kalpa; free text books were supplied to about 1,000 poor and deserving children in primary classes every year at an estimated cost of one lakh rupees per year; mid-day meals are provided to about 1,500 children in primary classes every year at an estimated expenditure of Rs. 17,500 per year, four school mothers were appointed to look after girl students in primary classes and one Assistant District Inspector of Schools appointed in each block. In view of poor enrolment some of the primary schools have a single teacher. By 1970 there were as many as fifty-five trained graduate teachers, 279 Junior Basic Trained teachers, twenty-three oriental teachers, fifteen senior vernacular teachers, nineteen drawing teachers, five craft teachers and one music teacher.

Facilities for higher, technical and professional education have not yet been provided within the district. However for higher education, beyond the high school standard, there exists a government degree college at Rampur (District Mahasu) the nearest station from the district.

The students of some high, middle and primary schools have not lagged behind in social work compared to their colleagues in the plains.

To inculcate that spirit of the dignity of labour and public welfare students of about six high schools, six middle and two primary schools were led by their teachers to undertake repair of roads, levelling of fields, improvement of drinking water sources etc. In this rugged terrain such physical work is all the more commendable for students of tender age when their studies have not been neglected either.

To implement the scheme of National Physical Efficiency Drive, committees have been formed at the district and the state level. At the district level the committee comprises the Deputy Commissioner as the Chairman and the Assistant District Education Officer, in charge of physical education, as the Secretary, besides, a few other members. The district has been provided with nineteen physical training instructors. A Sports Committee with the Deputy Commissioner as the Chairman and the Assistant District Education Officer, incharge of physical education, as Secretary has been constituted for the encouragement of sports.

No newspaper or magazine or periodical is published within the district. The achievements in all the fields including that of the education, however, is covered by the newspapers published outside the district. There exists no school for the cultivation of fine arts. However, in Lippla, Rispa, and Nesang there are a few traditional painters well-known for their paintings on cloth and paper. Efforts are being made to encourage the local talent to revive the folk and traditional arts.

Libraries

There exists a district library located at Kalpa started in 1961. Housed in the lower flat of the Girls Hostel building, the library has only two rooms. It has lending, referencing and periodical sections, under the charge of a trained Librarian. This library, financed by the Education Department, is under the control of the Deputy Commissioner. It contains seven thousand books which include 2000 English, 4000 Hindi and 1000 children books. Forty periodicals besides newspapers, three in English, one in Hindi and one in Urdu are received regularly. Members have access to the library to study books, periodicals and newspapers. To the Himachal Government employees books are lent free of charge whereas non-Himachal Government employees are required to deposit a refundable security of ten rupees each for borrowing books. Total number of borrowers in 1970 numbered near about 600.

In addition, eighteen *gram* panchayats of Kinnaur district have their own libraries. The books of these libraries were purchased by the Panchayat Department out of the government grant. Some nine panchayats

have still to organise their libraries. From the panchayat libraries, general public as also the office bearers of panchayats are deriving benefits. Efforts are being made to popularise panchayat libraries among the literate persons in the villages and to begin with, as an incentive, library fees have been abolished. Usual registers for stock entry and issue of books have been maintained in all the libraries.

Fourth five year plan scheme

In the Fourth Five Year Plan, an outlay of Rs.10.58 lacs has been tentatively earmarked for educational development programmes in Kinnaur district. This outlay is proposed to be utilised in various sides, as given below:—

Elementary Education	Rs. 7.15 lacs
Secondary Education	Rs. 3.03 lacs
In-service Education of teachers	Rs. 0.02 lacs
Adult Literacy	Rs. 0.15 lacs
Improvement of inspection	Rs. 0.23 lacs
Total:-	Rs. 10.58 lacs

The main programmes will include opening of five primary schools, upgrading of six primary schools to middle schools and three middle schools to high schools; supply of science equipment to primary, middle and secondary schools; literacy for about 1000 adults and appointment of additional Block Education Officers.

CHAPTER XVI

MEDICAL AND PUBLIC HEALTH SERVICES

Survey of public health and medical facilities in early times

The area called Kinnaur up to the beginning of the present century remained steeped in the traditional belief of supernatural and a few traces of it continue to persist even today. The age old use of some indigenous medicinal herbs and plants was prevalent. This had its roots in the local beliefs, climate and taboos. Side by side the people had, as they still have, much faith in their local deities and lamas. They believed in propitiating gods and spirits to get rid of their ailments and diseases. The lamas were consulted and though there were a few *hakims*, yet the bulk of the people pinned their faith in charms and incantations as a cure for various ailments. Some private practitioners, locally known as *habas*, *chobas* and Tibetan lamas, went from village to village to provide medical relief succour to the sick. These private practitioners received their training in Tibet on the *ayurvedic* pattern. Among the private practitioners of the past Dwarka and Khargyudtanzin of village Morang, Rasbir of village Ropa and Nockchebaba of village Thangi were well-known. Dawarka was a renowned qualified *vaidya* from Tibet. He practised *ayurvedic* system of treatment and was a specialist in the use of herbs. A *vaid* capable of performing miraculous feats like replacing the tainted lung of a human being is believed to have lived here. The talent and proficiency of such *vaid*s was duly recognised by their contemporary rulers and the eminent ones were honoured by the grant of fiefs etc. to them. During the pre-Merger period Chervang, Nargu, Choba Chertzin and Chharing Dutt, all residents of village Morang, were mentionable local private medical practitioners.

VITAL STATISTICS

The maintenance of vital statistics on demographic lines, has now been adopted, though not without the possibility of inaccuracy. Future however holds promise and it is expected that through the institution of *gram* panchayats, the element of inaccuracy in the collection of these statistics will gradually disappear. The steady increase in the population is reflected in the following table showing vital statistics from 1961 to 1970 :—

Year	Birth (Registered)			Death (Registered)		
	Persons	Males	Females	Persons	Males	Females
1961	460	245	215	415	209	206
1962	298	148	150	230	134	96
1963	544	297	247	402	189	213
1964	677	306	371	337	178	159
1965	507	274	233	324	161	163
1966	766	385	381	413	221	192
1967	604	327	277	296	152	144
1968	615	337	278	337	178	159
1969	837	454	383	538	273	265
1970	659	338	321	465	245	220

Among the causes of mortality, fever has taken precedence over other specific causes, except those which the reporters were possibly unable to indentify. The succeeding table denotes the causes of mortality :—

Year	Small-pox	Fever	Dysentery and Diarrhoea	Respiratory causes	Injuries and suicides	All other causes	Infant mortality
1661	—	98	120	37	14	97	47
1962	—	72	28	25	5	76	24
1963	—	99	74	43	21	165	21
1964	1	89	64	82	27	74	48
1965	—	86	48	69	15	106	44
1966	—	103	66	34	35	175	86
1967	—	65	83	32	13	79	12
1968	—	53	54	41	21	133	36
1969	—	141	55	33	25	235	52
1970	1	91	45	46	8	231	38

Common diseases

The principal common diseases are dysentery and diarrhoea, hook-worms, flu, respiratory diseases, pneumonia, leprosy, venereal diseases and goitre. The district has remained immune from the scourges of cholera, plague and small-pox, due mainly to the salubrious climate and the high altitudes.

Public hospitals and dispensaries

Allopathic system of medicines and treatment was introduced for the first time, in 1914 with the opening of a civil dispensary at Chini. It is interesting to learn that among the pioneers who undertook medical care in the Chini tahsil were the dedicated personnel of the Salvation Army. The then officer of the Salvation Army at Chini, a qualified chemist with some hospital training who did real hard and useful work there. The erstwhile state of Bushahr contributed its share by constructing

a dispensary building which was to remain the property of the State, but the medical side of it continued to be looked after by the Salvation Army on behalf of the State. The State Forest Department in its turn maintained a Sub-Assistant Surgeon with a dispensary at Kilba to attend primarily to the needs of its staff though occasionally some medical relief was also made available to the villagers round about the area. Apart from these the Moravian Mission also maintained a dispensary at Puh towards which the State granted a small annual contribution of Rs. 100. However, at the time of Merger of erstwhile Bushahr State, only the civil dispensary at Chini and an *ayurvedic* dispensary which had been opened at Sangla in 1944, were in existence. These were primary dispensaries and had no indoor facilities. The subsequent period after the Merger of the State has witnessed a significant development and augmentation, both in respect of the medical institutions and the staff. After the start of five years plans a number of dispensaries and a district hospital have been opened. The medical and public health institutions functioning in the district with their location are described below.

District Hospital, Kalpa—The principal government hospital in the district is at Kalpa. This hospital was upgraded in 1960-61 and has several sections: medical, surgical, orthopaedic, ear, nose and throat, dental, tuberculosis, pathology, radiology and children's. There are forty beds out of which twenty are for women. It is staffed by one District Medical Officer and nine Medical Officers, five Compounders and eight Nurses. The number of patients in the outdoor department in the year 1970 was 26,196 and the number of indoor patients 9,984. These figures are mentioned only to give an idea of the extent of the medical relief provided by this hospital. The total expenditure incurred on medical and public health was to the tune of Rs. 7,45,900 and Rs. 1,72,240 respectively during the year 1969-70. A venereal disease clinic was also started at Kalpa in 1961-62. In 1959 Social Welfare Department opened three leprosy centres. Now these centres have been transferred to the Medical Department; the clinics are under the charge of Leprosy Technicians and domiciliary treatment is given after field surveys. Two venereal disease clinics were opened one each at Kalpa and Puh in August, 1959 by the Social Welfare Department to provide medical facilities. These institutions were transferred to the Medical Department in 1960-61.

Dispensaries

Allopathic—There are four allopathic dispensaries in the district located at Rupi, Puh, Morang and Kilba, each under the charge of a Medical Officer assisted by a Compounder.

Ayurvedic—There are in all twenty-eight *ayurvedic* dispensaries with equal number of *vaid*s. These are located at Nigulsari, Jani, Bhabha, Natpa,

Chhota Kamba, Karchham, Purbani, Shaung, Chhitkul, Rakchham, Ribba, Rarang, Giabong, Leo, Chango, Nesang, Charang, Thangi, Jangi, Lippa, Hango, Barang, Sapni, Sumra, Asrang, Nako, Namgya and Urni.

Medical organisation

The medical organisation is headed by a Civil Surgeon, designated as the District Medical Officer. He is assisted by nine Medical Officers and other subordinate staff. He acts as the Inspecting Officer of all government hospitals and dispensaries, and is responsible for maintaining efficiency and discipline in these institutions. He is also responsible for the public health activities. Besides, there are, two Doctors (gazetted), two Doctors (non-gazetted), one Ward Sister, seven Staff Nurses, five Compounders, three Technicians, one Theatre Assistant, one Nursing Orderly, one Nursing Dai, one Midwife and other administrative staff. At the state level the Director of Health Services is responsible for administering the health services of the entire Pradesh and is responsible to the Secretary Health Department and eventually to the Himachal Pradesh Government with regard to all matters connected with health services.

General practitioners and specialists

There are no private hospitals, and only a few clinics catering for the needs of the outdoor patients are run by some hereditary *vaid*s. The names of Lama Tashi Nargu of village Thangi, Sangya Durje of village Ribba, Chhering Namgyal of village Lippa, Ram Nand of village Morang and Sanam Plazar of village Kalpa are mentionable. The number of private registered practitioners is insignificant.

Research centres and institutions

So far no such centre exists. Health education is, however, imparted occasionally by the Health Educator of the Medical and Public Health Department by occasional visits to the district. The necessity and need for birth control is disseminated to the people, by the District Family Planning Officer and Lady Health Visitors, at the family planning clinics located at Kalpa, Nachar and Kamru; by the Medical Officers, Compounders and Auxiliary Nurses/Midwives at the primary health centres located at Kanam, Nachar and Sangla; and by the Lady Ward and the Midwife at the maternity and child welfare centre at Kalpa. Contraceptives are also distributed to the needy persons by the family planning clinic attached to the district hospital. A family planning board stands constituted at the state level, to discuss proposals and to consider ways and means for popularising family planning. The board comprises non-official as well as official members. Free distribution of milk to expectant mothers and children is effected at all health centres. Three venereal diseases clinics at Kalpa, Kilba and Puh are looked after by one Medical

Officer of venereal diseases, one staff nurse and three venereal diseases Technicians. Besides there are four leprosy clinics at Kalpa, Kilba, Nachar and Puh manned by one Medical Officer leprosy, three Technicians, one Leprosy Compounder, one Leprosy Non-Medical Assistant and one tuberculosis clinic at Kalpa headed by a Medical Officer, a Technician and a Health Visitor all specialists in tuberculosis. A team of experts held an eye camp at Kalpa in September-October, 1960. They operated upon thirty patients and provided treatment to 270 others. All the patients were provided with free treatment and diet.

SANITATION

At places there are separate dry laterines known as *chhakcha* provided, usually, at a corner of the upper storey. The night soil is covered with *kon*, but at times children and even elders relieve themselves in the open. The government through the Departments of Agriculture and Development have constructed a few laterines which are becoming extremely popular with the local populace. Drainage system is absent and heaps of refuse are seen around the houses. A very cold climate in the region refrains the inhabitants from taking a regular bath. Use of soap is not common. Warm clothes are washed with *pu* (nut) locally available and *atal* (soap nut). Upkeep of the springs, the main source, of drinking-water is not hygienic. The daily users become immune to water borne diseases though an outsider would be susceptible.

The gradual dissemination of education and induction of outsiders into the district is having tremendous effect on the outlook of the local people in all matters and spheres. The traditional beliefs and taboos are loosing ground and are being replaced by healthy and modern improved practices.

Administrative set up

The sanitation work is looked after by the District Medical Officer with the assistance of the Medical Officer of Health. In the lower rung are two Sanitary Inspectors with their headquarters at Kalpa and Kanam. The Inspector posted at Kalpa looks after the sanitation of Nachar and Kalpa sub-divisions and the one posted at Kanam carries out the job of sanitation in the Puh sub-division.

The main functions of the Medical and Health Department include the control of communicable diseases, immunisation, implementation of public health laws including the prevention of *the Food Adulteration Act, 1954*, health education, and services at fairs and festivals for sanitation and care of public health.

The problem of drinking water supply is of utmost importance in the hilly and rugged terrains. Here the people have to fetch water on their backs from rather far off places. In snow covered areas, drinking water is difficult to fetch from the open sources, even if such sources happen to be near enough. To overcome this difficulty schemes to provide potable water have been formulated and by the end of the current Plan almost all the 77 villages will have the facility of having water.

Before the formation of Himachal Pradesh the vaccination work in the various princely States was carried out by the special vaccination staff of the Punjab Government. But no statistics to substantiate this statement are available. However, after 1961 necessary records have been maintained and vaccinations carried out from 1961 to 1970 are given in the following statement. *The Vaccination Act, 1880* is in force since July, 1963 under which the vaccination is compulsory. The vaccination establishment comprises a Vaccination Superintendent and nine Vaccinators posted at Kalpa, Nachar, Bhabha, Karchham, Sangla, Purbani, Thangi, Kanam and Puh. The Vaccinators undertake the vaccination work in the interiors and report to the authorities concerned on the detection of any infectious diseases in the villages.

Years	Primary Vaccination			Re-vaccination	
	Total number of persons vaccinated	Total	Successful	Total	Successful
1961	1,926	1,111	895	815	495
1962	2,458	1,175	925	1,283	752
1963	45,367	6,721	5,972	38,646	33,640
1964	39,953	7,418	6,721	32,535	27,484
1965	8,659	2,652	2,420	6,007	4,469
1966	9,397	1,041	923	8,356	4,475
1967	14,181	1,586	NA	12,595	7,224
1968	17,658	3,578	NA	14,080	7,804
1969	11,337	2,566	2,566	8,771	4,874
1970	9,171	1,560	1,408	7,611	3,873

CHAPTER XVII

OTHER SOCIAL SERVICES

LABOUR WELFARE

There being no industry large enough to need and employ labour, no serious labour problems arise. Agricultural labourers are scattered and too negligible, i.e. 984 according to 1961 census. Necessity of special labour welfare activities has, therefore, not been felt so far on any appreciable scale. Whenever extra hands are needed unavoidably to complete certain agricultural operations or house building etc. people resort to traditional system of mutual help without charging any cash wages. Some well-to-do people do employ a few permanent agricultural labourers paid partly in cash and partly in kind on the terms mutually agreed upon. Usual rates of wages are given in Chapter IX of this volume. For construction of roads and buildings and for the execution of certain other developmental works labourers are hired by the government as well as private contractors on purely temporary basis. *The Minimum Wages Act, 1948* and *the Payment of Wages Act, 1936* are in force.

The Labour Inspector Mahasu, Sirmur and Kinnaur, with headquarters at Kasumpti, is responsible for the enforcement of labour laws. The Deputy Commissioner functions as the Commissioner under *the Workmen's Compensation Act, 1923* and the rules framed thereunder with jurisdiction throughout the district. He has also been declared as authority to hear and decide cases under *the Payment of Wages Act, 1936*.

At the headquarters the Labour Commissioner is assisted by the Labour Officer who also functions as (i) Deputy Registrar of Trade Union, (ii) Chief Inspector of Factories, and (iii) Claims Officer under *the Personal Injuries (Emergency Provisions) Act, 1962*. There is no prohibition.

ADVANCEMENT OF BACKWARD CLASSES AND TRIBES

The principal communities of Scheduled Tribe here are, (1) Kanaura, (2) Jad, (3) Lamba, and (4) Khampa. The main Scheduled Castes are (1) Badhi, (2) Chanal, (3) Koli, (4) Lohar, (5) Chamar, (6) Jullaha, (7) Od or Tarkhan and (8) Thathera.

The inhabitants of the district are not in any way inferior. The root cause of their backwardness lies much nearer to the lack of proper opportunity of development owing to which circumstances they have been made to suffer in the past. Therefore this entirely tribal inhabited district receives special and preferential treatment in various economic fields in order to enable the people to raise their standard and to catch up with the other sections of the population of the Pradesh. The administrative and developmental arrangements concerning the welfare of these people have been dealt with elsewhere.

As required under article 275 (1) of the Constitution the Government of India have been giving financial assistance for schemes intended for the welfare of Scheduled Tribes and Scheduled Castes since the inception of the First Five Year Plan. In pursuance of the suggestions made by the Estimates Committee of Parliament in their forty-eighth report on Scheduled Castes and Scheduled Tribes etc. the Central Government have appointed a Central Co-ordinating Committee. The conference of the State Ministers in charge of the backward classes held at New Delhi on 25.10.1960 also recommended the adoption of a suitable machinery by the states to keep a constant watch to ensure that the interests of Scheduled Castes and Scheduled Tribes etc. are properly safeguarded and promoted by the general development sector and the technical departments.

A committee called the Project Implementing Committee has been established at Kalpa which works under the supervision and control of the Himachal Pradesh State Social Welfare Advisory Board at Simla. The latter is financed and supervised by the General Social Welfare Board. This committee runs five centres in villages Brelangi, Kothi, Pangi, Rogi and Kilba. Each centre is run by a team comprising a *Gram Sewika*, a Craft Teacher and a Midwife. The *Gram Sewika*, conducts adult education classes in the evenings, and also manages *balwadis* for the pre-primary children. The Craft Teacher conducts classes in tailoring, sewing and knitting. The Midwife renders assistance in delivery cases and also renders first-aid to the sick in the villages. Mid-day meals are given to the *balwadi* children daily, and a small library has been started for the use of those attending the centres. For all the foregoing works, the Project Implementing Committee incurred an expenditure of Rs. 1,13,612 from September 1963, when it was established, up to January 1966.

The *Khadi* and Village Industries Commission is running centres at Kalpa, Chango, Rarang, Sangla, Tapri and Puh for sale of wool, *khadi* goods and other essential commodities at competitive rates. They also distribute spinning wheels, carding-brushes, bee-hives and oil-*ghanis* at subsidized rates to encourage local artisans.

The Government of Himachal Pradesh have constituted co-ordinating council for welfare work in Himachal Pradesh comprising official and non-official members. Its functions are to ensure that the maximum advantage is given to the backward classes in the general development schemes and that statistics are maintained to determine what part of the programme for the welfare of the backward classes can be and will be taken up from the general sector; to closely co-ordinate the welfare activities of various departments and other non-official agencies like, Parvatiya Adim Jati Sewak Sangh, Harijan Sewak Sangh, Gandhi Smarak Nidhi, Red Cross, State Social Welfare Advisory Board etc. and to consider any other matter which in the opinion of the Chairman is deemed to be conducive to the socio-economic advancement of the under-developed classes in Himachal Pradesh.

The achievements in the field of welfare in the district are indicated in the table given below :—

1961-62 1962-63 1963-64 1964-65 1965-66 Total expenditure during the Third Plan (1961-66)												
Name of Scheme	1	2	3	4	5	6	7	8	9	10	11	12
Education												
(Rupees in lacs)												
1. Pre-matric scholarships		0.100	0.100	0.080	0.1516	0.075	0.5066	0.398	0.145	0.090	0.320	0.460
2. Mid-day meals		0.150	0.150	0.350	0.240	0.215	1.105	0.180	...	...	...	...
3. Aid for books and slates		0.100	0.100	0.1035	0.100	0.075	0.4785	0.105	0.100	...	...	...
4. Cosmopolitan hostels		0.200	0.200	...	0.112	0.075	0.587	...	...	Not available	...	...
5. Teachers quarters		0.670	0.2076	0.1463	0.160	0.2478	1.4317	0.310	0.060	...	...	0.025
6. Technical scholarships		...	...	...	...	...	...	...	0.118	0.060	0.142	0.057
		1.220	0.7576	0.6798	0.7636	0.6878	4.1088	0.993	0.423	0.150	0.462	0.542
Economic uplift												
1. Horticultural development		0.159	0.25	0.214	0.358	0.396	1.377	0.245	0.376	---	...	...
2. Breeding and development of yaks, sheep, <i>pashmina</i> goats and poultry		0.451	0.250	0.270	0.203	0.452	1.626	...	...	...	...	...
3. Minor irrigation		0.561	0.366	0.50	0.844	0.361	2.632	0.329	0.570	---	0.386	0.130
		1.171	0.866	0.984	1.405	1.209	5.635	0.574	0.946	...	0.386	0.130
Miscellaneous												
1. Subsidies given to multi-purpose co-operative societies		0.400	0.346	0.300	0.840	...	1.886	...	...	...	...	...
2. Construction of roads and bridges		0.597	0.406	0.448	0.225	0.48	2.156	0.361	0.488	...	0.422	0.050
3. Drinking water-supply schemes		0.070	0.192	0.12	0.080	0.098	0.56	0.075	0.070	0.040	0.025	0.026
4. Aid to voluntary agencies		0.081	0.100	...	0.070	0.070	0.321	...	...	Not available	...	...
5. Construction and maintenance of inns		0.020	0.1396	0.128	0.089	0.083	0.4596	0.130	0.020	...	...	...
6. Housing subsidies etc. given		...	0.500	0.500	1.227	0.180	2.407	0.875	0.200	0.315	0.228	0.080
7. Purchase of wool		...	1.00	...	...	...	1.00	...	...	---	...	---
8. Construction of <i>ashram</i> schools		0.545	0.500	0.160	0.387	0.180	1.772	...	...	Not available	...	...
9. Establishment of special multi-purpose blocks		...	...	1.196	4.80	5.436	11.432	5.022	4.325	0.350	3.137	NA
		1.713	3.1836	2.852	7.718	6.527	21.9936	6.463	5.103	0.705	3.812	0.156
Grand Total		4.104	4.8072	4.5158	9.8866	8.4238	31.7374	8.030	6.472	0.855	4.660	0.828

CHAPTER XVIII

PUBLIC LIFE AND VOLUNTARY SOCIAL SERVICE ORGANISATIONS

REPRESENTATION OF THE DISTRICT IN THE STATE LEGISLATURE AND THE UNION LEGISLATURE

After the attainment of Independence during the first general elections, in the year 1952, held on the basis of adult franchise, the then Chini tahsil of Mahasu district constituted a single-member constituency of the Himachal Pradesh Legislative Assembly. There was a straight contest between a Congress candidate and an Independent. Out of the total of 12,235 votes, 2,058 valid votes were polled, constituting a percentage of 16.82. The seat was captured by an Independent candidate securing 1,146 votes constituting 55.68 per cent of the total valid votes polled. The Congress candidate polled 912 or 44.32 per cent of the valid votes. The polling, during these first elections, quite a novelty for the people, was fairly satisfactory.

Lok sabha

For the purpose of elections to the House of the People, the districts of Mahasu and Mandi, formed Mahasu Mandi double-member constituency and Kinnaur area did not play any part by itself. Nine persons filed nomination papers, but only seven contested the elections. There were 3,50,437 electors in all. Total number of votes in this double-member constituency stood at 7,00,874 out of which 1,75,377 valid votes constituting 25.02 per cent of the total votes were polled. The contesting candidates belonged to the Congress, the Kisan Mazdoor Praja Parishad, the Scheduled Caste Federation, the Socialist and the Jan Sangh parties besides Independents. The biggest number of votes for both the seats i.e. 47,152 and 41,433 constituting 26.8 and 36.6 per cent respectively of the valid votes polled went in favour of the two candidates sponsored by the Congress Party. The Kisan Mazdoor Praja Parishad, the Independent, the Scheduled Caste Federation, the Socialist and the Jan Sangh candidates polled 19,872, 19,099, 18,988, 16,780 and 12,053 valid votes respectively.

Rajya sabha

Only one seat fell to the share of Himachal Pradesh. The Congress Party put up a candidate who succeeded in securing the seat.

SECOND GENERAL ELECTIONS

Territorial council

A political change took place in 1956 due mainly to the *States Re-organisation Act, 1956*, by virtue of which Himachal Pradesh ceased to be Part 'C' State and was converted into a Union Territory. The State Legislature was terminated and a Territorial Council came into being. The second general elections to the House of the People and the first general elections to the Territorial Council of Himachal Pradesh were conducted during the year ending the 31st December, 1957.

Chini tahsil (now Kinnaur district) had only one constituency, namely, Chini for the purpose of elections to the Territorial Council, in accordance with the *Delimitation of the Council Constituencies (Himachal Pradesh) Order, 1956*. Elections took place on the 25th, 27th, 29th, 31st May and 2nd June, 1957. In this constituency, out of 17,047 votes about 25 per cent or 4216 votes were polled. Six votes were invalid. The Congress, the Jan Sangh and the Scheduled Caste Federation put up a candidate each, besides an Independent to contest the seat which ultimately went to the Congress candidate who secured 1,339 votes. The Independent candidate polled, 1,196, the Jan Sangh candidate 1,048 and Scheduled Caste Federation candidate 633 votes.

Lok sabha

The Union Territory of Himachal Pradesh was delimited for the purpose of elections to the House of the People under the *Delimitation of Parliamentary and Assembly Constituencies Order 1956* and Mahasu district (including the area which is now Kinnaur district) was included in the Mahasu double-member constituency. This constituency consisted of Mahasu and Sirmur districts and Karsog tahsil of Mandi district. Out of two seats, one was reserved for Scheduled Castes. Twelve candidates filed nomination papers but only eight contested the election. There were as many as 3,20,908 electors and 6,41,816 votes, out of which 2,17,844 valid votes were cast constituting a percentage of 33.94 over the total number of votes. Taking into account the vastness of the constituency together with extremity of weather and difficult means of communication the polling was normal. The recognised political parties namely the Congress, the Praja Socialist Party and Scheduled Caste Federation put up their candidates to contest these seats. Besides, four Independent candidates were also in the field. Both the seats were captured by the Congress candidates.

During the currency of the term, a seat in the Mahasu Parliamentary Constituency fell vacant as a result of the foregoing election having been

declared void and, therefore, a bye-election fell due to elect a member to fill the vacancy so caused before the 20th June, 1959. As usual, an election programme was drawn and notified. Three candidates sponsored by the Congress, the Praja Socialist Party and the Communist Party contested the bye-elections. The Election Commission of India introduced the marking system of voting in this bye-election. Election rehearsals were held at various places for educating the people in this new method. The verdict of the voters went in favour of the Congress and its candidate was declared elected. The Communist candidate forfeited his security deposit.

Rajya sabha

The district was represented, alongwith the other districts by two members, namely Shrimati Lila Devi (Congress) and Raja Anand Chand (Swatantra).

THIRD GENERAL ELECTIONS

Territorial council

In April, 1962 were conducted the second general elections to the Territorial Council of Himachal Pradesh. Only one constituency namely the Kinnaur constituency (excluding Rupri and Natpa *patwar* circles in Natpa *kanungo* circle and Nachar and Paunda *patwar* circles in Nachar tahsil) was formed under the *Delimitation of Territorial Council Constituencies (Himachal Pradesh) Order, 1962*. The Election Commission announced that the ballot system of voting would be followed. There was a straight contest between a Congress and an Independent candidate and the seat was captured by the Congress candidate securing 6,196 votes. The Independent candidate secured 776 votes. The percentage of the votes polled on the total number of votes was 37.69. There were only four invalid votes. Out of a total of 18,496 votes only 6,976 votes were polled including four invalid votes.

Himachal Pradesh, starting as a Chief Commissioner's Province, became a Part 'C' State in 1952 with a popular Ministry and an Assembly. As a result of the *States Re-organisation Act, 1956* it was given the status of a Union Territory under the charge of a Lieutenant-Governor. A relentless struggle for the restoration of democracy was waged by the local people during the period October, 1956 to April, 1963. As a result, the *Union Territories Act, 1963* was passed by the Parliament granting a democratic set up to the Pradesh. The year 1963-64, witnessed the return of a Legislature and a Ministry to Himachal Pradesh, after a lapse of about six-and-half years. On July 1, 1963, a three member Cabinet was formed.

Simultaneously, the Territorial Council was converted into the Legislative Assembly for the Pradesh. The Pradesh Assembly comprised forty-three members, forty-one elected and two nominated of whom one nominee was from Kinnaur.

Lok sabha

Polling for the *Lok Sabha* seat was held simultaneously with the polling to the Territorial Council seats. Kinnaur was combined with the Mahasu constituency for the purpose of the election to the *Lok Sabha*, forming a single member constituency. Out of 1,60,883 electors only 66,921 exercised their franchise constituting a percentage of 41 over the total number of votes. Invalid votes counted to 2,253. The Congress won the seat.

Rajya sabha

In the biennial elections to the *Rajya Sabha*, a Congress candidate was declared elected defeating his only rival belonging to the Swatantra Party.

FOURTH GENERAL ELECTIONS

State legislature

Consequent upon the re-organisation of Punjab with effect from 1st November, 1966, the hilly areas of Kangra, Kulu, Lahul and Spiti and Simla districts, were transferred to Himachal Pradesh and the number of constituents to the Himachal Pradesh Assembly was raised from 43 (41 elected and 2 nominated) to 56. The additional 13 sitting members of the Legislative Assembly of Punjab elected to fill a seat in that Assembly from a constituency which on the appointed day by virtue of the provisions of Section 14 of the *Punjab Re-organisation Act, 1966* (No. 31 of 1966) with or without alteration of boundaries ceased to be members of the Legislative Assembly of Punjab and were deemed to have been elected to fill a seat in the Legislative Assembly of Himachal Pradesh. Subsequently the strength was however, raised to 63 (60 elected and three nominated). As a result of this the Lieutenant-Governor, Himachal Pradesh on the recommendations of the Election Commission of India, issued a notification, calling upon all the Assembly constituencies in the Union Territory of Himachal Pradesh to elect members to the Pradesh Assembly.

As per recommendations of the Delimitation Commission the entire district formed part of the Kinnaur Scheduled Tribe Assembly Constituency and election took place on the 27th of April, 1967. As many as 64 polling stations were set up to enable 22,957 electors exercise the right of their

franchise. There was a direct contest between the nominees of the Indian National Congress and the newly formed party known as Himachal Lok Raj Samiti. The important feature of the election here was that separate ballot boxes were used for each contesting candidate and the method of voting by ballot was followed.

In view of the difficult terrain 3rd of May was fixed the last date for the completion of the election. The ballot boxes were brought from all the polling stations to Kalpa. The polling was peaceful and no untoward incident took place. Out of a total electorate of 22,957, 15,360 exercised their right of franchise. Four votes were declared invalid. This gave a percentage of 67 which was by all standards very creditable for such a mountainous and backward area. The successful candidate Shri Thakur Sen Negi polled 13,559 votes as against 1,797 accounted for by his rival. He thus accounted for 88 per cent of the total valid votes cast. The Congress nominee forfeited his security deposit.

Lok sabha

Kinnaur district was tagged with the districts of Mahasu and Kulu for the purpose of election to the *Lok Sabha*. The Assembly constituencies of Kinnaur, Rampur, Rohru, Jubbal, Chaupal, Theog, Kasumpti, Kulu, Inner Seraj and Outer Seraj formed the Mahasu Parliamentary constituency.

While polling in Assembly constituencies of Rampur, Jubbal, Theog, Kasumpti, Kulu, Inner Seraj and Outer Seraj had been completed on the 21st of February, 1967, the polling in the constituencies of Kinnaur, Rohru and Chaupal took place on the 27th and 29th of April, 1967. The date for the completion of the election to the Mahasu Parliamentary constituency was thus fixed for the 3rd of May, 1967. The ballot boxes were brought to Simla and the result completed within the stipulated period. Five candidates, a nominee each of the Indian National Congress, the Praja Socialist Party of India and three Independents contested the election. The following chart will reveal the outcome of the election.

Name of constituency		Total number of electors	Votes polled		
			Valid	Rejected	Total
Mahasu		2,58,163	1,29,221	4,178	1,33,399
Sl. No.	Names of contesting candidate	Party affiliation	Number of votes polled	Name of successful candidate	
1.	Shri Anand Ram Sewal	Independent	5,340	Shri Vir Bhadra Singh	
2.	Shri Nawal Kishore	Independent	24,272		
3.	Shri Mahavir Prashad	Praja Socialist Party	5,360		
4.	Shri Vir Bhadra Singh	Congress	83,782		
5.	Shri Shiv Lal	Independent	10,498		

In the *Rajya Sabha* the district is represented by the members elected from the entire Pradesh.

Mid-term poll to the Lok sabha

Consequent upon the dissolution of the fourth *Lok Sabha* mid-term polls took place in the month of March, 1971 to elect representatives to the new (fifth) *Lok Sabha*. Himachal Pradesh had already witnessed a political change in January, when it was elevated to be the eighteenth state of the Indian Union. Though it fulfilled the long cherished desires of the people, they had to remain contented with a reduced representation, for the member of representatives from Himachal Pradesh in the *Lok Sabha* was curtailed from six to four. Subsequently the constituencies were delimited and Kinnaur formed part of Mandi Parliamentary constituency. Elections could not however, be completed, here till the 20th of May, 1971 due to the area being snow bound. As many as five persons representing the Congress (led by Shri Jagjivan Ram), the Congress (led by Shri Nijlingappa), the Lok Raj Party and two Independents vied for honours, and Shri Vir Bhadra Singh of the Congress (led by Shri Jagjivan Ram) came out triumphant. All the defeated candidates lost their security deposits.

Political parties and organisations

In the first general elections, there was a straight contest between a Congress and an Independent candidate, in which, the Independent candidate, captured the seat of the Legislative Assembly. In the second general elections the Congress, the Jan Sangh, the Scheduled Caste Federation and an Independent candidate contested the elections and the seat for the Territorial Council was won by the Congress. In the third general elections too the Congress defeated the only Independent candidate for the Territorial Council. In the fourth general elections the nominee of the Lok Raj Party accounted for the seat. In all the elections to the *Lok Sabha* the candidates sponsored by the Congress Party were elected. This cannot however be taken for the hold of the party as the district never formed an independent constituency. The Congress Party led by Shri Sanjivayya and the Lok Raj Party have its offices sprinkled over the district. The latter though not an all India Party have of late brought a majority of the people under its fold.

Newspapers

No newspaper is published locally. Among the dailies *the Tribune* commands the largest circulation. A few copies of some other important newspapers and periodicals published in Northern India and particularly New Delhi are also received in the district.

Voluntary social service organisations

Parvatiya Adim Jati Sewak Sangh, Project Implementing Committee, Kasturba Gandhi Smarak Nidhi and Bharat Sewak Samaj are some of the Voluntary Social Service Organisations functioning in the district.

Parvatiya Adim Jati Sewak Sangh

The Sangh aims at the amelioration of the lot of the poor tribal people by adopting various beneficiary schemes suitable to the peculiar condition of the area. The Sangh runs *ashram* schools, which are like residential institutions bearing all the boarding and lodging expenses of students. Of course this facility is extended to a limited number of students who are really needy and but for the extension of this facility by the Sangh, would never have received even primary education. In such institutions day scholars are also allowed and are not charged any tuition fee upto the primary standard. In addition, the pupils are trained in crafts like weaving, spinning, tailoring and carpentry. This training is also of the elementary nature as the students are almost of such age groups that they cannot be saddled with advanced training. The Sangh which functions under the overall supervision of its head office at Salogra in Mahasu district, had been organising and running such *ashram* school-cum-hostels from time to time and even now one such institution at Thopan in Puh sub-division is functioning under the aegis of the Sangh.

Project Implementing Committee, Kalpa

The district branch of the State Social Welfare Advisory Board, Himachal Pradesh, Simla was established as far back as 1963 for this district and was given the nomenclature of Project Implementing Committee, Kalpa. Since then it has established five Welfare Extension Centres at Kothi, Rarang, Pangi, Brelengi and Barang villages. Each centre is manned by a whole time Dai, a *Gram Sewika*, a Craft Teacher and a part-time female helper. Their functions are well-known and comprise organisation of *Balwadis* for the instruction of pre-school-going-age children, female adult education, general medical aid including maternity and allied services, training in handicrafts and embroidery and general education of the people to bring home to them the hazards of drinking, gambling and other vices.

The Deputy Commissioner's wife functions as the Chairman of Project Implementing Committee and this provides enough opportunity to the Deputy Commissioner himself to be in touch with the affairs of the Committee enabling smooth running of the various activities in the district. The details about the grant-in-aid received by the Committee from the

Director Welfare, Himachal Pradesh, Simla and State Social Welfare Advisory Board, Simla are as follows :-

1963-64	Rs. 27,543.21
1964-65	Rs. 47,458.80
1965-66	Rs. 53,608.05
1966-67	Rs. 61,694.55
1967-68	Rs. 72,731.35

Kasturba Gandhi Smarak Nidhi

The Kasturba Gandhi Smarak Nidhi extended its sphere of activities to Kinnaur district during the year 1964-65 when it established a centre at Barang village aimed at the welfare of women and children.

Bharat Sewak Samaj

Three Lok Karya Kshetras were established one each at Nachar Kalpa and Puh during the year 1964-65. The Samaj envisages a ten point programme for the development of agriculture and horticulture, animal husbandry, arts and crafts, primary education, health and sanitation, family planning, co-operation, voluntary labour youth welfare and *nasha bandi*. No tangible results could however, be achieved and of late it has been noticed that the activities of the Samaj are gradually waning.

CHAPTER XIX

PLACES OF INTEREST

Perched in the lap of the high Himalaya, the mountainous, rugged and craggy terrain of Kinnaur has fascination and beauty of its own. Three mountain ranges with many perpetually snow-clad peaks of over 6,100 m cross the area and are in turn cut by the great Satluj river to form in many segments a formidable gorge on its long tortuous route. The lovely valley of Baspa and the weird Hangrang offers endless sites to feed and evoke the adventurous and an aesthetic alike. The temperate climate with cold snowy winters, and cool dry summers is healthy and exhilarating. The upper half of the district is beyond the reach of the often tiresome and enervatingly humid monsoon and has a perfect climate from May to October.

With the much improved all-weather motorable communications, it has become an ideal trippers' paradise. Mountaineers have an endless field for seeking beauty, excitement and adventure, without restraint from high transportation expenses, while trekkers have equally rich scope for enjoying the high passes, alpine flower-strewn meadows, and lush coniferous forests. For the more sedate hiker, attractive bridle paths punctuated by comfortable rest-houses and staging-huts exist throughout. Trout-fishing in the Baspa valley for the angler and a variety of animals and birds for the hunters, whether with gun or camera, such as ibex, snow-leopard, *bharal*, *goral*, musk-deer, black and red bear, and the chukor, snow-partridge, snow-cock, the monal pheasant, to name the important ones, are available. Skiing on the easy Alpine slopes above Kalpa during winter will undoubtedly prove additional attraction in the days to come.

Last but not least, for the sociologist and anthropologist, humanist and theologian, scholar, writer and artist the attractive tribal inhabitants of Kinnaur, where the Hindu and Buddhist cultures meet, set in their picturesque villages, with frescoed monasteries and wood-carved temples, provide an abiding field for study, research and artistic endeavour. Listed below are the villages in alphabetical order noteworthy for visitors as places of interest.

Chango

Chango, a collection of four hamlets in pargana Shuwa, sub-tahsil Hangrang, is situated on the left bank of the Spiti river. It lies in an alluvial plain, or rather on the floor of a valley, down which a stream holds its course and falls into the Lee. It is walled in on every side by

lofty hills, and which in many places bear witness to the former presence of a lake. Large beds of clay and sand, enclosing rolled and water-worn pebbles of every size, occur on all sides, while the flat and level bottom of the vale furnishes a broad tract for cultivation. The area of the village is about 139 hectares having 133 occupied houses and 522 persons. It is at a distance of about fifty-one kilometres from Puh on the Hangrang valley road. Inhabitants work hard in autumn; but during long wintry months of the year they frequently indulge in revelling and dancing.

The founder of this village was one Changla, a lama, in the court of the raja of Tibet. Once, with the raja of Tibet, he came on a pilgrimage to the sacred place of Nachang Lochan and saw the flat piece of land of Chango and was so fascinated that he felt like settling there, but his master, the raja, did not grant his wish. Ultimately they returned. After sometime Changla is said to have been exhorted in a dream that if he settled at the sacred place of Nachang Lochan it would develop into a fertile land and a good habitation. He related his dream to the raja and again asked for his permission, to migrate, which was granted. He came and settled there founding the village and giving it the name Changla, which, with the passage of time, got to be called Chango. The village is within the area of Buddhist influence yet there are some local deities too, namely, Gyalbo, Dabla and Yulsa. These deities do not command much influence which could entitle them the compliment of any sanctuary or temple. Nevertheless, they are venerated and each of them, has a *labdak*. It is served by a post office, a middle school and an *ayurvedic* dispensary.

Chhitkul

Within the Sangla tahsil this is the last and highest village in the enchanting Baspa valley, situated in the upper extremity and on the right bank of the river of that name. It has a population of 326 souls. It is approachable from Karchham through a bridle path along the left bank of Baspa river, distant about forty-five kilometres. A jeepable road has also been constructed along the right bank of the Baspa river, from Karchham to Chhitkul. The name of the local goddess is Mathi having three temples, the main one said to have been constructed, about five hundred years ago, by a resident of Garhwal. The square ark of the goddess, is made of walnut wood and is covered with clothes and surmounted by a tuft of yak tail. Two poles called *bayanga* are inserted into it by means of which it is carried. The goddess has a mouthpiece. Her legend goes that she started from Brindavan and passing through Mathura and Badri Nath reached Tibet. Afterwards she came to Garhwal, and *via* Sirmur reached Sarhan in Bushahr and ultimately reached Barua Khad. Beyond Barua Khad she found the territory divided into seven parts. The deity of Shaung village was Narenas, her nephew. She appointed him to guard the territory.

Then she proceeded to Chasu village. There too she appointed the Narenas of Chasu, her nephew, as a guard. Then she visited Kamru fort where her husband Badri Nath, was a guard of the throne of Bushahr. She further went to Sangla where, her another nephew, Berang Nag, was responsible for safeguarding the Rupin Ghati. Thereafter she proceeded to Batseri village where Badri Nath of Batseri, her husband was responsible for guarding a place named Dhumthan. Thenceonward she arrived at Rakchham where, Shanshares deity, yet another nephew, was appointed as a guard of Dhumthan. Finally she arrived at Chhitkul and settled there permanently assuming the overall responsibility of safeguarding the seven divisions. After her arrival, people had plenty of food; animals had sufficient grass, and the village began to prosper. She has also a *pujares*. In the morning, the *pujares* brings water from the nearby spring and worships the goddess by burning incense while musical instruments are played by Domangs. There is now an *ayurvedic* dispensary and a primary school as also a game sanctuary.

Jangi

The village lies mid-way between Kalpa and Puh in the Puh subdivision. It is about thirty-two kilometres from Kalpa. There is a middle school, an *ayurvedic* dispensary, a veterinary hospital, a post office, and a rest-house. There stands an ancient Buddhist temple.

Kalpa

Kalpa, the district headquarters is situated at a height of 2,759 m above the sea level, on the old Hindustan Tibet Road at a distance of 260 kilometres from Simla and is connected by a motorable road. It has a population of 1,298 persons and was once the favourite haunt of Lord Dalhousie the then Governor-General of India, during his sojourn in the hills. In front of Kalpa is an impressive view of the Raldang Kailas massif, directly across the Satluj. The place is surrounded by vineyards which are protected from the ravages of bears by large sheep dogs especially trained for the purpose. There is a post office, a high school, a civil hospital, a police station, a veterinary hospital, a seed multiplication farm, a forest rest-house, a library and a temple dedicated to Narenas.

Kamru (Mone)

Kamru (Mone), as it is called by the local inhabitants, is a big and fertile village built on a rock in pargana outer Tukpa, tahsil Sangla. This village can be approached by a jeepable road branching off the National Highway No. 22 near the Karchham bridge over Satluj. It lies at a distance of about seventeen kilometres from Karchham and about 248 kilometres from Simla in the famous Baspa valley. The total area

of the village is 489 hectares with 171 households and 174 occupied houses with a population of 1,085 souls. In the centre of the village stands a single storeyed temple dedicated to Badri Nath. The main attraction in this place is a five storeyed old fort resting on a platform. It is situated on the protuberance of a hill just above the village and has a commanding situation. It is a lofty square structure built of dressed stones bound at small intervals with wooden-rafters. The enthronement ceremony of the rulers of erstwhile Bushahr State used to be performed in this fort. In a room in the second storey is housed an idol of Kamrakh or Kamakhya Devi. There is also a small house near the fort, in which prisoners sentenced to imprisonment for life used to be interned. Inside the house there is said to have been a deep well inside which the prisoners used to be lowered with a rope. They lived in that dark well. Food for them was likewise lowered in a basket attached to a rope. There is a panchayat *ghar*, a post office, a primary school, a *patwar khana* and a *zira* and saffron research station. ¹There is another temple devoted to Bhimakali at Kamru. A jagir is also attached to the temple. The following traditions are associated with the Bhimakali at Kamru. ²Many centuries ago, so runs the legend, the Baspa valley was invaded by an army from Tibet, before which the local ruler and his followers fled for refuge to the Kamru fort. The enemy pitched their camp upon the hill slopes which overlook the fortress, and from there sent emissaries in all directions to bribe the neighbouring chieftains to fight against their overlord. One of these envoys found his way to Chini, then capital of a semi-independent Thakur, whom the raja of Bushahr had lately reduced to vassalage. Uncertain of his loyalty, the raja had already sent him a warning that if he helped his country's enemies he would be considered a *darohi* and would have to pay the penalty.

The Thakur of Chini chose to ignore the warning and joined hands with the Tibetan hordes. Another of the raja's subjects, a low bred-tailor, living in a village close to the fort, also played the traitor and sold the secret information relating to the structure of the citadel to the enemy. He told the invaders about the existence of a central beam which if dislodged would bring the fort down with it in a mass of ruins. For the remainder of the siege therefore the Tibetans directed all their efforts towards the destruction of the fort. But each time the goddess Kali turned their missiles ineffective, so that at length disheartened by the supernatural forces ranged against them, as also fearful of the coming winter they raised the siege and left the raja free to wreck his vengeance on his treacherous subjects. He again reduced the Chini Thakur to vassalage, and as a

1. *The Punjab State Gazetteer*, Vol. VIII, Simla Hill States, 1910, p. 28

2. Rose, H. A., *A Glossary of the Tribes and Castes of the Punjab and North-west Frontier*, Vol. 1, 1919, pp. 482-85

general warning to traitors ordered that a man of Chini should henceforth present himself at Kamru on every triennial celebration held there in honour of the goddess Kali. On this occasion sacrifices were offered on a liberal scale, the sacred fire was burnt for several days and the peasants from the neighbouring villages assembled with their family gods. Moreover, a representative from Chini, called the Chinchhang attended the festival, alongwith a man from an adjacent village, who by ancient right acted as his escort. During the eight days of the celebration, the Chinchhang was freely supplied with liquor, so that on the final day he was in a state of almost complete insensibility. Rusty armour was put upon his body and a helmet on his head, and thus attired he was made to dance first round the building and then inside the courtyard of the fort, to amuse the assembly of villagers. Further he was accompanied in this dancing by a descendant of the tailor who had divulged a state secret to the enemy, as stated earlier. Formerly, before the actual commencement of the dance the priest used to sprinkle holy water on their heads. This process was employed to produce a shiver which would signify the acceptance of the sacrificial victim by the deity. The quivering according to popular belief denotes the actual entry of the deity into the body, and it is the divine spirit and not the water. The significance of the ritual is unique; and there could be little doubt that the triennial festivals at Kamru were formerly associated with human sacrifice. A superstitious belief prevailed for quite sometime that the actor in the drama would die within a year but lost its ground after sometime when change in the ceremonial was made many years ago. Up to that time, though the actual sacrifice had been abolished, the water was still poured on the Chinchhang's head. The Chini villagers, from amongst whom the representative was chosen by lots, objected to this dedication at the shrine of Kali, and their apprehensions were partially allayed when the practice of pouring water on the head was replaced by pouring on the hands. Still during the Chinchhang's absence at Kamru, his family continued in a state of mourning, consoled only by the hope that the lamps they keep burning day and night inside the house will win the mercy of Narain, the village deity.

Another legend associated with the Bhimakali of Kamru also speaks of human sacrifice. The deity in her form of Parvati, the mountain goddess is propitiated and held in high esteem by the prince and peasant alike. To win her favour and placate her wrath, the people leave nothing untried and no sacrifice is considered great. As much, some significant ceremonies were performed, whenever the raja paid a visit to Kamru. He was carried in a palanquin, preceded by musicians and state officials, and escorted by his subjects. As the procession drew near the ridge whence Kali's home burst on the vision, a halt was called. While still sheltered from her eyes and those of her sentinels the raja descended

from his palanquin, doffed robes, ornaments and head-dress, instead, to enable the *mathes* of Sapni, a village nearby, attired himself in raja's dress, while the raja donned inconspicuous garments of grey. A priest waved a vessel of holy water round his head and then poured its contents over the *mathes* head. Then the latter was born in the royal palanquin, and treated like the raja, who himself walked in the crowd until the procession entered the fort. He then resumed his dignities, but the robes and ornaments worn by the *mathes* became his perquisite. He (*mathes*) was then sacrificed within the fort, and his acquisitions fell to his heirs. He was called the *raja-ki bali*.

On one occasion when the heir-apparent visited Kamru, the old rites were all observed, but the water was poured on the hands of *mathes*, instead of on his head; and the man who then took the part declared that he was the first of his family to survive the ordeal by a year. As late as the middle of the last century no act of state was performed without the approval of Bhimakali, who was regarded as the ruler of the land, she having granted the regency to the raja's ancestor six score generations ago, just as she had conferred the hereditary priesthood to the senior branch of his family.

Kanam

It is a village in tahsil Puh with a population of 764 at an elevation of 2,699 m above the mean sea level, on the declivity of a recess embosomed in lofty mountains, and near a feeder the Satluj, which flows past at a distance of about two kilometres. It falls just below the old Hindustan Tibet Road at a distance of about fifty-one kilometres from Kalpa and can be approached by a jeep or by bus from the National Highway No. 22. The first settler in this village is believed to have been a person from Loktus family hailing from Tikkar Garh in pargana Nawar, tahsil Rohru of Mahasu district. While cultivating the land he found a stone on which was carved a letter "ཀ", which he took home taking it to be a deity. Subsequently a lama from Tibet visited his house to whom he showed the stone with the carving. The lama explained to him that in Tibetan language the word "ཀ" denoted an order by God or the raja. It was after this stone that the place was christened as Kanam. The sloping surface of the land is formed into terraces by means of rough and massive embankments of stone, and cultivated, those narrower forming the sites of houses rising, sometimes, above each other in such a manner, that the flat roofs of those beneath are platforms in front of the upper. Interspersed through the straggling collection of dwellings, are fine groves of poplar; and flourishing orchards of peach, apple, apricot, and walnut trees. This prosperity results from the judicious employment of irrigation, the means of which are supplied from the torrent flowing down

the valley, as the great aridity of the climate otherwise precludes vegetation. Here is a celebrated Buddhist temple, provided with a library of books, printed in the Tibetan language; one of these is an encyclopaedia, in 225 volumes; another a system of theology, in 100 volumes. The encyclopaedia has been described by Jacquemont, a traveller, as a translation from the Sanskrit. The printing is distinct, and done with wooden types. Another temple dedicated to a local god known as Dabla exists here. There is a post office, a rest-house and a high school.

Kilba

Kilba is a village in pargana Rajgram, tahsil Sangla, on the left bank of the Satluj. The villagers have got their lands, a few kilometres up the hill. The scenery all-round is very picturesque. There is a middle school, a progeny orchard, a dispensary run by the Forest Department with a venereal disease sub-clinic and a veterinary hospital. In earlier times, it is believed, an old temple existed in this village which was dedicated to a local deity, named, Kilbalu. It is after the name of this deity that the village was named as Kilba. The deity now does not seem to be commanding any prominent propitiation.

The principal local deity is Narenas which has as usual, an ark with twenty masks. One of these masks is made in brass, another in eight metals and the remaining are made of silver. Head of one of the masks is made in gold. In the space between the two front masks locally called *thum-mukhangs* has been set a small sheet of gold. The offerings laid before the deity include *pole*, *porsad*, coconut and *shudung*. People also offer cash according to their vow, will and capacity. At the time of each harvest every household is under obligation to contribute three *kods* of grains to the temple. This levy is locally called *kutang*. Animals are not sacrificed. Worship is offered to the deity twice daily. The evening worship is concluded by the blowing of a conch but in the morning the worship is attended upon only by the local instruments sounded by the musicians. *Belang* is offered by the local musicians before dawn and at night.

The duty of the mouthpiece is to speak on behalf of the deity whenever he is supposed to be seized by the supernatural spirit or invoked by the people or even otherwise. Before passing his decrees on problems put up before him, when he is in a frenzied stage, he narrates what is called a *chironing*, briefly explaining the emergence and exploits of the deity on behalf of whom he speaks.

Kothi

Kothi also called Koshtampi, is an ancient large village in tahsil Kalpa, a little below Kalpa proper. The village is environed by the

fields and fruit trees punctuated by vineyards. It is overshadowed by the Kinner Kailas peak which forms a magnificent backdrop. The village with its attractive temple, tanks and gracious willows makes an altogether lonely landscape.

Its area is 206 hectares with 133 occupied houses sheltering 1,294 persons. There is a primary school and a post office. It is said that in the ancient times this area was under the rule of Thakurs who were subsequently subjugated by what is now known as Chandika of Koshtampi. The Thakurs had their residence in this village which was called Kothi. After the name of the royal residence, Kothi, the village was christened.

A handsome temple dedicated to the goddess Chandika, more especially designated as Shuwang Chandika, after the name of pargana Shuwa, has spread the fame of village Kothi in greater part of the district. The local people hold the goddess in great reverence and consider her to be one of the most powerful goddesses. For want of social contact by the local people with their more advanced and brahmin-ridden brethren they have evolved their own peculiar procedure of ritual and worship to this presiding deity. There is an image of gold, seated in an ark. It is danced up and down by four persons at the time of worship. There is yet another ancient temple dedicated to Bhairon, but is now lying neglected.

Leo

Leo is the headquarters of sub-tahsil Hangrang in Puh sub-division, and is situated at a distance of about thirty-two kilometres from Puh on a small rocky eminence, amidst an alluvial expanse of moderate extent, on the right bank of the Spiti river, and at the confluence of the Lipak, torrent flowing from the west. At the east of it is an insulated rock once surmounted by a fort, now in ruins considerable. It occupies a slip of soil embosomed by sterile masses of earth glowing under the ardour of a tropical sun. From such a situation the climate has acquired a delicious softness. To its north is an extensive well-cultivated plain, with apricot trees. The total area of the village is 40 hectares with 78 occupied houses. It has a population of 350 persons. About the origin of the name of Leo there is a legend current among the local people. The place where the village exists was once a beautiful lake. Laffan Rimbochhe, considered by the local people as an incarnation, came there and drained the water of the lake. Thus a chunk of land appeared. After sometime Laffan Rimbochhe went away leaving behind a bronze plate. Bronze in the local dialect is called *li*. To perpetuate the memory of Laffan Rimbochhe the place was named as '*li*' which in the course of time corrupted to Leo. There is a post office, a police post, a middle school, an *ayurvedic* dispensary, a veterinary hospital, an experimental seed multiplication farm, and a temple to Jamato.

Lippa

This is a populous village in Puh sub-division, at an elevation of about 2,438 m above the sea and is situated in a sheltered recess of a dell, near the left bank of the Taiti, a considerable stream, which, about six kilometres below, falls into the Satluj. This village is approachable from Kalpa by the old Hindustan Tibet Road up to about six kilometres beyond Jangi, from where a jeepable road bifurcates and leads to this village distant about eight kilometres. The grass of this village is said to be very nourishing to cattle and horses. Ibex are said to be found in the nearby forest. There is a game sanctuary. A post office, an *ayurvedic* dispensary and a primary school exist here. The total area of this village is 267 hectares with 130 occupied houses and 762 inhabitants. There are three Buddhist temples dedicated to Galdang Chhoikar, Dunguir and Kangyur. Apart from the Buddhist temples there is yet another old sanctuary dedicated to Tangtashu, a local deity. About seven or eight years back animal sacrifice was prevalent in this temple, when at the instance of a lama the animal sacrifice was abandoned and the local deity taken within the fold of Buddhism. Instead of animal sacrifice now *porsad*, *rote* and *rakh* are offered.

Morang

Morang also called Ginam is the largest village in the inner Tukpa pargana, tahsil Morang. It is situated above the left bank of the Satluj, at some distance from the confluence of the Tirung. The situation is fine, and the approach to it highly picturesque, leading along the bank of a *kuhl*, and through an avenue of apricot trees. Its elevation above sea is about 2,591 m. The total area, according to the 1961 census is 211 hectares with 187 occupied houses and 1,071 souls. It is at a distance of about 262 kilometres from Simla. The dell is encircled by lofty mountains on every side, except westward open to the Satluj, on the bank of which there is an old fort believed to be built by Pandavas. The fort has a square structure situated on a knoll overlooking the Satluj. Its main gate is approachable by a detached ladder. It has a flat roof. There is a high school and a primary school, a post office, a police station, a veterinary dispensary and a civil dispensary. The local deity is Urmig. There are three structures dedicated to this deity each existing at Thwaring, Gramang and Shilling. Generally these structures are empty except for the *kro* of the deity. The ark of the deity remains in the fort. Whenever there is some sacred or auspicious day the ark is taken to the above named places. The ark contains eighteen *mukha* made of silver, a little gold and brass. It is explained here that the eighteen *mukha* represent the eighteen days of the great epic of *Mahabharata*. In the past animals

were sacrificed to the god but for the last fifteen or twenty years this custom has gone into disuse and the god is now propitiated with *porsad*, *shudung*, *pole* etc. The deity has a priest who performs puja once daily in the morning while *konnal*, *ronshheng* and bells are sounded. The deity has a mouthpiece who utters *chironing*. The legend of the deity is that it was once in flesh and blood. At that time Dharam Chand was the Thakur of Morang area whose jurisdiction extended north-east up to Tibet. Once there was a boundary dispute between the Tibetans and the people of Morang. Dharam Chand, Urmig and a person from Pawari went in a delegation to the disputed site where they were met by a delegation from Tibet. After discussions they decided to fix the boundary at a place estimated to be about one kilometre towards Morang from Zamesari village. The spot which was fixed as boundary was marked by a long stone slab set in the ground. Since Dharam Chand was instrumental in bringing about this agreement the place was named as Dharam Chand. Generally people going to Tibet halt at this stage of journey from Jongchin to Dharam Chand for the night. The distance between the two places is about sixteen kilometres. It is said that after sometime a dispute arose between Urmig and Dharam Chand in which Dharam Chand was killed and Urmig established his rule. Uptil recently a fair called *shang* puja used to be held in the month of *Vaisakha* in which a procession headed by the deity and followed by a bier of the said Thakur used to be taken around the village to mark the memory of the victory of Urmig over Dharam Chand. This fair is no longer in vogue. There is still a family regarded as the descendent of Urmig.

Nachar

Nachar, a village in pargana Athara Bis of tahsil Nachar, is situated between Taranda and Wangtu. It lies on the northern declivity of a mountain sloping down to the left bank of the Satluj river. Its elevation above the sea is about 2,111 m. It falls at a distance of about 208 kilometres from Simla on the old Hindustan Tibet Road and about five kilometres above Wangtu. It is now the headquarters of a sub-division and also a tahsil of the same name. Many new buildings for official and residential purposes have either been constructed recently or are under construction. The scenery all about is very beautiful. The climate is noted for its mildness. The area of the village is 329 hectares with 218 occupied houses containing 221 households and 1,316 people. A beautiful forest rest-house in the midst of an orchard exists here. There is a post-office, a high school, a civil dispensary, a police station, a progeny orchard and a veterinary hospital. In the thick forests and rocky glens from this place downwards goral and thar antelopes abound in. Black and red bears are also met with, the latter inhabiting the higher and colder portions of the

range. The red bear is abundant on the heights above Nachar. Here they are both said to attack and kill sheep and goats, and they are often such a nuisance that the local people vie with each other to kill them. The village deity is goddess Ukha. Within the hamlet of Nakayang or Nanganio stands a temple dedicated to goddess Ukha. In all, there are four prominent structures. A main gate leads to the temple area. The gate is quite large with a wooden door mounted by a plate of brass containing many pictures depicting various deities. The brass plate is said to have been wrought by local Domangs. Some words have also been engraved on it in *Tankri*, Urdu and Hindi. After entering the main gate a single storeyed structure to the left is called *khazana*. It is covered with a slanting roof of slates. Some wood carvings have been done on the wood work of the buildings. The building is meant to house the valuable belongings including masks when removed from the ark of the deity.

Adjacent to the *khazana* building is another single storeyed structure with a closed verandah in front and a single cell behind it. It is called *deoring*. It too has a slanting slated roof. The masks of the deity set on the ark as also the pieces of coloured cloth meant to decorate the ark are kept in *deoring*. Just below the *deoring* stands a lofty structure called *shu kothi*. It has five storeys, four of which comprise a single roof while the last has two rooms. On three sides of the last storey runs a *togang* (balcony). The building has a shingled roof. A few pairs of horns of *bharal* and ibex have been nailed here and there on the walls of the building by way of decoration.

The first storey is used for storing firewood and utensils belonging to the deity. The second storey serves as a kitchen and living room of a chowkidar. The third empty storey, locally known as *satpanthang* serves as a sitting place for the Brahmans whenever they happen to visit the temple to perform certain religious ceremonies. They usually come from Rawin in Rampur tahsil. The fourth flat is the abode of a deity named Chalangs, represented by a brass idol and a spouted lotah. Here worship is offered to Chalangs on certain occasions determined by Ukha Devi. On such occasions villagers assemble and after offering worship take their food here. In one of the rooms are housed plates of bell-metal belonging to the goddess. It is customary to use these plates of bell-metal for taking food when the gathering is quite large. As a rule none except the *bhandari* is eligible to enter this room to fetch plates. Even the *bhandari* is under a traditional taboo not to look inside the room while bringing out the plates. This condition was perhaps imposed on the *bhandari* to discourage him from disclosing the contents of the room.

Ukha or Usha Devi does not fall as a goddess among the Shakti cult. Usha means early morning and for that reason its idols have been moulded in benevolent and benign expression-adorned in glittering gold signifying the resplendent glory of the early morning. There are, however, a number of legends associated with Usha who in a number of Puranic legends is the generic name of the heavenly damsel (Apsara) in the court of king Indra. This heavenly damsel is supposed to be endowed with super charm and grace. Her celestial beauty has been considered to be over-powering that sages and ascetics have fallen victim to her charms through ages.

The story goes that there lived a sage called Ahan even the Sun did not shine in the skies. This sage worshipped Brahma for a million years and was so blessed that he acquired the mystic power to create anything out of dust. Indra became apprehensive lest his throne may be lost to him if Ahan continued with such unabated worship of the all powerful Brahma. In order therefore to distract Ahan from his meditation he commissioned the beautiful Usha's services to descend to the earth. Ahan with the blessings of the Brahma created the Sun so that when Usha descended upon the earth she was immediately vanished by the powerful light of the Sun. Indra undeterred and undaunted in his evil designs continued sending Usha after Usha. Thus ever since Usha, (the early morning) comes to the earth and vanishes with the rising of the Sun.

Having failed to break the supreme soul of Ahan, Indra then decided upon to exploit the weaker sentimental side of Ahan. This weaker side called the desire or the animal instinct was separated from the saintly side of Ahan and was called Vahan i.e. the chariot of Asur, the desire in Ahan further called Banasur. This part of the sage taking shape in the form of a man as Vahanasur (later called Banasur) eventually married the women in Ukha or Usha.

This high-flown tale of gods, sages, heavenly damsels, kings and queens cannot give a satisfactory explanation as to why Ukha Devi should be worshipped and not Banasur. What is more puzzling is the belief that human heads were sacrificed at her altar.

According to yet another legend, which is not very current Banasur the successful king one day realized the reality of his being; Ahan, the sage, his real self, was practising asceticism somewhere in the Himalayas. Ushas of the court of Indra were trying to knock him off his saintly path, preventing him from attaining godhood. The queen Ukha was the spirit in flesh or the obedient damsel. In righteous indignation, Banasur may have chopped his own head in front of his queen Ukha and allowed a temple to be raised in her name and thereby

allowed her to attain the status of a goddess. He debarred himself from becoming a god by the sheer act of committing suicide, even though he was the first martyr at the altar of Ukha Devi. Only thus can be explained the fact that Ukha Devi and not her husband Banasur is worshipped in this area. The deity has, as usual, a mouthpiece, who when goes into trance utters *chironing* giving an outlandish tale of the goddess Ukha Devi.

Nako

Nako in the Hangrang valley is one of the largest villages of the area. It lies about two kilometres above the Hangrang valley road at a distance of about thirty-two kilometres from Puh, on the western declivity of the huge mountain of Pargial. Its elevation above the sea level is about 3,662 m. It is a collection of small huts, built partly of stone, partly of unbaked bricks and covered with roofs of mud overspreading a platform made of the trunks of junipers. People pile their firewood on the roofs which give a furzy look to the whole habitation. This is perhaps, the highest village in whole of the Hangrang valley. Nevertheless, there are produced the most luxuriant crops of barley, wheat, *phapra* and turnips. Beans with black seed, locally called *nagduba*, are also cultivated, and though very small, ripen perfectly. The fields are supported and partitioned by dykes of granite. In consequence of the extraordinary aridity of the atmosphere, the crops are produced by means of water flowing from the masses of ice and snow above. In the village is a small lake formed out of the masses of ice and snow above. The lake is fringed with willows and poplars. Generally, furze is used for firewood and the scarcity of this too adds to the privations to be endured in a climate so inclement. Yaks, kine, horses and asses are reared here in abundance. The area of the village is about 85 hectares with 71 occupied houses having 341 people. About the origin of its name, it is said that one, Nab, in the employ of a raja of Tibet, once on a pleasure trip, came to this place and was fascinated to see the site, plain and cultivable. He decided to settle here and name the place Khampa Nab which, in due course of time, got to be called Nako.

One of the village deities is Deodum which previously accepted animal sacrifices but for the last about eight or nine years no animal sacrifice is being offered. Another temple known as *lagang* exists in the village and contains several idols. Also there are two structures called Dumgyur housing prayer wheels. The *lagang* belongs to the village as a whole whereas the Dumgyur have been erected by the members of Kharba family. Julahu or Chamang and Jo or Domang are not allowed to enter either the *lagang* or the Dumgyur. Whenever they want to revolve the Dumgyur a long rope is tied with the other end of the rope attached to the

praying wheel, reaching the door where the Chamangs and Domangs can sit and pull it to move the prayer wheel. Here worship is performed twice daily by a local lama by lighting a lamp of oil or ghee. Hymns from sacred books are recited and musical instruments like *bugjal* etc. are sounded. Water is also offered in seven cups every night. For a visitor to stay there is a staging hut. Facility of an *ayurvedic* dispensary and a post office is available.

Namgya

Namgya is a small village with a population of 438 in pargana Shua, tahsil Puh. It is situated on the left bank of the Satluj river about two kilometres above the confluence of the Spiti river with the celebrated Satluj. It is between 183 m and 213 m above the bed of the Satluj and, at an elevation of about 3,048 m above the sea level. It is surrounded by frightful barrenness and desolation, though close to the habitation on the opposite bank of a rivulet, can be seen fields of barley, buckwheat, turnips and a few vines and apricots. The inhabitants are once who were known Niams or Jads and now prefer to be called Kanauras and speak a dialect akin to Tibetan. Apart from a Buddhist temple called *lagang*, the local residents venerate four local godlings, namely, Chola, Bushahru, Dabla and Kuldeo Narain. Among them Dabla enjoys a senior position, others are regarded his subordinates. The deities neither have any temple nor a shelter. Near the Public Works Department rest-house stands a poplar tree regarded to be the common abode of these supernatural beings. They are occasionally appeased by offering animal sacrifice but this practice is loosing ground gradually. Each of them has a separate *labdak* (mouthpiece). As for modern convenience there is a post office, a rest-house, an *ayurvedic* dispensary and a primary school.

Nesang

Nesang, a comparatively small village with a population of 257, is situated on the other side of Kanam across the Satluj. It falls at a distance of about nineteen kilometres from the Morang tahsil headquarters. The total area of the village is 94 hectares with forty-five occupied houses. The village lies at the northern base of the Tungrug pass, the downward foot path from which it passes through thick growth of juniper and thyme. The soil and the climate are sufficiently genial to bring to maturity esculent vegetables and small fruit, such as gooseberries, though it has an elevation of about 3,098 m above the sea. There is a post office and a primary school. It is famous for its locally distilled spirit commonly called Nesang brandy manufactured from barley. The peculiarity lies in the barley gram locally. Barley gram elsewhere will not produce this kind of brandy for which Nesang is famous.

The local deity is Shang-che-kyung. A building, called *Laikhamba*, stands dedicated to the deity the symbol of which is known as *kro* and to which worship is offered on special occasions. Animals are also sacrificed. The deity had a mouthpiece who died some years back and since then deity had not chosen a new mouthpiece. The mouthpiece as usual gets possessed of the spirit of the deity and utters, among other things, *chiral* akin to *chironing* or *chiran* in other parts of the district.

Puh

Puh or Spuwa as it is locally pronounced, is a village in pargana Shua, tahsil Puh. It is now the headquarters of a sub-division and tahsil of the same name. It is situated above the National Highway No. 22 at a distance of about seventy-eight kilometres from Kalpa by a motorable road. There are in all 202 households with a population of 723 souls. From here a bridle path leads to Hango. The place is remarkable for the contrast which its green fields, vineyards, and apricot groves form with the barren cliffs. There is a post office, a high school, two Public Works Department rest-houses, a civil dispensary, a police station and a veterinary hospital. The local deity is Dabla. Dabla does not have any dwelling nor does it possess an ark. The only manifestation of the deity is a small pole with a small idol set on its upper end adorned with yak tail hair and long pieces of coloured cloth; the whole being called *fobrang*. This symbol of the deity is, on occasions brought to the *santhang*.

The local lore avers that this deity, to begin with, appeared in the guise of an unusually enormous lammergeyer. The huge bird set in village Puh with one of its wings touching Siapishupa, another touching Malingpa, the tail touching Yaling and the head touching Chabagid. All these four points are a few kilometres apart from each other and are, according to the people, still marked by trees of *cedrus deodara*. Lammergeyer, enormous as it was, covered the entire area of village Puh. At Chabagid still exists a small hut in which, it is believed, a bone of the huge lammergeyer had been preserved until recently when some mischievous boy removed the same and, as a consequence, it is felt that the power of the deity has lost its potency. The tale of this deity, it is said, is written in a *pothee* possessed by a resident of Puh village. It is in the form of a song which is recited by a lama in the month of *Kartika*. Previously there was a mouthpiece of the deity, but there is none now for the last about twenty years. A gist of the *chironing*, as is known to the local people, is given here.

At first when the deity came from the plains of India it was customary in Puh to sacrifice an ox of three years and also a child aged eight years at a place named Shirgin. But later he abjured the child sacrifice and accepted a sheep or goat etc. to be offered to appease him. The ox sacrifice was also to be replaced by offering milk equal to the quantity yielded in five times by all the milch-cows in the village. He further decreed that milk so collected be turned into cheese, butter and butter-milk and a handful of butter be given to every such person who had been blessed with a son during the year preceding the occasion of collection. Also a leg of a goat or sheep slaughtered on the occasion was ordered to be given to these blessed persons. By awarding these gifts each one of those persons was to be reminded that the deity had saved his son from the heinous sacrifice previously prevalent in the village. The deity further ordained four festivals to be held at Shuktu, Shirgin, Losar and Malingpa without deviation. These festivals, the deity claimed, would ensure prosperity and happiness to the village. He further commanded that while the people should not fail to celebrate these festivals they on the other hand should not start celebration of any new festival.

It is believed that Dabla has eight brothers who are also local deities established at various places. Sarkungi Dabla Makhphun is established at Sarkung and is regarded to be a deity of war. Hangi Dabla Makhphun has an abode at Hango and is also a war deity. Sarchin Chinmo dwells in village Namgya. Utithungmo is settled in village Khabo. Tidan Dabla Chormo has a seat near the Hindustan Tibet Road adjacent to Tirung stream. Chokhrni Dabla Changrikpa swells in village Dablung and is regarded to be a lover of truth. Dablung Palanjamo has an abode in village Dablung. Dabla Kanam lives in village Kanam.

Rakchham

This village is on the right bank of the Baspa river in Kalpa sub-division at an elevation of 3,115 m from the sea level. Its name is derived from "Rak" a stone and "Cham" a bridge. It is said that in the earlier times there was a natural stone bridge over the Baspa river hence the name of the village. The site of the village is striking at the western extremity of a glen, and at the base a huge mass of bare rocks, which rise abruptly in numerous black spires above the village. There is a post office, an *ayurvedic* dispensary, a primary school, a veterinary dispensary and a temple which is more than a hundred years old.

Ribba

Ribba or Rirang or Ridung, as it is called, is a large populous village in the inner Tukpa pargana, tahsil Morang, situated between the villages of Purbani and Rispa. The forest scenery above the village is picturesque. It falls at a distance of about fourteen kilometres from Morang, the tahsil headquarters and both are connected by a bridge via Tidong bridge constructed by the Forest Department. The total area of the village, according to the 1961 census, is 427 hectares with 183 occupied houses containing a population of 1,137 persons. In the local, dialect *ri* stands for *chilgoza* and *rang* denotes the peak of a mountain. This village is situated on the northern flank of the lofty Kinner Kailas group. Its surroundings are full of the trees of edible pine. It is just possible that its mountainous topography and existence of edible pine in good number gave rise to its name as Ri-Rang which got corrupted to Ribba in due course of time. There is a progeny orchard, a co-operative multi-purpose society, a veterinary hospital, a staging hut, a high school, an *ayurvedic* dispensary with some non-dieted beds. This as well as another village Rispa are known for their grape orchards and the alcohol famous grape distilled from the vineyards of Ribba.

Sangla

Sangla, a populous village, situated on the right bank of the Baspa river, is famous for its highly fertile soil, at an elevation of about 2,621 m above the level of sea and falls at a distance of about seventeen kilometres from Karchham. It is the headquarters of the tahsil of the same name and is inhabited by 1341 souls, according to 1961 census. The total area of the village is 790 hectares with 313 occupied houses. It is built on a slope with the houses rising one above the other; the scene being closed by the gigantic Raldang peaks towering behind. The forest scenery all-round and the eternal snow view are picturesque. There is a post office, a high school, a primary health centre, a police post, a veterinary hospital and two rest-houses one on either side of the Baspa which provides comfortable accommodation.

The whole of the Baspa valley is one of the prettiest valleys mainly due to its flat terrain and green vegetation on the slopes which are not very steep. The Baspa river had been quite famous for fishing. The trout are not as plentiful now owing, perhaps, to ruthless destruction and floods in the past, but are again being restored. On account of the peculiar topographical conditions the clear water of Baspa collected from the virgin snow-fed streams offer good scope for developing trout variety of fish. A beginning in this direction has made by establishing a hatchery. A temple dedicated to Nages god exists in the village.

Sangnam

In pargana Shua, tahsil Puh, Sangnam is quite a considerable village situated on the left bank of a stream called Darbung, at the confluence of the torrent named Bonkeo running from the north-east. It is about 2,859 m above the mean sea level. The village has a total area of 186 hectares containing 59 occupied houses with 78 households and 461 persons. It falls at a distance of about twenty-one kilometres from Puh. It has a post office and a primary school. The village is famous for blankets and *gudmas*. Snuff cases of ibex horn are also made here. The village has a dialect of its own called the Sangnam dialect which differs from, Kinnauri. The village deity is Yulsa with its ordinary temple situated within the village. There is an ark containing about a dozen masks made in silver and set in the body of the ark topped by a tuft of yak tail. It is customary for the deity to visit houses of such persons who have been blessed with a son during the year preceding *losar* festival. On these visits the deity is taken in a procession formed of his *kardars* and local musicians. Whenever a person falls ill, the ark of the deity is taken to his house for offering a special worship in order to avert the illness.

Previously, before the sixties it was customary to sacrifice animals in the name of the deity. This custom has been abandoned. The change was, it is said, brought about by the local lamas who exerted their influence and made the deity agree to the offering of *porsad*, *rote*, *rakh*, *yu* and *chonme* instead. As usual the deity has a mouthpiece who when under the divine afflatus utters, what is here called, *chilan*.

Sapni

Sapni village lies in pargana Rajgram, tahsil Sangla, about eleven kilometres from Kilba village, on a high range of the mountain. Total area of this village is 359 hectares with 117 houses occupied by a population of 864 persons. There is a middle school, an *ayurvedic* dispensary and a post office. The name of the village as Sapni, it is said, came into vogue during the land-revenue settlement conducted by Tikka Raghunath Singh. No evidence is however available as to how and why it was so named. The local people, amongst themselves, refer to it as Rapang, which is a combination of two words i.e. *ra* meaning a raja and *pang* denoting to make. The sense is that this is a village made or founded by a raja. In support of this theory, the existence of land, belonging to raja, and, called as *hasa*, since ancient times, is the only proof adduced by the local people. Another version is that once Kinnaur was overtaken by a drought continuously for three years. This village, however, was spared by the drought, rains did not fail and the pastures remained green. *Rag*, a local dialect, denotes greenery and *pang*, being a contraction of *panang*, means a sloppy place

which Sapni is. By joining two words of *rag* and *pang* the name became, with the omission of *g*, Rapang, meaning a green slope.

The local deity is Nages. Four edifices, dedicated to this deity, still exist here. Three of them are in a line at one place and the fourth is a little above this cluster of religious buildings. There are said to be as many as thirty-four masks. Some of them are made in gold, others in silver and still others in a compound of *ashtadhatu* (eight metals) etc. Puja is customarily offered twice daily but only when the masks of the deity are on the sedan-chair and the sedan-chair has been set in the *khubshimig choring*. When the masks are stowed away in the *shu kothi* no worship is performed. The masks are detachable from the sedan-chair and are set on or removed from it on specific occasions. In the worship, when offered, incense is burnt, earthen lamp is lighted and flowers and water are offered. Animal sacrifice is not prevalent here. Once in a fortnight a worship is offered to Kali or to Kailas on behalf of Nages. At that time offerings are made of *porsad*, *shudung* or *shu* and a coconut, out of the treasury or at the cost of Nages.

APPENDICES

APPENDIX I

FLORA

(See page 24)

Trees

Sl. No.	Botanical name	English/vernacular name	Remarks
1	2	3	4
1.	<i>Abies smithiana</i>	Himalayan spruce <i>ree or ryung</i>	...
2.	<i>A. spectabilis</i>	...	Timber valued for all purposes.
3.	<i>Acer acuminatum</i>	<i>Kanzal</i>	...
4.	<i>A. caesium</i>	Maple	...
5.	<i>A. oblongum</i>	Maple	...
6.	<i>A. pentapomicum</i>	...	...
7.	<i>Aesculus indica</i>	<i>Khanor</i>	Leaves used for fodder and fruit for flour in deficit areas and in famine.
8.	<i>Amygdalus persica</i>	Peach, <i>ado</i> or <i>rag</i>	...
9.	<i>Arundinaria falcata</i>	Bamboo	Used for household.
10.	<i>Betula utilis</i>	Birch, <i>shagootang</i>	...
11.	<i>Buxus wallichiana</i>	<i>Paprang</i>	Wood used locally for carving.
12.	<i>Carpinus faginea</i>	...	...
13.	<i>C. viminea</i>	<i>Lolti</i>	...
14.	<i>Cedrela toona</i>	<i>Krishing</i>	Lopped for fodder. Timber used for furniture and bridge work.
15.	<i>Cedrus deodara</i>	<i>Kelmang</i> , deodar	Timber valued for all purposes.
16.	<i>Celtis australis</i>	<i>Kharak</i>	Fodder useful.
17.	<i>Cupressus torulosa</i>	Cypress, <i>kelmang</i>	...
18.	<i>Euonymus echinatus</i>	<i>Kala</i>)	Wood fine grained
19.	<i>E. Fimbriatus</i>	<i>Skiosh</i>)	but only used as
20.	<i>E. Tingens</i>	<i>Rohni</i>)	fuel. Young shoots lopped for fodder.
21.	<i>Fraxinus xanthoxyloides</i>	Ash, <i>thum</i>	Good fodder.
22.	<i>Grewia oppositifolia</i>	<i>Beul</i> , <i>dhaman</i>	...

1	2	3	4
23.	<i>Juglans regia</i>	Walnut, <i>ka</i>	Fruits eaten, timber valuable, bark sold in market for cleaning teeth.
24.	<i>Juniperus squamata</i>	Creeping juniper, <i>pama</i>	...
25.	<i>Litsea umbrosa</i>	...	...
26.	<i>Machilus duthiei</i>	...	...
27.	<i>M. odoratissima</i>	...	Good fodder.
28.	<i>Morus serrata</i>	Mulberry, <i>chimu</i> , <i>Pahari tut</i>	Fodder useful.
29.	<i>Olea cuspidata</i>	<i>Wi</i>	Good fodder.
30.	<i>Picea smithiana</i>	<i>Ravang</i>	Timber valued for all purposes.
31.	<i>P. webbiana</i>	Webian pine or silver fir, <i>tos</i>	...
32.	<i>Pinus excelsa</i>	Lofty pine, <i>kyl</i> , <i>kail</i> , <i>leem</i>	...
33.	<i>P. gerardiana</i>	<i>Chilgoza</i> pine, <i>ree</i>	Fruit eaten.
34.	<i>P. roxburghii</i>	<i>Shti</i>	Valuable for resin extraction and timber.
35.	<i>Pistacia integerrima</i>	<i>Kakarsingi</i>	Medicinal. Wood used for carving.
36.	<i>Prunus cerasoides</i>	<i>Paja</i>	Moist zone.
37.	<i>P. cerasus</i>	Wild cherry	...
38.	<i>P. Jacquemontii</i>	<i>Shikarang</i>	Dry zone.
39.	<i>P. persica</i>	Peach, <i>pek</i>	Fruit distilled for wine.
40.	<i>Pyrus foliolosa</i>	<i>Rangrek</i>	...
41.	<i>P. lanata</i>	<i>Marpol</i>	...
42.	<i>P. malus</i>	Apple, <i>seo</i> , <i>palre</i>	Fruits eaten.
43.	<i>P. pashia</i>	...	...
44.	<i>P. variolosa</i>	Pear, <i>naspati</i>	...
45.	<i>Quercus ilex</i>	Oak, <i>breh</i>	Fodder and fuel useful.
46.	<i>Q. incana</i>	Oak, <i>ban</i>	Fodder and fuel useful.

1	2	3	4
47.	<i>Q. Semecarpifolia</i>	Oak, <i>kharsu</i>	Fodder and fuel.
48.	<i>Rhododendron arboreum</i>	<i>Sprak</i>	...
49.	<i>Rhus punjabensis</i>	<i>Halashang</i>	...
50.	<i>R. semialata</i>	<i>Titri</i>	Fruit used in native medicines.
51.	<i>R. Wallichii</i>	<i>Hukru</i>	Juice corrosive and blisters the skin.
52.	<i>Robinia pseudacacia</i>	—	Fodder.
53.	<i>Taxus baccata</i>	<i>Yamdal</i> , <i>yew</i>	...
54.	<i>Ulmus wallichiana</i>	<i>Maldang</i>	Fodder and timber used.
Shrubs			
1.	<i>Abelia triflora</i>	<i>Bhang</i>	...
2.	<i>Achyranthes aspera</i>	...	...
3.	<i>Andrachne cordifolia</i>	...	...
4.	<i>Astragalus candolleanus</i>	...	...
5.	<i>A. peduncularis</i>	...	...
6.	<i>A. polyacanthus</i>	...	...
7.	<i>A. rhizanthus</i>	...	...
8.	<i>A. strobiliferus</i>	...	...
9.	<i>A. tibetanus</i>	...	...
10.	<i>A. webbianus</i>	...	...
11.	<i>Avena fatua</i>	...	...
12.	<i>Berberis aristata</i>	...	...
13.	<i>B. ceratophylla</i>	<i>Kulso</i>	Roots are used for making <i>Rasont</i> used as a medicine for eye troubles.
14.	<i>B. petiolaris</i>	...	...
15.	<i>B. umbellata</i>	...	...
16.	<i>Berchemia lineata</i>	...	Common in Baspa valley.
17.	<i>Bosia amherstiana</i>	<i>Khesbar</i>	...
18.	<i>Buddleia paniculata</i>	...	...
19.	<i>Caragana brevispina</i>	<i>Nyamzo</i>	...
20.	<i>C. gerardiana</i>	...	...
21.	<i>C. Versicolor</i>	...	...
22.	<i>Cassiope fastigiata</i>	...	...
23.	<i>Colutea nepalensis</i>	...	...
24.	<i>Corylus colurna</i>	<i>Sholi</i>	...

1	2	3	4
25.	<i>Cotoneaster acuminata</i>	...	...
26.	<i>C. bacillaris</i>	Reonsh	Branches used for walking sticks.
27.	<i>C. microphylla</i>	...	...
28.	<i>C. nummularia</i>	...	...
29.	<i>C. rosea</i>	...	...
30.	<i>Cynachum auriculatum</i>	...	...
31.	<i>C. dalhousieae</i>	...	...
32.	<i>C. glaucum</i>	...	...
33.	<i>Daphne cannabina</i>	...	...
34.	<i>D. oleoides</i>	...	...
35.	<i>Desmodium concinnum</i>	...	...
36.	<i>D. floribundum</i>	Musa	...
37.	<i>D. nutans</i>	...	...
38.	<i>D. oxyphyllum</i>	...	...
39.	<i>D. podocarpum</i>	...	...
40.	<i>D. pseudo-triquetrum</i>	...	...
41.	<i>D. tiliaefolium</i>	...	...
42.	<i>Deutzia corymbosa</i>	Philru	...
43.	<i>D. staminea</i>	...	...
44.	<i>Elaeagnus umbellata</i>	...	...
45.	<i>Elsholtzia polystachya</i>	Gwadro	...
46.	<i>Ficus clavata</i>	Fig	...
47.	<i>F. foveolata</i>	...	...
48.	<i>Flemingia strobilifera</i>	...	...
49.	<i>Gaultheria nummularioides</i>	...	...
50.	<i>G. trichophylla</i>	...	...
51.	<i>Genista versicolor</i>	Tartaric furz	...
52.	<i>Hamiltonia suaveolens</i>	Padari	...
53.	<i>Hippophae rhamnoides</i>	Sutz	...
54.	<i>H. salicifolia</i>	...	...
55.	<i>Hypericum cernuum</i>	Ping neara	...
56.	<i>H. patulum</i>	...	...
57.	<i>Indigofera gerardiana</i>	...	...
58.	<i>I. heterantha</i>	...	...
59.	<i>Inula cappa</i>	...	...
60.	<i>I. cuspidata</i>	...	...
61.	<i>Juniperus communis</i>	Tailu pama	Fruits medicinal.
62.	<i>J. pseudo-sabina</i>	Juniper, Tailu pama	...
63.	<i>Leptodermis lanceolata</i>	...	...
64.	<i>Lеспедеза eriocarpa</i>	...	...

1	2	3	4
65.	<i>Lonicera alpigena</i>	Phulor	—
66.	<i>L. angustifolia</i>	Kapchingzashe	...
67.	<i>L. hispida</i>	...	...
68.	<i>L. hypoleuca</i>	...	...
69.	<i>L. obovata</i>	...	...
70.	<i>L. parvifolia</i>	Hilru	Fodder.
71.	<i>L. quinquelocularis</i>	Bhajwal	—do—
72.	<i>L. spinosa</i>	...	—
73.	<i>Myrsine africana</i>	Chitring	...
74.	<i>Osbeckia stellata</i>	...	...
75.	<i>Parrottia jacquemontiana</i>	...	...
76.	<i>Periploca calophylla</i>	...	...
77.	<i>Picrasma quassioides</i>	...	Used as tonic.
78.	<i>Piptanthus nepalensis</i>	...	...
79.	<i>Plectranthus rugosus</i>	Chhichhri	...
80.	<i>Prinsepia utilis</i>	...	...
81.	<i>Reinwardtia trigyna</i>	Basant	...
82.	<i>Rhamnus purpureus</i>	Lhishi	...
83.	<i>R. triqueter</i>	...	...
84.	<i>R. virgatus</i>	Chorda	Wood is good for agricultural implements. Fruits used as purgative.
85.	<i>Rhododendron anthopogon</i>	...	...
86.	<i>R. campanulatum</i>	...	...
87.	<i>R. lepidotum</i>	...	...
88.	<i>Rhus cotinus</i>	Tugang	Leaves and bark used in tanning and dyeing.
89.	<i>Rhynchosia pseudo-cajan</i>	...	...
90.	<i>Ribes glaciale</i>	...	...
91.	<i>R. grossularia</i>	Yanghai	—
92.	<i>R. nigrum</i>	Bedhi ki chuli	Moist zone.
93.	<i>R. orientale</i>	Yanghai	Dry zone.
94.	<i>R. rubrum</i>	...	Moist zone.
95.	<i>Salix daphnoides</i>	...	...
96.	<i>S. hastata</i>	Kushang	...
97.	<i>S. viminalis</i>	Krammal	...
98.	<i>S. wallichiana</i>	...	...
99.	<i>Sarcococca saligna</i>	...	...
100.	<i>Schizandra grandiflora</i>	...	...

1	2	3	4
101.	<i>Skimmia laureola</i>	<i>Shashra</i>	Yields an insecticide.
102.	<i>Spiraea canescens</i>	<i>Chakroi</i>	...
103.	<i>S. sorbifolia</i>	...	...
104.	<i>Staphylea emodi</i>	<i>Kaganitz</i>	Keeps off snakes. Used for walking sticks.
105.	<i>Stipa</i> spp.	...	...
106.	<i>Strobilanthes alatus</i>	...	...
107.	<i>S. atropurpureus</i>	...	...
108.	<i>S. dalhousianus</i>	...	...
109.	<i>S. glutinosus</i>	...	...
110.	<i>S. wallichii</i>	...	...
111.	<i>Symplocos crataegoides</i>	<i>Lojh</i>	Dye and fodder.
112.	<i>Syringe emodi</i>	<i>Shapar</i>	...
113.	<i>Tylophora govanii</i>	...	...
114.	<i>Viburnum cotinifolium</i>	<i>Tustus khatek</i>	...
115.	<i>V. nervosum</i>	...	...
116.	<i>V. stellulatum</i>	<i>Ensi</i>	...
117.	<i>Viscum album</i>	...	...
118.	<i>Vitis vinifera</i>	Grape, <i>dakhang</i>	...
119.	<i>Wickstroemia canescens</i>	...	...
120.	<i>Zanthoxylum alatum</i>	<i>Patrang</i>	Used for walking sticks.
Herbs			
1.	<i>Aconitum heterophyllum</i>	<i>Patish, mohro</i>	Used in indigenous medicine as a mild and bitter tonic. Roots are valuable febrifuge.
2	<i>Anagallis arvensis</i>	Pimpernel	...
3.	<i>Androsace lanuginosa</i>	...	Medicinal.
4.	<i>A. rotundifolia</i>	...	...
5.	<i>A. sarmentosa</i>	...	...
6.	<i>Anemone narcissiflora</i>	...	...
7.	<i>A. obtusiloba</i>	...	Roots give blisters and seeds cause vomiting and purging.
8.	<i>A. polyanthes</i>	...	...
9.	<i>A. rivularis</i>	...	...

1	2	3	4
10.	<i>Aquilegia pubiflora</i>	Columbine	...
11.	<i>Arabis pterosperma</i>	...	...
12.	<i>Artemisia maritima</i>	...	...
13.	<i>A. vulgaris</i>	...	Fodder and medicinal.
14.	<i>Aster albescens</i>	...	...
15.	<i>A. asperulus</i>	...	...
16.	<i>A. molliusculus</i>	...	...
17.	<i>Bidens wallichii</i>	Black jack	...
18.	<i>Biebersteinia odora</i>	...	...
19.	<i>Brassica</i> sp.	Rope seed	...
20.	<i>Bulbostylis capillaris</i>	...	...
21.	<i>Bupleurum</i> sp.	...	...
22.	<i>Caltha palustris</i>	Marsh merigold	It is acrid and poisonous; prefers marshy land.
23.	<i>Campanula argyrot richa</i>	...	...
24.	<i>C. colorata</i>	...	...
25.	<i>C. latifolia</i>	...	...
26.	<i>Cannabis indica</i>	Indian hemp, <i>kas</i>	...
27.	<i>Capsella bursapastoris</i>	Shepherd's purse	...
28.	<i>Carex filicina</i>	...	...
29.	<i>Cerasus Puddum</i>	...	...
30.	<i>Cimicifuga foetida</i>	Bugbane	Bitter stimulant tonic, adulterant for aconite.
31.	<i>Crambe</i> sp.	...	...
32.	<i>Crepis japonica</i>	...	...
33.	<i>Cynoglossum micranthum</i>	...	...
34.	<i>C. wallichii</i>	...	...
35.	<i>C. zeylanicum</i>	...	...
36.	<i>Delphinium denudatum</i>	<i>Nirbisi</i>	...
37.	<i>Dipsacus strictus</i>	...	...
38.	<i>Echinops niveus</i>	...	...
39.	<i>Emilia sonchifolia</i>	...	...
40.	<i>Erigeron multiradiatus</i>	...	...
41.	<i>Erysimum hieracifolium</i>	...	...
42.	<i>Eutrema primulaefolium</i>	...	...

1	2	3	4
43.	<i>Fimbristylis diphylla</i>	...	...
44.	<i>Fragaria vesca</i>	Strawberry	...
45.	<i>Galicm asperuloides</i>	...	...
46.	<i>Geranium nepalense</i>	Cranis bill	...
47.	<i>G. ocellatum</i>	...	...
48.	<i>G. robertianum</i>	...	...
49.	<i>G. wallichianum</i>	...	...
50.	<i>Gentiana argentea</i>	<i>Nilli sernal</i>	Of medicinal use.
51.	<i>G. kurroo</i>	<i>Karu</i>	...
52.	<i>Gerbera lanuginosa</i>	...	...
53.	<i>Hydrangea anomala</i>	...	...
54.	<i>Hyoscyamus niger</i>	Henbane	...
55.	<i>Impatiens</i> spp.	<i>Balsam</i>	...
56.	<i>Jurinea macrocephala</i>	<i>Dhup</i>	Used as incense.
57.	<i>Kobresia trinervis</i>	...	...
58.	<i>Lactuca scariola</i>	...	...
59.	<i>Lamium rhomboideum</i>	...	...
60.	<i>Meconopsis aculeata</i>	Blue poppy	...
61.	<i>Morina longifolia</i>	...	...
62.	<i>Myosotis caespitosa</i>	...	...
63.	<i>Nasturtium officinale</i>	Common water cress	...
64.	<i>Orobanch</i> sp.	...	...
65.	<i>Oxytropis chiliophylla</i>	...	...
66.	<i>Oxyria digyna</i>	...	...
67.	<i>Paeonia emodi</i>	...	Tubers used for curing uterine and nervous diseases. Seeds are purgative and emetic, leaves contain an acrid juice causing blisters.
68.	<i>Pedicularis pectinata</i>	...	...
69.	<i>Plantago</i> spp.	...	...
70.	<i>Polygonum</i> sp.	...	...
71.	<i>P. vacciniifolium</i>	...	...
72.	<i>Picrorhiza kurrooa</i>	<i>Karu, katki</i>	...
73.	<i>Potentilla argyrophylla</i>	...	...
74.	<i>P. biflora</i>	...	...
75.	<i>P. fruticosa</i>	...	...
76.	<i>P. rigida</i>	...	...

1	2	3	4
77.	<i>Prenanthes violaeifolia</i>	...	...
78.	<i>Primula denticulata</i>	...	...
79.	<i>P. petiolaris</i>	...	...
80.	<i>Ranunculus arvensis</i>	Corn butter cup	...
81.	<i>Rheum emodi</i>	...	...
82.	<i>Rumex hastatus</i>	...	Medicinal
83.	<i>Salvia nubicola</i>	...	...
84.	<i>Scrophularia himalensis</i>	...	...
85.	<i>Sedum</i> spp.	...	...
86.	<i>Senecio amplexicaulis</i>	...	...
87.	<i>S. chrysanthemoides</i>	...	...
88.	<i>Siegesbeckia orientalis</i>	...	...
89.	<i>Sisyambrium thalianum</i>	Thale cress	...
90.	<i>Solanum dulcamara</i>	...	...
91.	<i>Stellaria</i> sp.	...	...
92.	<i>Tanacetum longifolium</i>	<i>Bhutkesi, mushakbala</i>	Exported for incense.
93.	<i>Tanacetum nubigenum</i>	...	...
94.	<i>Thalictrum foliolosum</i>	<i>Jarbini</i>	Roots used in indigenous medicine for eye ailments, tooth ache, brain tonic etc.
95.	<i>Thermopsis</i> sp.	...	...
96.	<i>Valeriana hardwickii</i>	...	...
97.	<i>V. jatamansi</i>	<i>Balsam</i>	...
98.	<i>Verbascum thapsus</i>	...	...
99.	<i>Veronica baccabunga</i>	...	...
100.	<i>V. serpyllifolia</i>	...	...
101.	<i>Wulfenia amherstiana</i>	...	...
Climbers			
1.	<i>Clematis barbellata</i>	...	...
2.	<i>C. buchananiana</i>	...	...
3.	<i>C. connata</i>	...	...
4.	<i>C. grata</i>	...	...
5.	<i>C. graveolens</i>	...	...
6.	<i>C. montana</i>	...	...
7.	<i>C. orientalis</i>	...	...

1	2	3	4
8.	<i>Jasminum humile</i>	Kurang	...
9.	<i>J. officinale</i>	...	...
10.	<i>Rubus biflorus</i>	Anchu	...
11.	<i>R. ellipticus</i>	Bramble, akhi	...
12.	<i>R. lasiocarpus</i>	Sowating	...
13.	<i>R. purpureus</i>	...	...
14.	<i>Sabia campanulata</i>	...	...
15.	<i>Thalictrum javanicum</i>	...	...
16.	<i>Vitis himalayana</i>	Vine	...
17.	<i>V. parvifolia</i>	Chakcha	...
18.	<i>V. semicordata</i>	Bali	Wood used for picture frames.

Parasites

1.	<i>Arceuthobium minutissimum</i>	...
2.	<i>Cuscuta</i> sp.	...

Grasses

1.	<i>Agrostis alba</i>	...
2.	<i>Agropyron canaliculatum</i>	...
3.	<i>A. semicostatum</i>	...
4.	<i>Arthraxon lancifolius</i>	...
5.	<i>Avena aspera</i>	...
6.	<i>Chrysopogon gryllus</i>	...
7.	<i>Dactylis glomerata</i>	...
8.	<i>Deyeuxia scabrescens</i>	...
9.	<i>Digitaria cruciata</i>	...
10.	<i>Eragrostis nigra</i>	...
11.	<i>Eulalia hirtifolia</i>	...
12.	<i>E. trispicata</i>	...
13.	<i>E. quadrinervis</i>	...
14.	<i>Hordeum aegiceras</i>	...
15.	<i>Muhlenbergia himalayensis</i>	...
16.	<i>Oplismenus compositus</i>	...
17.	<i>Oryzopsis aequiglumis</i>	...
18.	<i>Panicum miliaceum</i>	...
19.	<i>Pennisetum flaccidum</i>	...
20.	<i>Setaria italica</i>	...
21.	<i>Spodisogon dubius</i>	...
22.	<i>Sporobolus pilliferus</i>	...
23.	<i>Tripogon filiformis</i>	...

APPENDIX II

FAUNA

List of Aves

(See page 36)

Sl. No.	Order	Family	Zoological Name	Popular English name	Local Name
1	2	3	4	5	6
1.	Falconiformes	Accipitridae	<i>Accipiter gentilis schvedour</i> (Menzbier)	Goshawk	
2.	"	"	<i>A. risus melachistos</i> (Hume)	Sparrow Hawk	
3.	"	"	<i>A. badius cenchroides</i> (Severtzov)	Shikra	
4.	"	"	<i>Spilornis cheela cheela</i> (Latham)	Crested serpent Eagle	Goldes
5.	"	"	<i>Gyps himalayensis</i> (Hume)	Himalayan griffon	
6.	"	"	<i>Neophron perconopterus</i> <i>perconopterus</i> (Linn)	Egyptian Scavenger Vulture	
7.	"	"	<i>Gypaetus barbatus aureus</i> (Halizl)	Bearded vulture or Lammergeier	
8.	"	"	<i>Aquila chrysaetus hodgsoni</i> (Ticehurst)	Golden eagle	
9.	"	"	<i>Milvus migrans migrans</i> (Boddart)	Pariat or Black Kite	

1	2	3	4	5	6
10.	"	Falconidae	<i>Falco subbutes centralis</i> (Buturlin)	Hobby	
11.	"	"	<i>F. tinnunculus tinnunculus</i> (Linn)	Kestrel	
12.	Galliformes	Phasianidae	<i>Lophorus impeyanus</i> (Latham)	Impeyah or Monal Pheasant	Dang
13.	"	"	<i>Tetraogallus himalayensis</i> <i>himalayensis</i> (Gray)	Himalayan Snow Cock	
14.	"	"	<i>Tragopan melanocephalus</i> (Gray)	Western Tragopan	
15.	"	"	<i>Arborophila torqueola Millardi</i> (Baker)	Common Hill Partridge	
16.	"	"	<i>Alectoris gracca chukar</i> (Gray)	Chukar Pheasant	Tig
17.	"	"	<i>Lophura leucomelana hamiltoni</i> (Gray)	White crest or Kalij Pheasant	
18.	"	"	<i>Pucrasia Macrolopha Macrolopha</i> (Lesson)	Koklas Pheasant	
19.	"	"	<i>Catreus wiallichi</i> (Hardwicke)	Cheer Pheasant	
20.	"	"	<i>Gallus gallus murghi</i> (Robinson & Klos)	Red jungle Fowl	
21.	"	"	<i>Lerwa lerwa</i> (Hodgson)	Snow Partridge	
22.	"	"	<i>Turnix sylvatica dussumier</i> (Temminck)	Little Bus Fard Quail	
23.	"	"	<i>Francolinus francolinus asiae</i> (Bonaparte)	Black Partridge	

1	2	3	4	5	6
24.	Anseriformes	Anatidae	<i>Anser indicus</i> (Latham)	Barheaded Goose	
25.	"	"	<i>Tadorna tadorna</i> (Linnaeus)	Common Shield Duck	
26.	"	"	<i>T. ferruginea</i> (Rallas)	Ruddy Shield Duck or Brahminy Duck	
27.	"	"	<i>Anas platyrhynchos</i> (Linnaeus)	Mallard	
28.	"	"	<i>A. strepera strepera</i> (Linnaeus)	Gadwall	
29.	"	"	<i>A. Penelope</i> (Linnaeus)	Wigeon	
30.	"	"	<i>A. creca creca</i> (Linnaeus)	Common Teal	
31.	"	"	<i>A. acuta</i> (Linnaeus)	Pintail	
32.	Columbiformes	Columbidae	<i>Columba leuconata leuconata</i> (Vigors)	Snow Pigeon	
33.	"	"	<i>C. eversmanni</i> (Bonaparte)	Eastern Stock Pigeon	
34.	"	"	<i>Columba rupestris turkestanica</i> (Buturlin)	Hill Pigeon	
35.	"	"	<i>C. livia neglecta</i> (Hume)	Blue Rock Pigeon	
36.	"	"	<i>C. hodgsoni</i> (Vigors)	Speckled Wood Pigeon	
37.	"	"	<i>Treron phoenicoptera</i> <i>phoenicoptera</i> (Latham)	Green Pigeon	
38.	"	"	<i>T. sphenura sphenura</i> (Vigors)	Wedge tailed Green Pigeon	
39.	"	"	<i>Streptopelia orientalis meena</i> (Sykes)	Rufous Turtle Dove	
40.	"	"	<i>S. senegalensis cambayensis</i>	Blossom Headed Parakeet	
41.	Psittaciformes	Psittacidae	<i>Psittacula cyanocephala</i> (Linn)	Blossom Headed Parakeet	
42.	"	"	<i>P. himalayana himalayana</i>	Slaty headed Parakeet	

1	2	3	4	5	6
43.	Charadriiformes	Charadriidae	<i>Vanellus vanellus</i> (Linnaeus)	Lapwing Peewit	
44.	"	"	<i>Capella gallinago gallinago</i> (Linn)	Fantail Snipe	
45.	Cuculiformes	Cuculidae	<i>Cuculus sparverioides sparverioides</i> (Vigors)	Large Hawk Cuckoo	
46.	"	"	<i>C. canorus aureus</i> (Linn)	Cuckoo	
47.	"	"	<i>C. poliocephalus poliocephalus</i> (Latham)	Small Cuckoo	
48.	"	"	<i>Clamator jacobinus serratus</i> (Sparman)	Pied crested cuckoo	
49.	Strigiformes	Strigidae	<i>Asio otus otus</i> (Linnaeus)	Long eared owl	
50.	"	"	<i>Otus spilocephalus huttont</i> (Hume)	Spotted Scops owl	
51.	"	"	<i>Glaucidium brodiei brodiei</i> (Burton)	Collared Pygmy Owl	
52.	Apodiformes	Apodidae	<i>Apus melba melba</i> (Linnaeus)	Alpine swift	
53.	"	"	<i>A. apus pekinensis</i> (Swinhoe)	The swift	
54.	"	"	<i>A. pacificus leuconyx</i> (Blyth)	Large White rumped Swift	
55.	Coraciiformes	Upupidae	<i>Upupa epops epops</i> (Linnaeus)	Hoopoe or Hudhud	
56.	Piciformes	Picidae	<i>Picus squamatus squamatus</i> (Vigors)	Scaly bellied Green Wood Peeki	
57.	"	"	<i>Dendrocopos himalayensis himalayensis</i> (Jardine & Seeby)	Himalayan Pied Wood peaker	
58.	"	"	<i>D. auriceps auriceps</i> (Vigors)	Brown fronted Pied Wood peacker	

1	2	3	4	5	6
59.	Piciformes	Capitonidae	<i>Megalaima virens marshallorum</i> (Swinhoe)	Great Hill Barbet	
60.	Passeriformes	Alaudidae	<i>Eremopterix grisea</i> (Scopoli)	Ashy Crowned Finch lark	
61.	"	Hirundinidae	<i>Hirundo rupestris</i> (Scopoli)	Crage Martin	
62.	"	"	<i>H. daurica nipalensis</i> (Hodgson)	Straited Swallow	
63.	"	Laniidae	<i>Lanius schach erythronotus</i> (Vigors)	Rufous bellied Shrike	
64.	"	Oriolidae	<i>Oriolus oriolus kundoo</i> (Sykes)	Golden Oriole	
65.	"	Dicruridae	<i>Dicrurus leucophaeus longicaudatus</i> (Hay)	Gray & Ashy Drango	
66.	"	Corvidae	<i>Corvus splendens splendens</i> (Vieillot)	House Crow	Kag
67.	"	"	<i>C. macrorhynchos intermedius</i> (Adams)	Jungle Crow	Kag
68.	"	"	<i>Kitta erythroryncha occipitalis</i> (Blyth)	Red billed blue Magpie	
69.	"	Corvidae	<i>Dendrocitta vagabunda pallida</i> (Blyth)	Indian Tree Pie	
70.	"	"	<i>Garrulus lanceolatus</i> (Vigors)	Black throated Jay	
71.	"	"	<i>Nucifraga caryocatactes multipunctata</i> (Gould)	Nut Cracker	
72.	"	Campephagidae	<i>Peritocotus brevirostris brevirostris</i> (Vigors)	Short Billed Minivet	
73.	"	Pycnonotidae	<i>Hypsipetes madagascariensis psaroides</i> (Vigors)	Black Bulbul	

1	2	3	4	5	6
74.	<i>Passeriformes</i>	<i>Pycnonotidae</i>	<i>Pycnonotus leucogenys leucogenys</i> (Gray)	White checked Bulbul	
75.	"	<i>Muscicapidae</i>	<i>Zoothera dauma dauma</i> (Latham)	Whites Golden or Small Bellied Mountain Thrust	
76.	"	"	<i>Phoenicurus frontalis</i> (Vigors)	Blue fronted Red Start	
77.	"	"	<i>Garrulax albogularis whistleri</i> (Baker)	White throated laughing Thrush	
78.	"	"	<i>G. variegatum variegatum</i> (Vigors)	Variegated laughing Thrush	
79.	"	"	<i>Pomatorhinus erythrogenys erythrogenys</i> (Vigors)	Rusty cheeked Scineter Babbler	
80.	"	"	<i>Stachyris pyrrhops</i> (Blyth)	Red Billed Babbler	
81.	"	"	<i>Alcippe vinipectus kangrae</i> (Ticehurst and Whistler)	White braved Tit Babbler or Hodgson's Fulvetta	
82.	"	"	<i>Heterophasia capistrata capistrata</i> (Vigors)	Black Capped Sibia	
83.	"	"	<i>Minla strigula simlaensis</i> (Meinertzhagen)	Strepe throated or Chest nut Tailed Sivia or Minla	
84.	"	"	<i>Yuhina flavicollis albicollis</i> (Ticehurst & Whistler)	Yellow naped Yuhina	
85.	"	"	<i>Pteruthius flaviscapis validirostris</i> (Kœlzl)	Redwinged or Greater Shrike Babbler	
86.	"	"	<i>Saxicola caprata bicolor</i> (Sykes)	Pied Bush Chat	
87.	"	"	<i>S. torquata indica</i> (Blyth)	Stone Chat	
88.	"	"	<i>S. ferrea</i> (Gray)	Dark Grey Bush Chat	
89.	"	"	<i>Oenanthe pleschanka pleschanka</i> (Lepechin)	Pleschankal's Pied Chat or Whear	

1	2	3	4	5	6
90.	<i>Passeriformes</i>	<i>Muscicapidae</i>	<i>Enicurus maculatus maculatus</i> (Vigors)	Spotted Forktail	
91.	"	"	<i>Chaimarrornis leucocephalus</i> (Vigors)	Whitecapped Redstart or River Chat	
92.	"	"	<i>Rhyacornis fuliginosus fuliginosus</i> (Vigors)	Plumbeous Redstart	
93.	"	"	<i>Erihacus pectoralis pectoralis</i> (Gould)	Himalayan Ruby Throat	
94.	"	"	<i>E. chrysaeus whistleri</i> (Ticehurst)	Golden Bush Robin	
95.	"	"	<i>E. cyanurus pallidior</i> (Baker)	Orange Flanked Bush Robin	
96.	"	"	<i>Phoenicurus caeruleocephalus</i> (Vigors)	Blue headed Redstart	
97.	"	"	<i>Turdus merula maximum</i> (Seebohm)	Black Bird	
98.	"	"	<i>T. albocinctus</i> (Royle)	White collared Black Bird	
99.	"	"	<i>T. ciscivorus bonapartei</i> (Cabanis)	Mistle Thrust	
100.	"	"	<i>Monticola rufiventris</i> (Jardine & Selby)	Chestnut billed Rock Thrust	
101.	"	"	<i>M. cinclorhynchus</i> (Vigors)	Blue headed rock Thrust	
102.	"	"	<i>Myiophonus caeruleus temminki</i> (Vigors)	Blue whistling thrust	

1	2	3	4	5	6
103.	Passeriformes	Muscicapidae	<i>Muscicapa sibirica gulmergi</i> (Baker)	Sooty Fly Catcher	
104.	"	"	<i>M. thalassina thalassina</i> (Swainson)	Rufous tailed Fly Catcher	
105.	"	"	<i>M. ruficauda</i> (Swainson)	Rufous tailed Fly Catcher	
106.	"	"	<i>Culicicapa ceylonensis</i> ceylonensis (Swainson)	Grey headed Fly Catcher	
107.	"	"	<i>Terpsihone paradisi leucogaster</i> (Swainson)	Paradise Fly Catcher	
108.	"	"	<i>Sylvia althaca althaca</i> (Hume)	Hume's lesser white throat	
109.	"	"	<i>Phylloscopus affinis</i> (Tickell)	Tickell's Leaf Warbler	
110.	"	"	<i>P. trochiloides ludlowi</i> (Whistler)	Dull Green Leaf Warbler	
111.	"	"	<i>P. nitidus</i> (Blyth)	Bright Green Leaf Warbler	
112.	"	"	<i>P. occipitalis occipitalis</i> (Blyth)	Large Crowned Leaf Warbler	
113.	"	"	<i>Scircercus xanthochistos</i> <i>albosuperciliaris</i> (Jerdon)	Grey headed Fly Catcher	
114.	"	"	<i>Cettia fortipes pallidus</i> (Brooks)	Strong Footed Bush Warbler	
115.	"	"	<i>Prinia criniger criniger</i> (Hume)	Brown Long tail Hill Warbler	
116.	"	"	<i>Cephalopyrus flammiceps</i> <i>flammiceps</i> (Burton)	Five capped Tit	
117.	"	Troglodytidae	<i>Troglodytes troglodytes neglectus</i> (Brooks)	Wren	
118.	"	Cinclidae	<i>Cinclus pallasii tenuirostris</i> (Bonaparte)	Brown Dipper	

1	2	3	4	5	6
119.	Passeriformes	Paridae	<i>Parus rubridiventris rufonuchalis</i> (Blyth)	Rufous bellied crested Tit	
120.	"	"	<i>P. major cashmirensis</i> (Harters)	Grey Tit or Great Titmouse	
121.	"	"	<i>P. monticolus monticolus</i> (Vigors)	Green backed Tit	
122.	"	"	<i>P. melanolophus</i> (Vigors)	Crested Black Tit	
123.	"	"	<i>P. dichrous kangrae</i> (Whistler)	Brown Crested Tit	
124.	"	"	<i>P. modestus</i> (Burton)	Yellow braved Tit	
125.	"	"	<i>P. xanthogenys xanthogenys</i> (Vigors)	Black spotted Tit	
126.	"	"	<i>Aegithaliscus concinnus</i> <i>iredalei</i> (Baker)	Red headed Tit	
127.	"	Sittidae	<i>Sitta leucopsis leucopsis</i> (Gould)	White cheeked Nuthatch	
128.	"	Certhidae	<i>Certhia himalayana himalayana</i> (Vigors)	Himalayan Tree Creeper	
129.	"	Prunellidae	<i>Prunella strophiate ierdoni</i> (Brooks)	Rufous breasted accentor	
130.	"	Sturnidae	<i>Acridotheres tristis tristis</i> (Linnaeus)	Common Myna	
131.	"	Ploceidae	<i>Petronia xanthocollis</i> <i>xanthocollis</i> (Burton)	Yellow throated sparrow	
132.	"	"	<i>Passer domesticus indicus</i> (Jardine & Selby)	House Sparrow	

1	2	3	4	5	6
133.	Passeriformes	Ploceidae	<i>Zosterops palpebrosa palpebrosa</i> (Temminck)	White eye	
134.	"	Motacettidae	<i>Motacilla alba personata</i> (Gould)	Masked Wagtail	
135.	"	"	<i>M. caspica caspica</i> (Gmelin)	Grey Wagtail	
136.	"	"	<i>Anthus trivialis haringtoni</i> (Witherby)	Tree Pipit	
137.	"	"	<i>Anthus hodgsonii hodgsonii</i> (Richmond)	Hodgson's Tree Pipit	
138.	"	"	<i>A. similis jerdoni</i> (Finsch)	Brown Rock Pipit	
139.	"	"	<i>A. pelopus</i> (Grey)	Hodgson's Pipit	
140.	"	"	<i>A. sylvanus</i> (Hodgson)	Upland Pipit	
141.	"	Nectarinidae	<i>Aethopyga gouldiae gouldiae</i> (Vigors)	Mrs. Gould's Sun Bird	
142.	"	"	<i>Nectarinia asiatica asiatica</i> (Latham)	Purple Sun Bird	
143.	"	Fringillidae	<i>Mycerobas icteroides</i> (Vigors)	Black & Yellow Grass Beak	
144.	"	"	<i>M. melanozanthos</i> (Hodgson)	Spotted Winged grosbeak	
145.	"	"	<i>Pyrrhula erythrocephala</i> (Vigors)	Red headed Bull Finch	
146.	"	"	<i>Loxia curvirostra himalayensis</i> (Blyth)	Grass Bill or Red Grass Bill	
147.	"	"	<i>Carpodacus pulcherrimus</i> (Moore)	Beautiful Rose Finch	

1	2	3	4	5	6
148.	Passeriformes	Fringillidae	<i>C. rhodochrous</i> (Vigors)	Pink browed Rose Finch	
149.	"	"	<i>C. rhodochlyamys grandis</i> (Blyth)	Red mantled Rose Finch	
150.	"	"	<i>C. erythrurus roseatus</i> (Blyth)	Common Rose Finch	
151.	"	"	<i>Callacanthus burtont</i> (Gould)	...	
152.	"	"	<i>Serinus pusillus</i> (Pallas)	Gold fronted Finch	
153.	"	"	<i>Carduelis spinoides spinoides</i> (Vigors)	Himalayan Green Finch	
154.	"	"	<i>Leucosticte nemoricola altaica</i> (Eversman)	Hodgson's Mountain Thrush	
155.	"	"	<i>Exberiza fucata arcuata</i> (Sharpe)	Grey headed Bunting	
156.	"	"	<i>E. stewarti</i> (Blyth)	White capped Bunting	
157.	"	"	<i>E. cia stracheyi</i> (Moore)	Rock Bunting	
158.	"	"	<i>Melophus lathamii</i> (Gray)	Crested Bunting	

Mammals

1.	Artiodactyla	Bovidae	<i>Capricornis sumatraensis thar</i> (Hodgson)	Serow	Emu
2.	"	"	<i>Naemorhedus goral goral</i> (Hardwicke)	Goral	Sar
3.	"	"	<i>Capra ibex sibirica</i> (Pallas)	Siberian Ibex	Kin
4.	"	"	<i>Pseudois nayaur nayaur</i> (Hodgson)	Blue Sheep	Pho
5.	"	"	<i>Hemitragus jemlahicus jemlahicus</i> (Smith)	Himalayan Thar or Thar	

1	2	3	4	5	6
6.	<i>Artiodactyla</i>	<i>Bovidae</i>	<i>Ovis ammon hodgsoni</i> (Blyth)	Argali wild sheep	<i>Pho</i>
7.	"	"	<i>Moschus moschiferus</i>	Musk Deer or Kastura	<i>Kyrock or Bena</i>
8.	"	"	<i>Moschiferus</i> (Linnaeus)		
	"	"	<i>Muntiacus muntjak</i>	Indian Muntjak or Barking Deer	<i>Kakkar</i>
9.	<i>Carnivora</i>	<i>Ursidae</i>	(Zimmermann)		
			<i>Selenarctos tibetanus laniger</i> (Pocock)	Asiatic Black Bear	<i>Rikha, Hom</i>
10.	"	"	<i>Ursus arctos isabellinus</i> (Horsfield)	Red Bear	<i>Shaham</i>
11.	"	<i>Felidae</i>	<i>Felis bengalensis horsfieldi</i> (Gray)	Leopare Cat	<i>Bon pishi</i>
12.	"	"	<i>Felis chaus affinis</i> (Gray)	Jungle Cat	<i>Bon pishi</i>
13.	"	"	<i>F. lynx isabellina</i> (Blyth)	European Lynx	
14.	"	"	<i>Neofelis nebulosa</i> (Griffith)	Gloued Leopard	
15.	"	"	<i>Panthera uncia</i> (Schreber)	Ounce or Snow Leopard	
16.	"	"	<i>P. pardus</i> (Linnaeus)	Leopard	<i>Thar</i>
17.	"	<i>Mustelidae</i>	<i>Martes flavigula</i> (Boddaerd)	Yellow Throated Marten	
18.	"	"	<i>Mustella kathia</i> (Hodgson)	Yellow bellied weasel	
19.	"	<i>Canidae</i>	<i>Canis aureus</i> (Linnaeus)	Asiatic Jackal	
20.	"	"	<i>Vulpes vulpes montana</i> (Pearson)	Common Red Fox	<i>Shalich</i>
21.	"	<i>Viveridae</i>	<i>Paguma larvata wroughtoni</i> (Schwarz)	Masked Plam Civet	
22.	<i>Ciroptera</i>	<i>Pteropidae</i>	<i>Pteropus giganteus giganteus</i> (Briinnich)	Indian Flying Fox	
23.	<i>Rodentia</i>	<i>Sciuridae</i>	<i>Petaurista petaurista nlbiventer</i> (Gray)	Common giant Flying Squirrel	

1	2	3	4	5	6
24.	<i>Rodentia</i>	<i>Sciuridae</i>	<i>Marmota bobak</i> (Muller)	Bobak Marmot or Himalayan Marmot	
25.	"	<i>Hystricidae</i>	<i>Hystrix indica indica</i> (Kerr)	Indian Crested Porcupine	<i>Shahi</i>
26.	<i>Primates</i>	<i>Cercopithecidae</i>	<i>Presbytis entellus ajax</i> (Pocock)	Langur or Entellus Monkey	<i>Gones</i>
27.	"	"	<i>Macaca mulata mulata</i> (Zimmermann)	Rhesus Monkey	<i>Bandres</i>
Fishes					
1.	<i>Clupeiformes</i>	<i>Salmonidae</i>	<i>Salmo trutta Fario</i> (Linnaeus)	Salmo trout	<i>Maches</i>
2.	<i>Cypriniformes</i>	<i>Cyprinidae</i>	<i>Schizothorax plagiotomus</i> (Heckel)		
Amphibian					
1.	<i>Anura</i>	<i>Rehidae</i>	<i>Rana limnocharis</i> (Wiegman)		
Lizards					
1.	<i>Sauria</i>	<i>Geckonidae</i>	<i>Hemidactylus</i> sp.	Common House Gecko	
2.	"	<i>Agamidae</i>	<i>Agama tuberculata</i> (Gray)	Rock lizard	
3.	"	"	<i>Calotes Versicolor</i> (Daudin)	Garden lizard or Blood sucker	<i>Chemmar</i>
4.	"	<i>Cacertidae</i>	<i>Tachydromus</i> sp.	Blood sucker	
Snakes					
1.	<i>Ophidia</i>	<i>Colubridae</i>	<i>Ptyas korrosus</i> (Schlegel)	Indo-Chinese Rat Snake	
2.	"	<i>Elapidae</i>	<i>Bungarus caeruleus</i> (Schn.)	Kraite	

APPENDIX III

Chironing of Badri Nath

(See page 53)

मोथरा विन्दरावोनच शुभ देवतागो उपवेशिद
दैरंग नीमा मुल्क जौलथील तोचे ।

मुल्क जौलथील कुमो कोईलासु बाल दामेसू
चारू दैतैच तोचे ।
ठैपंगु पुरनिंगु दैतैच गांगरिउ बाल तोचे
दोमया तिश यूने तिश गोलसैंग तोशिद
दोमया नाले लानशिद, खोनयाले लानशिद
दोक दोमया मुल्क प्रकट तोच
दोमया तियोच साक गोरेशिद सलोच आनंग जोमयाशिद
दोमया ठाट बाट देन बिशालयाशिद, दंगच सारशिशिद
दोमया द्वारिका कुमो असैसू राज तोच
आसैसू राजुदोक छेया लानोक
वै दवा राजधानी खींचयाक
दंगच सारशिस बौदरी थानू कुमो बच
शुभनुदवाचा काकचैच
तोन पूरनू दवा तोशेश
आनपूतू टोहरी बयोश
देवपूतू बशहर राजधानी तांगेस बक
दोमया गुगेयी काल मलोक,
गढवालू कुखयंग मलोक ।
दोमया बशहरो राजधानीयू तांगेस वीरदेक
दोमया बानासुरु लादगं तोच
ठाकराईयू राज तोच
दोमया ठाकराईयू राजू मारेक,
बानासुरु हरायेक
सिगु थाबिस, हाथयू कुंडिस, रोनू सयान कीतैक, थापेक ।
पहाडयू देन ठाकरेसु हरायाया
मुखोविशनायू हरायाया
दोमया जगच सारशेक
तांगलिंगं ठाकरेस तोचे, ठाकरेसू मारेक ।
दंगच सारशेक, चिने ऐमुरचू हरायेक
लामेस कौटंग डोलैक
युशू वीर खोलगानू बानैक
दंगच सारशेक, चिने ऐमुरचू हरायेक

लामेस कौटंग डोलैक
युशू वीर खोलगानू बानैक
दंगच सारशिस चौलिंग ठाकरेस तोचे दो लो मरिक
दंगच सारशेक सुन्नतपुर सौरानंग, कुलीनंग तोचे,
दोमया गस कुलीच जंग लानीक
दोमया श्रै डंगच सारशेक कांची नोगरिंगी
दवा दोसरथ राई प्रदुमनसिंह चन्दरबंसी
राज सौरानंग राजधानी कायम लानोक ।
दोमया सौरानंग पोरेसू कुनी खै काटैक ।
चूरी पोरेसू रोना जाश पंगोक
दोमया दयोगत गुरुस भाग बान्ठौ कैरोश
दोमया आगू कोईलासू कुमो वजीरी चलायेसू
भाग बांठौ कैरोश ।
दोमया डोमयानू तोगोतूदेन तीस २
टिको खानचैसू जिम्मावारी कैरोश
जैशमंग खुनंग आंग युमच कुशे
खाव नमग्यो शोंग, छितकुलु शोंग,
शोंग रिंग टुकपा खुनंग आंग युमच कुशे ।
बजीर इनपाल दोमया आंग युमच कुशे ।
दोमया बजीर इनपाल रंग आंग
गौकी माटियूदेन धीरोमचारा बानधेशे ।
दोमया आंग जागो याद लाननू
शोंग बोरयान, चासंग सैरयान, सांगला
चोनसयान, मौने दुक्कान,
बसैरिंग शानटैसटी, राकछाम विलैन्दू,
छितकुलु बोंगयाटो, आंग जागो याद लाननू साराको माथा ।

Hindi rendering of the chironing

मथुरा वृन्दावन में तीन देवते प्रकट हुए ।
उस समय पृथ्वी पानी के नीचे थी पानी इतना था कि कैलाश
की चोटी बल के कंधे के बराबर बाहर थी ।
(कन्नौरी) काली टोपी के बराबर गांगरी (जो कि मानसरोवर
के निकट है) की चोटी बाहर थी ।
उस समय सात सूर्य और सात चाँद प्रकट किए गये और
हुनियां में भरे पानी को सुखाया गया ।
उस समय हमने पृथ्वी को प्रकट किया ।

उस समय पानी में से मनुष्य और जीव जन्तु पैदा किए गये और थोड़ा अनाज पैदा किया गया।
 उस समय मथुरा वृन्दावन का सारा प्रबन्ध करके वहां से यह तीन देवते द्वारिका पहुंचे।
 उस समय द्वारिका में अमुरों का राज था।
 अमुरों के राज को समाप्त किया।
 वहां पर राजधानी कायम की।
 वहां से हम बद्रीनाथ चले गये।
 तीन भाईयों ने वहां पर हिस्से बांटे।
 तप पूर्ण वहीं ठहरे (जो सबसे बड़े थे)।
 अन्नपूर्ण जिसे राजपूर्ण भी कहते हैं और मंभले भाई थे वे टिहरी गढ़वाल गये, देवपूर्ण (कामरु बद्रीनाथ) बुशहर की राजगद्दी कायम करने आए।
 उस समय गुगे (तिब्बत में) परगना का निचला भाग यानि तिब्बत के अन्तिम सरहद और गढ़वाल के कुछ भाग को काटते हुये इन दोनों के बीच से होते हुये बुशहर की राजधानी कायम करने के लिये कामरु आए।
 उस समय बुशहर में बानासुर राज करता था।
 ठाकुरों के भी छोटे २ राज्य थे। उस समय ठाकुरों के राज को खत्म किया, बानासुर को भी हरा दिया।
 सिंह के पंजे से, हाथी की सूंड से कामरु किले की नींव रखी।
 सबसे पहिले पहाड़ियूदेन ठाकरेस नामक कामरु के ठाकुर को खत्म किया उसके बाद मुखोविशानान नामक सांगला ठाकुर को मारा।
 उसके बाद यहाँ (कामरु) से चल पड़ा।
 ताँगनिंग में ठाकुर था उस को मार दिया।
 वहां से चल पड़ा और चिनी के ऐपुरच नामक ठाकुर को मार कर, वहां के किले को गिराकर युशु नामक जगह से रास्ता बनाकर चोलिंग पहुंचा।
 चोलिंग में ठाकुर रहता था उसको भी मार दिया।
 वहां (चोलिंग) से सराहन गया।
 वहां पर बानासुर को हराया और उसके राज्य को खत्म किया।
 सतलुज के पार यानि पन्द्रावीस परगना के लोगों को सराहन लाकर उसके आस पास बसाया।
 उस समय वहां से कांची नगरी गया जहां दशरथ के वंश के पूर्वज प्रद्युम्न सिंह चन्द्रवंशी रहते थे।

उनको लाकर सराहन की राजगद्दी पर बिठाया और राजधानी कायम हुई।
 उस समय सराहन की रक्षा करने के लिये कुनी में खाई बनादी और कामरु किला की रक्षा के लिये राकछम गांव से नीचे रोना में डब्बर भर दिये।
 उस समय गुरु (सराहन की भीमाकाली) ने मुझे राजा की गद्दी पर, बिठाना और कैलाश पर्वत के चारों ओर वजीरी चलाना, यह मेरे भाग (हिस्से) में दिये।
 उस समय मुझे यह जिम्मेवारी दी कि राजा को तबत पर बिठाकर टिका लगाया करें।
 जेष्ठ खूंद (दुकया खूंद) मेरी वजह से कहलाया गया और प्रसिद्ध हुआ।
 खाब और नमगया से नीचे, छितकुल से निचे, शींग से ऊपर दुकपा खूंद मेरी वजह से कहलाया गया।
 इनपाल वजीर (पवारी वजीर) मेरी वजह से कहलाया गया।
 उस समय वजीर इनपाल के साथ मेरा गोफो हलोटी में धर्मचारा लगा और मेरे तमाम प्रबन्ध का जिम्मेवार बनाया गया।
 परगना बाहरली दुकपा में भी गांव २ में कुछ खानदान चुने गये जिनकी जिम्मेवारी बद्रीनाथ के काम को चलाने की थी।
 यह खानदान शींग का बौरयान, चासंग का सैरयान, सांगला का धनसयान (रैपालटो) कामरु का दूभयान, बटसेरी का शानटैसटो, राकछम का विलेन्द्र और छितकुल का बोगयाटो हैं।

APPENDIX IV

(See page 55)

Genealogy at Kamru

1	Parduman Singh	41	Padesri
2	Chhubal Singh	42	Malbahadar
3	Ser	43	Gopi
4	Kamal	44	Gurbadal
5	Gulab	45	Jagat
6	Vardev	46	Amrit
7	Mehrup	47	Dalbadar
8	Hari	48	Neil
9	Sarjit	49	Haripad
10	Jagbir	50	Fateh
11	Raghu	51	Amar
12	Gopal	52	Mahabadar
13	Hari Charan	53	Salar
14	Makarman	54	Jagbe
15	Mudai	55	Jogdeyal
16	Bhup	56	Dalab
17	Umed	57	Mador
18	Harkar Pal	58	Dalip
19	Karpal	59	Jagtav
20	Har Dev	60	Guman
21	Salab	61	Parmodh
22	Bima	62	Mahipar
23	Bagal	63	Sarv
24	Purva	64	Salehi
25	Mehar	65	Gorkokal
26	Sabla	66	Pardevar
27	Hami	67	Varpal
28	Jawar	68	Charmed
29	Gavardan	69	Darjod
30	Jagbir	70	Darkori
31	Surjan	71	Pritam
32	Madan	72	Sagar
33	Gobind	73	Ran
34	Pritam	74	Dhirjamehar
35	Gurdari	75	Mangal
36	Kisan	76	Gorsi
37	Visan	77	Lakhi
38	Raghunath	78	Prabhubhajan
39	Devi	79	Duman
40	Charan	80	Dankrit

81	Daldin	102	Darmorat
82	Pardeu	103	Charmal
83	Mari	104	Jabala
84	Amlar	105	Gvasdal
85	Dhari	106	Amrit
86	Basath	107	Sar
87	Karam	108	Krishan
88	Prem	109	Hari
89	Dast	110	Jabar
90	Charan	111	Bhup
91	Birvesi	112	Kalyan
92	Kesari	113	Kehri
93	Parjit	114	Vijay
94	Dharam	115	Udai
95	Kamal	116	Ram Singh
96	Chhatar	117	Rudar
97	Amar	118	Ugar
98	Karal	119	Mahinder
99	Tapnath	120	Samesar
100	Sagram	121	Padam
101	Suraj	122	Vir Bhadra Singh

Genealogy at Rampur

1	Parduman	21	Nardev
2	Anurudh	22	Suraj
3	Jamal	23	Bhim
4	Nahar	24	Surmangal
5	Kamal	25	Surma
6	Jagat	26	Mehar
7	Burid	27	Jamal
8	Surat	28	Gajpati
9	Narje	29	Jawahar
10	Sarjit	30	Gavardahan
11	Juginder	31	Jagbarat
12	Raghu	32	Surgian
13	Gopal	33	Madan
14	Haricharn	34	Garjan
15	Badama	35	Jabiv
16	Budhipati	36	Girdhari
17	Bhavni	37	Kishan
18	Ran Badal	38	Krishan (Visan)
19	Padam	39	Raghunath
20	Gurban	40	Devi

41 Charan	63 Nardev
42 Parmeshwar	64 Narsingh
43 Dalbadal	65 Gurubhagat
44 Gujrao	66 Mardhan
45 Garbadal	67 Nardal
46 Jagat	68 Dev
47 Anirudh	69 Darjodhan
48 Balbadur	70 Dhenugaj
49 Bhagwan	71 Pritam
50 Hari	72 Sar
51 Amar	73 Ratan
52 Madbhar	74 Dhajbhor
53 Ranmar	75 Mangal
54 Jagpati	76 Sursen
55 Joginderpal	77 Bhabhi
56 Dalpati	78 Haribhajan
57 Budhwan	79 Dhanbharat
58 Dalip	80 Bharat
59 Jagpati	81 Halsen
60 Tan	82 Nardev
61 Narmoh	83 Sar
62 Manihar	84 Amar

The genealogy of the last twelve rulers is as under :-

- 120 Chhatar Singh
- 121 Kalyan Singh
- 122 Kehri Singh
- 123 Vijay Singh
- 124 Udai Singh
- 125 Ram Singh
- 126 Rudar Singh
- 127 Ugar Singh
- 128 Mahindar Singh
- 129 Shamsher Singh
- 130 Padam Singh
- 131 Vir Bhadra Singh

APPENDIX V

TEMPLES

(See page 83)

Devi or Kali Cult

Bhagwati temple at Rakchham, Bhimakali temple at Kamru and Mathi at Chhitkul in Sangla tahsil; Chandika temple at Kothi in Kalpa tahsil; Chandika temple at Ropa, Khandma temple at Kanam, Khurmo Devi temple at Spilo in Puh tahsil; Chiterlekha at Taranda, Hirma Devi temple at Chauhra, Ukha Devi temple at Bara Kamba and Ukha Devi temple at Nachar in Nachar tahsil; Kali temple at Chuling in Hangrang sub-tahsil.

Siva Cult

Mahasu temple at Telangi and Parka Shankras at Pawari in Kalpa tahsil; Maheshras temple at Chagaon, at Gramang or Katgaon, at Sungra or Grosnam in Nachar tahsil and Rupak Shankras at Thangi in Morang tahsil.

Vishnu Cult

Badri Nath at Kamru or Mone, Badri Narayan at Batseri, Narenas at Chasu, at Kilba, at Shaung in Sangla tahsil; Kuldeo Narayan at Namgya in Puh tahsil; Kumshoo Narayan at Bei (pargana Bhabha), at Kafnu (pargana Bhabha), Narenas at Chagaon, at Gramang, at Sungra and at Urni in Nachar tahsil; Narenas at Asrang and Tegtashoo (Narayan) temple at Lippa in Morang tahsil; and Narenas at Chini in Kalpa tahsil.

Dabla Cult

Dabla at Chango and at Hango in Hangrang sub-tahsil; and at Dabling, Dubling, Kanam, Namgya, Shyaso and Spuwa in Puh tahsil.

Deodum Cult

Deodum at Chuling, Hango and Nako (pargana Shuwa) in Hangrang sub-tahsil; at Kanam and Spilo in Puh tahsil.

Gyalbo Cult

Gyalbo at Hango and Shyalkhar in Hangrang sub-tahsil.

Kuldeo Cult

Kuldeo at Dutrang (pargana Bhabha) and Gharshu in Nachar tahsil.

Nag Cult

Dharang Nag at Yangpa, Nages at Kandar, Natpa, Yula, Nagin at Bari and Chhota Kamba in Nachar tahsil; Nages at Barang and at Mebar in Kalpa tahsil; Nages at Barua, Chasu, Rakchham, Sangla and Sapni in Sangla tahsil; and Rapang Nages at Asrang and Nagin at Asrang in Morang tahsil.

Naidak Cult

Naidak at Chuling and Hango in Hangrang sub-tahsil.

Pathoro Cult

Pathoro at Punang (pargana Rajgram) and Rarang in Morang tahsil.

Yulsa Cult

Yulsa at Chango and Shyalkhar in Hangrang sub-tahsil and at Sangnam in Puh tahsil.

Miscellaneous Cults

Basheshras at Pihu, Bashehru at Namgya, Chhakoling Dumbar at Labrang, Chola at Namgya and Tungma Dumbar (replaced by Swami) at Giabong in Puh Tahsil; Bhairon at Kothi, Chornee at Miru, Markaling at Khawangi, Sheshering at Pangi in Kalpa tahsil; Durjichimbo at Sumra, Jomato at Leo, Kumshoo at Hango, Pale at Hango, Purgueel at Nako and Shungma at Shyalkhar in Hangrang sub-tahsil; Gyangmagyum at Jangi, Kasurajas at Rirang or Ribba, Kulyo at Rispa, Milakyum at Akpa, Shang-chi-kyung at Nesang and Urmig at Morang in Morang tahsil; Shanshras at Rakchham in Sangla tahsil and Teras at Rupi in Nachar tahsil.

APPENDIX VI**UTENSILS**

(See page 108)

Sl. No.	Local name	English name
1.	<i>Korchhi</i>	Ladle
2.	<i>Lamthu</i>	A big brass or copper vessel
3.	<i>Bodu</i>	A round shaped cooking vessel
4.	<i>Digch</i>	A little kettle, a small pot
5.	<i>Dig</i>	A kettle, a pot
6.	<i>Lothi</i>	Cauldron
7.	<i>Tusna</i>	Iron hook
8.	<i>Chharpona</i>	Sieve
9.	<i>Ron Pan</i>	Iron griddle
10.	<i>Parat</i>	A big iron pan
11.	<i>Kunal</i>	A big brass pan
12.	<i>Chokthal</i> or <i>Tasla</i>	Basin
13.	<i>Musarbo</i>	A jar for wine
14.	<i>Kargyul</i>	Silver cup
15.	<i>Batich</i>	Cup
16.	<i>Nangch</i>	Small dish
17.	<i>Nang</i>	Platter
18.	<i>Galas</i>	Tumbler
19.	<i>Lotri</i>	Pot, lotah
20.	<i>Surahi</i>	Pitcher, jug
21.	<i>Gagri</i>	A vessel for containing oil etc.
22.	<i>Chimto</i>	Tongs
23.	<i>Arbo</i>	A vessel for washing hands
24.	<i>Ladanang</i>	Iron tripod
25.	<i>Handia</i>	Earthen pot
26.	<i>Gor</i>	Earthen vessel
27.	<i>Dongbo</i>	Tea churner
28.	<i>Kaning</i>	Mortar
29.	<i>Challang</i>	Sieve
30.	<i>Ponach</i>	A small ladle
31.	<i>Khyot</i>	Big spoon
32.	<i>Dakna</i>	Lid
33.	<i>Thumbu</i>	A big brass ladle
34.	<i>Zom</i>	A wooden vessel for carrying water
35.	<i>Chadig</i>	Tea pot

APPENDIX VII

ORNAMENTS

(See page 111)

Sl. No.	Name of ornament	Part of the body where used	Metal
1.	<i>Chak</i>	head	silver
2.	<i>Tanol</i>	head	silver
3.	<i>Zuti</i>	head	silver
4.	<i>Pipla</i>	head	silver
5.	<i>Tunki</i>	head	silver
6.	<i>Tanole</i>	head	silver
7.	<i>Dabmige</i>	head	silver
8.	<i>Mul-u</i>	ears	silver
9.	<i>Kantai</i>	ears	silver or gold
10.	<i>Jumku</i>	ears	silver
11.	<i>Khul Kantai</i>	ears	silver
12.	<i>Kante</i>	ears	gold
13.	<i>Laung</i>	nose	gold
14.	<i>Balu</i>	nose	gold
15.	<i>Khundoch</i>	nose	gold
16.	<i>Balak</i>	nose	gold
17.	<i>Likcha & shulikcha</i>	neck	coral or some precious stone.
18.	<i>Patkachang</i>	neck	silver
19.	<i>Chandra-malang or chandra-har</i>	neck	a silver garland containing beads of <i>moonga</i> , <i>pheroza</i> etc. and old silver coins of four annas, eight annas and a rupee.
20.	<i>Tungma, gou-tungma and chostung</i>	neck	front in silver and back in copper.
21.	<i>Tramani</i>	neck	necklace heaving three large gold beads.
22.	<i>Kontmala</i>	neck	silver
23.	<i>Daglo or taro or brindlo</i>	wrist	silver
24.	<i>Kagun</i>	wrist	silver or gold
25.	<i>Bang-pole</i>	toes	silver
26.	<i>Digra</i>	breast	silver (to fasten the two ends of shawl).
27.	<i>Tomukch</i>	breast	silver (to fasten the two ends of a <i>dhori</i> near left shoulder).

The ornaments of upper Kinnaur

1.	<i>Bairak</i>	head	It is made of cloth, <i>mul</i> (silver), <i>yu</i> , <i>tungrek</i> (white stone), <i>ragan</i> (brass, <i>churu</i> , <i>poshal</i> (yellow plastic) and <i>sar</i> (gold).
2.	<i>Konta</i>	ears	silver and <i>moonga</i>
3.	<i>Menthak</i>	ears	silver
4.	<i>Lonk or laung</i>	nose	gold
5.	<i>Tirmol</i>	neck	silver and <i>moonga</i>
6.	<i>Gaun</i>	neck	silver, gold and <i>pheroza</i>
7.	<i>Ulik and Konthi</i>	neck	<i>moonga</i>
8.	<i>Pashal or Gyamrang</i>	Fastened on shoulders with the help of hooks.	plastic, <i>moonga</i> , copper and silver
9.	<i>Dugu</i>	wrist	silver
10.	<i>Dunglak</i>	wrist	broken shell
11.	<i>Surtuk</i>	finger	silver
12.	<i>Digra</i>	breast	silver brooch

APPENDIX VIII

FESTIVALS

(See page 118)

Sl. No.	Tahsil/ sub-tahsil	Village	Fair/Festival	Dates and duration
1	2	3	4	5
Chaitra (March-April)				
1	Kalpa	Chini	Chatrol	Either on Tuesday or Saturday during the first week of the month.
2	—do—	Khawangi	—do—	In the bright half of the moon.
3	—do—	Kothi	—do—	—do—
4	—do—	Pangi	—do—	One day (on <i>Amawas</i>).
5	Leo	Sumra	Chishu	One day.
6	Morang	Jangi	Shupyat	One day during dark half.
7	—do—	Morang	Sarimating	One day during bright half.
8	—do—	Rarang	Chatrol	No fixed date.
9	—do—	—do—	Jithu	One day (fourteenth, bright half).
10	—do—	Ribba	Rokshu puja	One day, on 7th Chaitra.
11	Nachar	Chagaon	Chatrol	One day, on Saturday.
12	Puh	Kanam	—do—	On full moon day.
13	Sangla	Kamru	—do—	Occasionally in the month.
14	—do—	(Mone)	—do—	Two days, on Saturday or Tuesday during <i>Navratras</i> .
15	—do—	Rakchham	Navratra	One day on 1st <i>Navratra</i> .
	—do—	Sangla	Chatrol	For two days, no fixed date.
Vaisakha (April-May)				
16	Kalpa	Barang	Beesh	Two days, on 1st and 2nd.
17	—do—	Chini	—do—	On 1st.
18	—do—	Duni	—do—	Two days, on 1st and 2nd.
19	—do—	Khawangi	—do—	On 1st.
20	—do—	Kothi	—do—	—do—
21	—do—	Pangi	—do—	—do—
22	—do—	—do—	Phloring	One day, (after flowering of <i>chuli</i> and <i>baimi</i>).

1	2	3	4	5
23	Kalpa	Pawari	Beesh	Two days, on 1st and 2nd.
24	—do—	Roghi	—do—	On first.
25	—do—	Telangi	—do—	Two days, 1st and 2nd.
Jyaistha (May-June)				
26	Leo	Hango	Urgin	Two days, (during bright half).
			Gyalja	
27	—do—	—do—	Laitahsi	One day, following Urgin.
28	Morang	Jangi	Beesh	Two days, on 1st and 2nd.
29	—do—	Lippa	—do—	—do—
30	—do—	Morang	—do—	—do—
31	—do—	—do—	Kulang	One day.
			Shuyun	
32	—do—	Nesang	Saringkora	—do—
33	—do—	Rarang	Beesh	One day, on 1st.
34	—do—	Ribba	—do—	Two days, on 1st and 2nd.
35	—do—	Rispa	—do—	One day, on 1st.
36	—do—	—do—	Remnes	On full moon day.
37	—do—	Thangi	Beesh	One day, on 1st.
38	Nachar	Chagaon	Bishu	—do—
39	—do—	Chauhra	Beesh	—do—
40	—do—	Catgaon	—do—	Two days, on 1st and 2nd.
		(Gramang)		
41	—do—	Natpa	—do—	Three days, 1st to 3rd.
42	—do—	Rupi	Bishu	—do—
43	Puh	Giabong	Beesh	One day, on 1st.
44	—do—	Kanam	—do—	Three days, 1st to 3rd.
45	—do—	—do—	Labrang	For one day.
			Zalma	
46	—do—	Puh	Giza	Seven days, during bright half.
47	—do—	Ropa	Beesh	One day, on 1st.
48	—do—	Sangnam	—do—	Five days, from 1st.
49	Sangla	Kamru	—do—	Three days, from 1st.
		(Mone)		
50	—do—	Kilba	—do—	One day, on 1st.
51	—do—	Rakchham	—do—	—do—
52	—do—	Sangla	—do—	—do—
53	—do—	Shaung	—do—	Two days, on 1st and 2nd.
54	—	—	Raskayang	Throughout Kinnaur.

1	2	3	4	5
Jyaistha (May-June)				
55	Kalpa	Khawangi	Purchun	In the bright half of the moon.
56	—do—	Kothi	—do—	—do—
57	—do—	Pangi	Jesthang Chhecha	One day (10th of bright half).
58	—do—	Pawari	Ramnes	One day on full moon day.
59	—do—	Roghi	Jeshtang Songa	One day on 15th.
60	Leo	Sumrah	Chishu	One day.
61	Morang	Morang	Pita Paza	—do—
62	—do—	Nesang	Giza	One day, on full moon day.
63	—do—	Rarang	Dumgyurjal	One day (<i>Buddha Purnima</i>).
64	—do—	Ribba	Ramnes	Two days, on 14th and 15th of bright half.
65	—do—	Rispa	—do—	One day, on full moon day.
66	—do—	Thangi	Jeshtang Songa	One day, no fixed date.
67	Nachar	Chagaon	Airatang	On twenty-fifth.
68	—do—	Katgaon	Jeshtang	One day, on 1st.
69	—do—	(Gramang)	Sankrantang	—do—
70	Puh	Natpa	Sankrantang	—do—
71	—do—	Giabong	Jangyachen	One day.
72	—do—	Kanam	Labrangjalma ...	—do—
73	Sangla	Ropa	Jangyachen	One day.
74	—do—	Kamru (Mone)	Rola Chhango	Every night from 1st to 15th.
		Sangla	Jeshtang Songa	...
Asadha (June-July)				
75	Kalpa	Kothi	Ashletang	One day, during bright half.
76	—do—	Telang	Jeshtang	On 1st.
			Sankrantang	—do—
77	Leo	Shyalkhar	Bumkar	One day, on full moon day.
78	—do—	Jangi	Dumgyur	One day, on 12th.
			Jalkha	—do—
79	Morang	Lippa	Kangyur	Two days, on 1st and 2nd.
			Jalkha	—do—
80	—do—	Morang	Ramnes	One day, on 8th or 9th of bright half.

1	2	3	4	5
81	Morang	Nesang	Nazal	One day, on 10th of bright half.
82	—do—	Ribba	Ramnes	One day, during bright half.
83	—do—	Rispa	Ponasing	Two days, on 14th and 15th of bright half.
84	—do—	Rarang	Bhojang	One day, (date determined by the deity).
85	—do—	Thangi	Bagh Jatrang	One day, no fixed date.
86	Nachar	Chagaon	Ashletang	On full moon day.
87	Puh	Kanam	Surpu Gunfa	One day, on 7th.
88	—do—	—do—	Jalma Kangyur	One day, on 15th.
89	—do—	Spilo	Jalma Dumgyur	...
90	—do—	Labrang	Chhokten	...
91	—do—	Puh	Jalma Rangjun	Two days.
92	—do—	—do—	Giza	...
93	—do—	Spilo	Kailash	...
94	Sangla	Kamru (Mone)	Jalma Shushtan	One day, on 14th of bright half.
95	—do—	Rakchham	Marja	Two days, commencing either on Saturday or Tuesday.
Sravana (July-August)				
96	Kalpa	Brelangi	Udaneyang	...
97	—do—	Chini	Dakhrain	On 1st.
98	—do—	Khawangi	—do—	—do—
99	—do—	—do—	Udaneyang	In the dark half of moon.
100	—do—	Kothi	Dakhrain	On 1st.
101	—do—	—do—	Udaneyang	In the dark half of moon.
102	—do—	—do—	Shonetang	One day, during bright half.
103	—do—	—do—	Koshme Shukud	Date is fixed by Chandika Devi.
104	—do—	Pangi	Dakhrain	For three or five days.
105	—do—	Pawari	—do—	One day, on 1st.
106	—do—	Roghi	—do—	—do—

1	2	3	4	5
107	Kalpa	Telang	Dakhrain	One day, on 1st.
108	Leo	Chango	Namganchuan	One day.
109	—do—	Shyalkhar	—do—	Two days.
110	Morang	Jangi	Dakhrain	Two days, on 1st and 2nd.
111	—do—	Lippa	—do—	—do—
112	—do—	Morang	—do—	One day, on 1st.
113	—do—	—do—	Rangkonching	On 14th and 15th of bright half.
114	—do—	Rarang	Dakhrain	Three days, from 1st.
115	Morang	Ribba	—do—	One day, on 1st.
116	—do—	Rispa	—do—	—do—
117	—do—	Thangi	Sawanang Santhang	Throughout the month on alternate nights.
118	Nachar	Chagaon	Dakhrain	On 1st.
119	—do—	Chauhra	Dakhlaini	One day.
120	—do—	Kashpo (Nachar)	Shonetang	One day, on 15th.
121	—do—	Katgaon (Gramang)	Dakhrain	One day, on 1st.
122	—do—	—do—	Shonechang	Seven days, during bright half.
123	—do—	Natpa	Dakhrain	One day, on 1st.
124	—do—	Rupi	—do—	Three days, from 1st.
125	Puh	Kanam	—do—	One day, on 1st.
126	Sangla	Kamru (Mone)	—do—	Two days, from Saturday or Tuesday.
127	—do—	Kilba	—do—	One day, on 1st.
128	—do—	Rakchham	Shonetang	One day, on 20th.
129	—do—	Sangla	Dakhrain	...
130	—do—	Shaung	—do—	Two days, no fixed date.

Bhadra (August-September)

131	Kalpa	Barang	Ukhyang	Five days, commencing on 19th.
132	—do—	Chini	Penasing	On 7th.
133	—do—	—do—	Jagro	On 20th.
134	—do—	Khawangi	Homang	...
135	—do—	Kothi	—do—	...
136	—do—	Pangi	Jagro	Two days, on 20th & 21st.
137	—do—	—do—	Ponasing	One day, during bright half.
138	—do—	Pawari	Bhadrang songa	One day, on 15th.

1	2	3	4	5
139	Kalpa	Telang	Koshme	During first week.
140	Leo	Hango	Namgan	Five days, from 18th.
141	—do—	—do—	Manthoke or Jogtog	...
142	—do—	Leo	Namgan	Five days, commencing from 18th.
143	—do—	Nako	Namganchuan	Four days.
144	—do—	—do—	Namganchheya	Two days, on 27th & 28th.
145	—do—	Sumra	Namganchuan	Three days.
146	Morang	Jangi	Rangkorang	Two days, (once in three years).
147	—do—	Lippa	Changmang	...
148	—do—	Morang	Jagro	Two days, on 4th and 5th.
149	—do—	Nesang	Niza	One day, on 20th.
150	—do—	Rarang	Ponas or Ponasing	One day, on 14th of bright half.
151	—do—	Ribba	Jeu Ukhyang	One day, on 10th.
152	—do—	—do—	Niza	One day, on 20th.
153	—do—	—do—	Ukhyang	From 28th.
154	—do—	Rispa	Niza (Jagro)	One day.
155	—do—	Thangi	Rangkorang chim	Two days, between 5th and 10th.
156	Nachar	Chagaon	Ponasing	On full moon day.
157	—do—	Chauhra	Chauhra	One day, on 17th or 18th.
158	—do—	Katgaon	Ponasing	One day, on full moon day.
159	—do—	Punang	Ukhyang	Four days, from 20th.
160	—do—	Ramni	—do—	—do—
161	—do—	Rupi	—do—	Five days, from 7th.
162	Puh	Giabong	Uo	Two days, on 20th and 21st.
163	—do—	Kanam	Menthoko	One day, on 19th or 20th.
164	—do—	Namgya	Shuktuk	Three days, from 14th.
165	—do—	Puh	—do—	Two days.
166	—do—	Ropa	Uo	Two days, on 20th and 21st.
167	—do—	Rushkalang	Ukhyang	Five days, from 20th.
168	—do—	Sangnam	Menthoko	Five days, from 20th.
169	Sangla	Kamru	Janam Ashtmi	One day.
170	—do—	—do—	Ukhyang	Three days, from 19th
171	—do—	Kilba	—do—	Four days, from 20th.
172	—do—	Rakchham	Usko (Ukhyang)	Four days, from 20th.
173	Sangla	Sangla	Ukhyang	...

1	2	3	4	5
174	Sangla	Sapni	Ukhyang	Eight days, from 16th.
175	—do—	Shaung	—do—	Three days, from 19th.
176	—do—	—do—	Jagro	One day, on Tuesday or Saturday.
Asvina (September-October)				
177	Kalpa	Chini	Ukhyang	On Dussehra day.
178	—do—	Khawangi	—do—	Five days, from 10th of bright half.
179	—do—	Kothi	—do—	—do—
180	—do—	Pangi	—do—	Three days, from Dussrhra.
181	—do—	Pawari	—do—	Three days, from 1st.
182	—do—	Roghi	—do—	Three days, after Dussehra.
183	—do—	Telangi	—do—	On Dussehra day.
184	Leo	Shyalkhar	Namgan	One day.
			Chhetpo	
185	—do—	Sumra	Namgancha	Two days.
186	Morang	Jangi	Ukhyang	Four days, from 20th.
187	—do—	Morang	—do—	Seven days, from 1st.
188	—do—	Nesang	Shirkan	—do—
189	—do—	Rarang	Ukhyang	Three days, from 20th.
190	—do—	Rispa	—do—	Five days, from 1st.
191	—do—	Thangi	—do—	—do—
192	Nachar	Chagaon	—do—	25th to 31st.
193	—do—	Chauhra	—do—	Three days, from 20th.
194	—do—	Natpa	—do—	—do—
195	Puh	Kanam	Namkyangma	...
			Ukhyang	
196	Sangla	Kamru	Ukhyang	Three days, from 19th.
		(Mone)		
197	—do—	—do—	Dang	Two days, no fixed date.
			ukhyang	
198	—do—	Rakchham	Jagro	One day, on 20th.
199	—do—	Sangla	Gato Ukhyang	...
			or Dang	
			Ukhyang	

1	2	3	4	5
Kartika (October-November)				
200	Kalpa	Roghi	Diwal	One day, on <i>amawas</i> .
201	Leo	Chango	Namgancha	Three days.
202	—do—	Hango	Rofu	—
203	Morang	Changmang	Ganga fair	...
		(above Lippa)		
204	—do—	Jangi	Shurgurich	Two days, on 10th and 11th.
205	—do—	Lippa	Ukhyang	Three days, from 3rd.
206	—do—	Morang	Jai Ukhyang	Two days, on 1st and 2nd.
207	Nachar	Jani	Ukhyang	Three days, from 1st.
208	—do—	Katgaon	—do—	Seven days, from 10th.
209	Puh	Giabong	—do—	...
210	—do—	Kanam	Shirkan	Five days, from 7th.
211	—do—	Namgya	—do—	Three days, from 7th.
212	—do—	Puh	—do—	Seven days, from 1st.
213	—do—	Ropa	Ukhyang	...
214	—do—	Rushkalang	Shirkan	Five days, from 1st.
215	Sangla	Kamru	Jagro	Two days, no fixed date.
		(Mone)		
216	—do—	—do—	Rig Diwal	One day, on <i>amawas</i> .
217	—do—	Sangla	—do—	...
Agarahayana (November-December)				
218	Kalpa	Barang	Diwal	...
219	—do—	Chini	—do—	On <i>amawas</i> .
220	—do—	—do—	Shogch	This takes place in annual turns.
221	—do—	—do—	Rathin	—do—
222	—do—	Chini	Pathoran	This takes place in annual turns.
			Samyan	
223	—do—	Khawangi	Diwal	Two days, during dark half.
224	—do—	—do—	Khaning	Two days.
225	—do—	Kothi	—do—	—do—
226	—do—	Pangi	Diwal	Five days, during dark half.
227	—do—	—do—	Khaning	One day, (date determined by Chandika of Kothi).
228	—do—	Pawari	Diwal	One day, on 15th of dark half.
229	—do—	Telangi	—do—	In the dark half of the moon.

1	2	3	4	5
230	Leo	Chango	Losar	Three days.
231	—do—	Shyalkhar	—do—	On 13th and 14th of bright half.
232	Morang	Morang	Diwal	Two days, from <i>amawas</i> .
233	—do—	Rarang	Sholing	Three days, from 13th.
234	—do—	—do—	Diwal	One day before <i>amawas</i> .
235	—do—	—do—	Khepa	One day.
236	—do—	Ribba	Diwal	11th of dark half.
237	—do—	Rispa	—do—	One day, on 15th of dark half.
238	—do—	Thangi	Duiyal	One day, on 15th of dark half.
239	Nachar	Chagaon	Diwal	On <i>amawas</i> .
240	—do—	Chauhra	Deoli	One day, (date determined by Sungra Maheshras).
241	—do—	Katgaon	Manu	One day, (date determined by Maheshras of Bhabha).
242	—do—	Natpa	Diwal	One day, no fixed date.
243	—do—	Rupi	Deoli	Three days, (date determined by the deity).
244	—do—	Sungra	Diwal	One day, date determined by the local deity).
245	Puh	Kanam	Khwangri	Three days, from 5th of the bright half.
246	—do—	—do—	Khepa	Three days, from 9th of dark half.
247	Sangla	Kamru	Diwal	One day, (one month after Diwali).
248	—do—	Kilba	—do—	One day, on <i>amawas</i> .
249	—do—	Rakchham	—do—	—do—
250	—do—	Sangla	—do—	...
251	—do—	Shaung	—do—	One day, on <i>amawas</i> .
Pausa (December-January)				
252	Kalpa	Chini	Rathin	...
253	—do—	Khawangi	Khepa	Two days, on <i>amawas</i> , and a day earlier.
254	—do—	Kothi	—do—	One day, (date determined by the Chandika of Kothi).
255	—do—	Pangi	—do—	—do—
256	—do—	Pawari	Parkaoning	One day, no fixed date.

1	2	3	4	5
257	Kalpa	Roghi	Khepa	Commences either on Tuesday or Saturday in the dark half of moon.
258	—do—	Telanghi	—do—	On the date determined by the Chandika of Kothi.
259	Leo	Hango	Losar	Three days, from Ist.
260	—do—	Leo	—do—	—do—
261	—do—	Noko	—do—	Three days.
262	—do—	Sumra	—do—	—do—
263	Morang	Jangi	—do—	Three days, from 9th of bright half.
264	—do—	Lippa	—do—	—do—
265	—do—	Morang	—do—	Two days, on 7th and 8th of bright half.
266	—do—	—do—	Khepa	On 7th and 8th of the dark half.
267	—do—	Norang	Losar	Six days, from 13th of the dark half.
268	Morang	Rarang	Losar	Two days, on 9th and 10th.
269	—do—	Rispa	Khepa	Three days, from 15th of bright half.
270	—do—	—do—	Yungnas or Jungnas	...
271	—do—	Thangi	Losar	Two days, on 7th and 8th of bright half.
272	Nachar	Chagaon	Ponasing	On full moon day.
273	—do—	—do—	Ragul	—do—
274	—do—	Katgaon (Gramang)	Khepa	No fixed date.
275	Puh	Giabang	Losar	Five days, during bright half.
276	—do—	Kanam	—do—	—do—
277	—do—	Mamgya	—do—	Three days, during bright half.
278	—do—	Puh	—do—	Seven days.
279	—do—	Ropa	—do—	Five days, during bright half.
280	—do—	Sangnam	—do—	—do—
281	Sangla	Kamru (Mone)	Khepa	Three days, from 14th of the dark half.
282	—do—	Rakchham	—do—	One day, on <i>amawas</i> .
283	—do—	Sangla	Khepa	...
284	—do—	Shaung	—do—	One day, on 14th of the dark half.

1	2	3	4	5
285	Morang	Rispa	Aitang (Agitarang)	One day, during dark half, no fixed date.
Magha (January-February)				
286	Kalpa	Chini	Sazo	On 1st.
287	—do—	Khawangi	—do—	—do—
288	—do—	—do—	Mang Songa	One day, on 15th.
289	—do—	—do—	Jagang	One day, during bright half.
290	—do—	—do—	Ratingahukun	One day, (date determined by Chandika of Kothi)
291	—do—	Kothi	Sazo	One day, on 1st.
292	—do—	—do—	Mang Songa	One day, on 15th.
293	—do—	—do—	Jagang	One day, during bright half.
294	—do—	—do—	Ratingshukun	One day, (date determined by Chandika of Kothi).
295	—do—	Pangi	Sazo	One day, on 1st.
296	—do—	Pawari	—do—	Two day, on 1st and 2nd.
297	—do—	Roghi	—do—	One day, on 1st.
298	—do—	—do—	—do—	—do—
299	Leo	Hango	Lamoche	—
300	—do—	Leo	Yum	Seven days, from 8th.
301	—do—	Nako	Ngana	Four days, from 13th of bright half.
302	—do—	—do—	Rofu	Three days, (end of Magh).
303	—do—	Sumra	Guru	Three days, from 10th bright half.
304	Morang	Jangi	Sazo	One day on 1st.
305	—do—	Lippa	—do—	—do—
306	—do—	—do—	Mangh Shirang	Two days.
307	—do—	Morang	Urmig	Eight days, from 10th of bright half.
308	—do—	Nesang	Lamoche	Seven days, (after a month of Tapsya).
309	—do—	Rarang	Sazo	One day, on 1st.
310	—do—	Ribba	Suskar	...
311	—do—	Rispa	Sazo	As at Morang.
312	—do—	—do—	Mang	...
313	—do—	Thangi	Mangh Santhang	Eight days, from 10th of bright half.
314	Nachar	Chagaon	Sazo	On 1st.
315	—do—	—do—	Mangh Songa	On 15th.

1	2	3	4	5
316	Nachar	Chauhra	Sazo	Two days, on 1st and 2nd.
317	—do—	Katgaon (Gramang)	—do—	One day, on 1st.
318	—do—	—do—	Mangh Songa	One day, on 15th.
319	—do—	Rupi	Shujarch	Twenty day, no fixed date.
320	Puh	Kanam	Mangh Songa	Five days, from 15th.
321	—do—	—do—	Sazo	One day, on 1st.
322	—do—	—do—	Jokhya- Kushimig or Jokhya Chhugshimig	...
323	Sangla	Kamru	Sazo	One day, on 1st.
324	—do—	Kilba	Jagang	Three days commencing on Tuesday or Saturday during bright half.
325	—do—	Rakchham	Mangh Songa	One day, on 15th.
326	—do—	Sangla	Sazo	...
327	—do—	Shaung	—do—	one day, on 1st.
328	—do—	—do—	Mangh Songa	One day, on 15th.
Phalgun (February-March)				
329	Kalpa	Chini	Suskar	In the bright half of the moon.
330	—do—	Khawangi	—do—	For fourteen days, one month after jagang.
331	—do—	Kothi	—do—	—do—
332	—do—	Pangi	—do—	For eight days, (date deter- mined by Chandika Devi.)
333	—do—	Pawari	—do—	Eight days, no fixed date.
334	—do—	Roghi	—do—	On 7th of bright half of moon.
335	—do—	Telangi	—do—	On a day fixed by the Chandika Devi.
336	Leo	Chango	Rofu	One day.
337	—do—	Nako	Laitashi	—do—
338	—do—	Sumra	Jithu	Three days.
339	Morang	Jangi	Lamoche	...
340	—do—	Lippa	Urmig	Eight days, from 7th of bright half.

1	2	3	4	5
341	Morang	Morang	Shupyat	Four days, from 14th of dark half.
342	—do—	Nesang	Khepa	Two days, in bright half.
343	—do—	Rarang	Jagang	One day, on 12th or 13th of bright half.
344	—do—	—do—	Lamoche	Two days, no fixed date.
345	—do—	—do—	Shupyach	Three days, no fixed date.
346	—do—	Ribba	Lamoche	...
347	Nachar	Chagaon	Phagul	In the bright half starting from Monday and lasting for six days.
348	—do—	—do—	Shivrat	On <i>amawas</i> .
349	—do—	Chauhra	Phagul	Six days, (date determined by Nachar Ukha).
350	—do—	Katgaon (Gramang)	—do—	Nine days, (date determined by Maheshras).
351	—do—	Natpa	—do—	Five days, no fixed date.
352	—do—	Rupi	Phaguli	Four days, (date determined by the deity).
353	Puh	Giabong	Suskar	Five days, during bright half.
354	—do—	—do—	Chunglong	Two days, on 20th and 21st.
355	—do—	Kanam	Lamat	Three days, from 4th of bright half of the moon.
356	—do—	Namgya	Lamoche	Four days, during bright half of the moon.
357	—do—	Ropa	Suskar	Eight days, during bright half.
358	Sangla	Kamru (Mone)	Phagul	Twelve days.
359	—do—	Sangla	—do—	...
360	—do—	Shaung	—do—	Commencing on Holi for five days.

APPENDIX IX

OLD TYPE AGRICULTURAL IMPLEMENTS

(See page 135)

1	Plough or share beam	<i>thong, gnal, tal, stal</i>
2	Wooden share	<i>charuk, phalan</i>
3	Iron share	<i>chathuk, charu, ronn-phalang</i>
4	Yoke	<i>nashing, pol, kol</i>
5	Goat hair rope to fasten the plough with the yoke	<i>chhudak, walthu, thakpa</i>
6	Handle of plough	<i>aar, arri</i>
7	Pole fixed to the plough	<i>shandrang</i>
8	Harrow	<i>gyama</i>
9	Hand hoe	<i>tokche, khawat, goling, khot</i>
10	Small hoe	<i>koma, komat, kript, kotich, chuti</i>
11	Pick-axe	<i>bilcha</i>
12	Big-sickle	<i>kutamb, botia, thame, naryal</i>
13	Small-sickle	<i>jithrang, chatam, sora</i>
14	Conical basket	<i>chebo, kotik, koting</i>
15	Basket	<i>changer</i>
16	Axe	<i>teri, laktha, lasta, tauk</i>
17	Adze	<i>basing</i>
18	Large seive	<i>yara</i>
19	Sack	<i>phat</i>
20	Goat and sheep skin	<i>khul</i>
21	Grain container	<i>urch</i>
22	Thrashing floor	<i>kholang</i>
23	Jumper	<i>zabbal</i>
24	Goat hair rope	<i>thakpa, bash</i>
25	A tray, a substitute of winnowing pan	<i>zongfa</i>
26	Stick for thrashing <i>Ogla</i> or <i>phapra</i>	<i>berka</i>
27	Spade	<i>phorua</i>
28	Leveller	<i>chahar, dompo</i>
29	Rack	<i>sqaich</i>

APPENDIX X

DOMESTIC ANIMALS

(See page 142)

Sl. No	Name of animal	Local name					
		Leo	Sangnam	Nesang	Jangi	Rakchham	Rupi
1.	Horse	<i>ta</i>	<i>shang</i>	<i>ta</i>	<i>kyo rang zeb</i>	<i>kyo rang</i>	<i>rang</i>
2.	Mule	<i>diu</i>	<i>khockor</i>	...	...	...	<i>khachar</i>
3.	Donkey	<i>boong</i>	<i>photeh</i>	<i>m. phu</i>	<i>m. gyabung</i>	<i>m. kyofoch</i>	<i>foch</i>
4.	Yak	<i>yag</i>	<i>yag</i>	<i>f. fumo</i>	<i>f. bongmo</i>	<i>f. mantfoch</i>	
		<i>zomo</i>	<i>zofo</i>	<i>m. yak</i>	<i>yak</i>	<i>ya</i>	<i>breeme</i>
			<i>zomo</i>	<i>f. breeme</i>	<i>zo</i>	<i>zo</i>	<i>zomo</i>
				<i>zomo</i>	<i>zomo</i>	<i>trol</i>	
5.	Cow	<i>balang</i>	<i>balang</i>	<i>balang</i>	<i>lang</i>	<i>murath</i>	<i>hanz</i>
6.	Ox	<i>langto</i>	<i>etong</i>	<i>langdo</i>	<i>damas</i>	<i>dama</i>	<i>herad</i>
7.	Calf	<i>bhiu</i>	<i>lukche</i>	<i>phiu</i>	<i>lukeach</i>	<i>m. lakchang</i>	<i>rach</i>
8.	He goat	<i>rabho</i>	<i>bakhrang</i>	<i>ray</i>	<i>kweet</i>	<i>f. shakuri</i>	
9.	She-goat	<i>rama</i>	<i>lama</i>	<i>ran</i>	<i>la</i>	<i>kheet</i>	<i>aach</i>
10.	Sheep	<i>mamo</i>	<i>m. mole</i>	<i>m. khawa</i>	<i>khas</i>	<i>la</i>	<i>bakhor</i>
			<i>f. lama</i>	<i>f. maon</i>		<i>maon</i>	<i>khas</i>
11.	Ram	<i>khabla</i>	<i>khakar</i>	<i>hules</i>	<i>hules</i>	<i>konya</i>	<i>hules</i>
12.	Lamb	<i>lu</i>	...	...	<i>karch</i>	...	...
13.	He-goat (breeder)	<i>yangra</i>	<i>rabo</i>	<i>rathook</i>	<i>hozo</i>	<i>bolu</i>	<i>bolu</i>
14.	Mare	...	<i>gonma</i>	<i>ta</i>	<i>gonma</i>	<i>mantrang</i>	...
15.	Dog	<i>khee</i>	<i>khiuee</i>	<i>m. khee</i>	<i>m. khavi</i>	<i>khavi</i>	<i>kui</i>
16.	Cat	<i>poshi</i>	<i>pishi</i>	<i>f. khimo</i>	<i>f. khayimo</i>		
				<i>m. pishiphon</i>	<i>pishi</i>	<i>pishi</i>	<i>pishi</i>
				<i>f. pishi</i>			

APPENDIX XI

FOREST LEASE AGREEMENT

No. XXVI

(See page 151)

Agreement with Rajah of Bussahir for lease of his forests, 1864.

The Rajah of Bussahir having found the management of his forests troublesome, desires to lease them to the British Government for a term of fifty years, and requests the Superintendent, Hill States, to submit the following proposals for the approval of the Punjab Government :-

ARTICLE 1

I make over the entire control of the whole forests of Bussahir to the British Government, who will appoint an English Officer to take charge of the said forests.

ARTICLE 2

No contractor or other person shall be permitted to cut timber in any forest of any dominions, except in places and under conditions specified by the officer appointed to be Conservator of Forests.

ARTICLE 3

For every tree felled in the forests of Bussahir by authority of the Conservator, the British Government shall pay at the following rates :-

	Rs.	An.	P.
Deodar (Kelu)	3	3	0
Walnut (Akhrot)	2	0	0
Birch (Bhojputea)	1	8	0
Other kinds.	2	0	0

ARTICLE 4

The accounts shall be made up quarterly or half yearly and rendered, and payments made at the above mentioned rates quarterly or half yearly.

ARTICLE 5

I will have nothing to do with the establishments appointed by the Forest Officer. The British Government will defray all expenses connected with the conservancy of the forests, felling and transporting timber to the Sutlej, and floating down to the depots.

ARTICLE 6

I agree that the officer appointed to the forest should have power of a subordinate Magistrate, 1st class, defined in Section 23 of Act XXV, 1861, to try and decide cases of offences against property and property marks.

ARTICLE 7

I will give every assistance required by the Conservator in the exercise of the above powers for apprehending offenders, or supposed offenders, and for confirming the penalties awarded by him.

ARTICLE 8

I hereby grant to the British Government a lease of the forests of Bussahir for (50) fifty years, commencing from such date as the Government may confirm the lease.

ARTICLE 9

I will furnish as indent to the Government for any timber I may require, specifying the amount and kinds of wood, and the purpose for which it is to be applied.

ARTICLE 10

The Zemindars shall be permitted to cut timber for fuel, charcoal, housebuilding, and vine frames. They are not to be prohibited from cutting down the inferior forests for purposes of cultivation.

Joala Doss Vuzeer	Sham Shere Singh
Surjeet "	Rajah of Bussahir and Rampoor.
Futteh Ram "	Simla, 28th June 1864.
Heeranund "	In the presence of
Joala Doss	Lt. Col. R.C. Lawrence, C.B. Supdt,
	Hill States.
Goverdhun Doss	Dr. Cleghorn, M. D.,
Petumber Doss	Conservator Genl. of Forests.

APPENDIX XII

(See page 204)

List of dak-bungalows, rest-houses etc.

Sl. No.	Name of place	Category of building	Department	Accommodation capacity.
1	2	3	4	5
Sub-division Nachar				
1	Chauhra	Rest-house	Forest	One bed room, one dining room, two bath rooms, a pantry and a kitchen.
2	Taranda	—do—	—do—	Two bed rooms, two dining rooms, a pantry and a kitchen.
3	Paunda	—do—	P. W. D.	Four rooms, four bath rooms with out-houses.
4	Nachar	—do—	Forest	Two bed rooms, two dining rooms, three bath rooms two pantries, a dressing room and two kitchens.
5	Wangtu	—do—	P. W. D.	Four rooms, four bath rooms with out-houses.
6	Tapri	—do—	—do—	Four rooms, two bath rooms with out-houses.
7	Sholtu	—do—	Forest	Two bed rooms, a dining room, two bath rooms and a kitchen.
8	Urni	—do—	P. W. D.	Two big rooms, two small rooms, two bath rooms, and four-roomed out-houses.
9	—do—	—do—	—do—	Two rooms, two bath rooms and a kitchen.
10	Rupi	—do—	Forest	Two bed rooms, two bath rooms, a pantry and a kitchen.
11	Rakchham	—do—	P. W. D.	Four rooms, two bath rooms with out-houses.
12	Bhabha	Staging hut	Revenue	Two suites with common bath room.

1	2	3	4	5
13	Nachar	Staging hut	P. W. D.	Two suites with common bath room.
14	Natpa	—do—	—do—	—do—
Sub-division Kalpa				
1	Kilba	Rest-house	Forest	One bed room, one dining room, two bath rooms, a pantry and a kitchen.
2	Karchham	—do—	P. W. D.	Three rooms, two bath rooms.
3	—do—	—do—	—do—	Two rooms, two bath rooms.
4	Sangla	—do—	P. W. D.	Four rooms, four bath rooms with out-house.
5	—do—	—do—	Forest	Two bed rooms, a dining room, with two pantries and a kitchen.
6	Shongtong	—do—	—do—	One bed room, a dining room, two bath rooms, two rooms, and a kitchen.
7	Purbani	—do—	—do—	One bed room, three bath rooms, one dining room, a pantry, a dressing room and a kitchen.
8	Kalpa	—do—	—do—	Two bed rooms, a dining room, two bath rooms, a pantry, a dressing room, two small rooms and a kitchen.
9	Roghi	—do—	P. W. D.	Two big rooms, two bath rooms and four roomed out-houses.
10	Pangi	—do—	—do—	Four big rooms, four small rooms, four bath rooms, five roomed out-houses and a kitchen block.
11	Chhitkul	—do—	—do—	Four rooms and two bath rooms.
12	Shaung	Staging hut	Revenue	Two suites with common bath room.
13	Chhitkul	—do—	—do—	—do—
14	Sapni	—do—	—do—	—do—

1	2	3	4	5
Sub-division Puh				
1	Jangi	Rest-house	P. W. D.	Two big rooms, two small rooms, two bath rooms, a kitchen block and four-roomed out-houses.
2	Kanam	—do—	—do—	Two big rooms, two small rooms, two bath rooms and a kitchen block.
3	Puh	—do—	—do—	Two big rooms, two small rooms, two bath rooms, a kitchen block and two blocks of out-houses.
4	Namgya	—do—	—do—	Two big rooms, two small rooms, two bath rooms, a kitchen block and two-roomed out-houses.
5	Morang	—do—	—do—	Four rooms and two bath rooms.
6	Nako	Staging hut	Revenue	Two suites with common bath room.
7	Charang	—do—	—do—	—do—
8	Sumra	—do—	—do—	—do—
9	Ribba	—do—	—do—	—do—
10	Nesang	—do—	—do—	—do—
11	Asrang	—do—	—do—	—do—
12	Hango	—do—	—do—	—do—
13	Chango	—do—	—do—	—do—
14	Sangnam	—do—	—do—	—do—
15	Thangi	—do—	—do—	—do—
16	Morang	—do—	—do—	—do—
17	Lippa	—do—	—do—	—do—
18	Ropa	—do—	—do—	—do—
19	Spilo	—do—	—do—	—do—
20	Rarang	Gang hut	P. W. D.	Emergency accommodation.

APPENDIX XIII

ANNUAL AVERAGE FAMILY EXPENDITURE

(See page 220)

Tahsil headquarters	Category of family	Food and beverage	Intoxication	Fuel & lighting	Housing (rent/repairs)	Clothing and foot-wear	Furniture and utensils	Other misc.	Total
1	2	3	4	5	6	7	8	9	10
Nachar	A	1150	...	...	...	150	...	50	1350
	B	150	...	10	...	60	...	70	290
	C	90	...	30	...	90	...	20	230
	D	900	...	25	...	100	...	90	1115
Sangla	A	460	...	10	...	200	...	20	690
	B	300	60	20	...	200	...	...	580
	C	560	60	...	...	270	...	20	910
	D	1430	30	15	...	700	...	200	2375
Kalpa	A	730	36	...	...	40	...	...	806
	B	2400	132	12	...	776	...	170	3490
	C	2100	84	...	...	248	...	248	2680
	D	3285	510	24	...	525	...	90	4434
Morang	A	120	...	...	...	30	...	...	150
	B	750	...	12	...	180	10	50	1002
	C	1380	36	...	...	250	...	60	1726
	D	1680	90	15	...	380	...	95	2260

1	2	3	4	5	6	7	8	9	10
Puh	A	700	50	...	...	470	25	100	1345
	B	1200	50	...	...	780	25	100	2155
	C	800	50	...	...	560	25	100	1535
	D	1830	200	...	...	1260	100	4000	7390
Leo	A	720	...	12	5	200	5	50	992
	B	1138	150	24	100	275	20	440	2147
	C	2160	90	40	...	450	...	755	3495
	D	2640	150	70	...	650	50	1390	4950

Basis of categorisation of families :—

- A. Landless and with no other means of livelihood (Income upto Rs. 100 p.m.).
- B. Landowners upto 4.04 ha cultivated (Rs. 101 to 200 p.m.).
- C. Landowners above 4.04 ha but less than 10.11 ha cultivated (Rs. 201 to 350 p.m.).
- D. Landowners 10.11 ha and above cultivated (Rs. 351 and above).

GLOSSARY

1. *Aach* He-goat.
2. *Aar* Handle of a plough.
3. *Abadi* A populated spot e.g. village.
4. *Adna malkiat* Inferior proprietary rights.
5. *Akhara* Wrestling arena.
6. *Akrot* Walnut.
7. *Alamalik* Superior landowners.
8. *Alu* Potato
9. *Anguri* Grape wine.
10. *Apsara* Nymph.
11. *Arbo* A vessel for washing hands.
12. *Arri* Handle of a plough.
13. *Arz-i-arsal* A memo given by the *patwari* to the village head-man indicating the distribution under the proper heads of the money to be taken to the tahsil.
14. *Ashram* Hermitage.
15. *Ashtdhatu* Compound of eight metals.
16. *Atal* Soap-nut.
17. *Atta* Flour.
18. *Awal* First class.
19. *Bachh* Distribution and imposition of the state demand of small kind.
20. *Bagicha* Area under fruit trees.
21. *Bagra* Inferior.
22. *Baimi* Peach.
23. *Bajra* Millet.
24. *Bakhal* Unirrigated land.
25. *Bakhor* She-goat.
26. *Balang* Cow.
27. *Balwadi* Nursery school.
28. *Ban* A musical instrument.
29. *Bandobast waziran* Settlement conducted by the wiziars.
30. *Bangparshimig* A local dance.
31. *Barani* Unirrigated.
32. *Bash* Goat-hair rope.
33. *Basing* Adze.
34. *Batai* Exchange.
35. *Bathu* A foodgrain.
36. *Batich* A cup.
37. *Belding sarmu* A marriage ceremony.
38. *Bennang hachis* A form of lone marriage.
39. *Bergi* A woollen shawl.
40. *Berka* Stick for thrashing.
41. *Beru* Scheduled-caste.
42. *Bethu* Labourer, menial worker.
43. *Bham* A large kettle-drum.
44. *Bhandari* Treasurer.
45. *Bhekal* A shrub.
46. *Bhiu* Calf.
47. *Bhojpatra* Birch.
48. *Bhut* Evil spirit.
49. *Bila-sift* Unclassified.
50. *Bilcha* Pick-axe.
51. *Bitho pono* Gifts allotted to the bride by the parents of the bridegroom.
52. *Biyoshimig* A ceremony when the bride bids farewell to the party which accompanied her to the groom's house.
53. *Bonyungchu-chashimig* A local dance performed by men folk only.
54. *Boong* Donkey.
55. *Bowli* A well.
56. *Brahmachari* Celibate.
57. *Bras* A foodgrain.
58. *Breeme* Female yak.
59. *Breja* A local grain measure.
60. *Bugjal* Cymbal.
61. *Bugo* Coriander seed.
62. *Balzanuspono* Woollen footwear.
63. *Burni* An ornament given by the parents of bridegroom to the bride's parents on the occasion of engagement.
64. *Buttoonggee* State official.
65. *Chadil* Tea imported from Kalimpong.
66. *Chahar* Leveller.
67. *Chaks* Revenue estates.
68. *Chalang* Dance movements.
69. *Chambaka* A flower.
70. *Chamu baskat* Woollen waist-coat.
71. *Chamu Kurti* Woollen shirt.
72. *Chamu Sutan* Woollen Trousers.

73. <i>Chano</i>	Hem.
74. <i>Chapati</i>	Loaf.
75. <i>Char</i>	Watchman.
76. <i>Chares</i>	A non scheduled caste head functionary.
77. <i>Charnamrat</i>	Holy water.
78. <i>Charasala</i>	Quadrennial recording of rights of landowners/tenants.
79. <i>Charuk</i>	Wooden share.
80. <i>Chatam</i>	Small sickle.
81. <i>Chathuk</i>	Iron share.
82. <i>Chebo</i>	Conical basket.
83. <i>Chet</i>	Marks on the lever.
84. <i>Chhakcha</i>	Dry latrines.
85. <i>Chhalia</i>	Maize.
86. <i>Chhanli</i>	Shawl.
87. <i>Chhatkang</i>	A house temple.
88. <i>Chhaunri</i>	Flywhisk.
89. <i>Chhemer</i>	Lizard.
90. <i>Chholpa</i>	Death ceremony
91. <i>Chhoma</i>	A name of dish.
92. <i>Chhosilma</i>	A death rite.
93. <i>Chhuba</i>	A garment.
94. <i>Chhudak</i>	Goat-hair rope.
95. <i>Chhwa phasur</i>	Alcohol distilled from foodgrains.
96. <i>Chigu</i>	A goat.
97. <i>Chironing</i>	History of the deity in verse.
98. <i>Choli</i>	Blouse.
99. <i>Chon</i>	A highway ghost.
100. <i>Chone gahba</i>	Five pieces of cloth.
101. <i>Chosten</i>	Buddhist shrine.
102. <i>Dab-dab</i>	Marriage by capture.
103. <i>Dakhangu phasur</i>	Grape wine.
104. <i>Dam tangshis</i>	A form of love marriage.
105. <i>Dama</i>	Ox.
106. <i>Dandi</i>	Indigenous mode of conveyance (In Spillo village also used as bier).
107. <i>Daroshi</i>	Marriage by capture.
108. <i>Darohi</i>	Oath.
109. <i>Dashongi</i>	Headman of a pargana.
110. <i>Devi</i>	Goddess.
111. <i>Dhal bachh</i>	Apportionment of cash revenue.
112. <i>Dhol</i>	Drum.

113. <i>Dhori</i>	Silver hook.
114. <i>Digra</i>	Silver hook.
115. <i>Doam</i>	Second class.
116. <i>Dogri</i>	An alternative farm hamlet.
117. <i>Dompo</i>	Leveller.
118. <i>Donktens</i>	Buddhist shrine.
119. <i>Dum</i>	An organisation for regulating affairs of the village. Peaceful picketing.
120. <i>Dumko</i>	Larse vessel used for distillation.
121. <i>Dung</i>	Conch.
122. <i>Dursa</i>	Pyre.
123. <i>Dusrang</i>	A hole in the roof for letting out smoke and admitting in the light.
124. <i>Gachhang</i>	A long strip of cloth tied round the waist.
125. <i>Gaonsar begar</i>	Village-wise forced labour.
126. <i>Gato-boba</i>	Younger father in a polyandrous family.
127. <i>Ghani</i>	Bullock-driven oil crusher.
128. <i>Gharat</i>	Water-mill.
129. <i>Ghartangna</i>	Rent for water-mills.
130. <i>Ghasni</i>	Grass preserves.
131. <i>Ghoont</i>	Hill pony.
132. <i>Ghori</i>	Sub-division of a pargana.
133. <i>Ghoye</i>	A small woollen shawl.
134. <i>Ghrasni</i>	A ceremony performed on entering a new house.
135. <i>Girdawari</i>	Crop inspection.
136. <i>Goling</i>	Hoe.
137. <i>Gor</i>	Earthen vessel.
138. <i>Gorasang</i>	A ceremony performed on completion of the construction of a new house.
139. <i>Gotang</i>	Water-mill.
140. <i>Gram</i>	Village.
141. <i>Gram Sabha</i>	Village council.
142. <i>Gram Sewak</i>	Village level worker (male).
143. <i>Gram Sewika</i>	Village level worker (female).
144. <i>Grihapravesha</i>	A ceremony performed on entering a new house.
145. <i>Grokch</i>	Mouthpiece of a deity.
146. <i>Gudma</i>	Woollen blanket.
147. <i>Guthung</i>	Trough.
148. <i>Gyama</i>	Harrow.

149. *Hales* Scheduled caste labourer.
 150. *Halmandi* A scheduled caste head functionary.
 151. *Har* Enticing away someone's wife.
 152. *Hodd* A dish.
 153. *Hom* Worship.
 154. *Izat*. Self-respect or prestige. In Kinnaur the word is used in the context of the husband who is recompensed in cash by the seducer of the wife thereby the husband's *izat* is supposed to be vindicated.
 155. *Jalebi* A sweet (Honey comb).
 156. *Janekang* or *Janetang* A from of marriage.
 157. *Jangmuch* Mushroom.
 158. *Jamabandi* Quadrennial recordings of the rights of landlords and tenants.
 159. *Jhula* Rope bridge.
 160. *Jinsi* A ritual.
 161. *Jinsrekch* Sacrificial fire beside the pyre.
 162. *Jomo* Nun.
 163. *Kamiz* Shirt.
 164. *Kanchong* The right of the youngest in the ancestral property.
 165. *Kankani* A painted gate.
 166. *Kanda* Highland, away from homestead.
 107. *Kangynr* A bunch of a number of Buddhist scriptures and classics stored away in a temple is called *kangyur*.
 168. *Kaning* Stone mortar.
 169. *Kanthi* Nacklace (invariably of beads).
 170. *Kapshaw* Shoes.
 171. *Karahads* Cesses.
 172. *Karali* Newly reclaimed land.
 173. *Kayang* A local dance performed in a circle.
 174. *Kerche* Lentil.
 175. *Khal* Oil cake.
 176. *Khalangna* Rent of oil-mill
 177. *Khanaur* Chestnut.
 178. *Kharif* General term for crop harvested in the summer.
 179. *Kharshuna* Light which is emitted by certain insects and plants or by phosphorescent fungus which glows like lamps in the Himalayan hills. The local people say the lamp of the fairies.

180. *Khashia* Non-scheduled caste.
 181. *Khatak* A piece of cloth.
 182. *Khera* Mat of goat's hair.
 183. *Kherach* A small mat of goat's hair.
 184. *Khindup* A form of marriage.
 185. *Kholang* Thrashing floor.
 186. *Khora* Cess in kind of *gur*.
 187. *Khorich* Crucible.
 188. *Khuchis* Marriage by capture.
 189. *Khul* Goat and sheep skin.
 190. *Khunds* Parganas.
 191. *Khunkch* An evil spirit.
 192. *Khura* A dish.
 193. *Kiar* Irrigated land.
 194. *Kimshu* Family god.
 195. *Kod* A local grain measure.
 196. *Kohlu* Oil-mill.
 197. *Kote* Wooden chests.
 198. *Koting* Basket.
 199. *Kuhl* Water channel.
 200. *Kunda* An idol.
 201. *Kurnang* Wood carving.
 202. *Kyo-rang* Horse.
 203. *Labrang* Buddhist temple.
 204. *Lagan* Revenue.
 205. *Lagang* Buddhist temple of Mahadeo.
 206. *Lamthu* A huge vessel made of brass or copper.
 207. *Lapcha* A square pile of stones considered holy.
 208. *Losoma Shalkid* Thank you for wishing.
 209. *Losoma tashi* Wish a happy new year.
 210. *Lotri* Lotah.
 211. *Lu* Soft wool, lamb.
 212. *Luchi* A dish.
 213. *Majomi* Go-between.
 214. *Mandi* Market.
 215. *Mane* Buddhist shrine.
 216. *Mangsho Tangsho* Hide and seek game.
 217. *Mashan* An evil being.
 218. *Matyang chilam* Improvised smoking device.
 219. *Meling* Hearth.
 220. *Melup* Meteor.
 221. *Menthok* Ashes.

222. *Misa haqiyat* Standing record.
 223. *Mograng* Wood carving.
 224. *Muafis* Revenue-free grants of land.
 225. *Mukhang* A mask embossed and engraved to simulate human features with jewelled eyes.
 226. *Mukhiya* Village headman.
 227. *Nala* A hill torrent.
 228. *Namukkamal* Incomplete.
 229. *Nangch* A small dish.
 230. *Nango* Platters.
 231. *Naryal* Big sickle.
 232. *Nashing* Yoke.
 233. *Nautor* New land brought under cultivation.
 234. *Nyar* Peas.
 235. *Nyaya* Dispense justice.
 236. *Pag* Turban.
 237. *Paimaish* To effect land measurement.
 238. *Paithang* Pulse.
 239. *Panchaka* Five days in a month usually regarded inauspicious.
 240. *Panch* Member of a judicial panchayat.
 241. *Panchrattan* Five precious things or gems.
 242. *Pashm* Wool of superfine quality.
 243. *Path* Reading from the scripture.
 244. *Phasur* Alcohol distilled from fruits or cereals.
 245. *Phat* Sack.
 246. *Phorva* Spade.
 247. *Piada* Messenger.
 248. *Pinti* Cess in kind of ghee.
 249. *Pole* Fried loaf.
 250. *Poltu* Illegitimate child.
 251. *Pono* Footwear.
 252. *Poreshing* Lever.
 253. *Porestang* Roofing ceremony of a temple.
 254. *Porsad* Pudding.
 255. *Pothee* Holy book.
 256. *Pu* Nut.
 257. *Puglang* Child of an unmarried girl.
 258. *Pulashon* A local dance.
 259. *Purdah* Veil.
 260. *Robho* He-goat.
 261. *Rabi* Agricultural season of winter months.

262. *Rad* Foodgrain.
 263. *Ragee* Mill-made cloth shirt.
 264. *Rakh* Country spirit.
 265. *Rakshas* An evil being.
 266. *Rama* She-goat.
 267. *Rang* Mountain peak, a horse.
 268. *Razinama* Agreement to the satisfaction of both parties. (In Kinnaur mostly pertain to the settlement of divorce).
 269. *Ri* Edible pine.
 270. *Rinchot* Gift given by the bridegroom to the bride.
 271. *Robkar* Court's order.
 272. *Ronsheeng* Hornpipe.
 273. *Rote* Loaf.
 274. *Sahukar* Money-lender.
 275. *Sajo githang* Farewell song sung exclusively on the occasion of the *Sajo* mela.
 276. *Sambat tentis* Thirty-third year of the Bikrami era.
 277. *Sambo* Laddle.
 278. *Sammelan* Conference.
 279. *Santhang* Temple courtyard.
 280. *Sapkhul* Skin bellow.
 281. *Sarhaddi* Bordering.
 282. *Sarpanch* Head of the judicial panchayat.
 283. *Satpanthang* A room in a *Kothi* of the deity.
 284. *Sening kunnu* Ceremony on the occasion of marriage when the bride or the bridegroom are introduced to their respective relatives.
 285. *Shajra kishtwar* Field map.
 286. *Shajra parcha* Patwari's copy of the field map.
 287. *Shalwar* Loose trousers worn by women.
 288. *Shamlat* Common land.
 289. *Shandrang* Pole fixed to the plough.
 290. *Shaptuk* A death rite.
 291. *Shatadru* Hundreds of currents. (The Satluj river).
 292. *Shew* Cap.
 293. *Shil* Mid-day meal.
 294. *Shing-tak-shimig* A ceremony for dissolution of the marriage.
 295. *Shonnal* Hautboy.
 296. *Shorcho* Wooden comb.
 297. *Shradh* Death anniversary.
 298. *Shudung* A kind of brewed liquor.

299.	<i>Shu kothi</i>	A structure of a village deity.
300.	<i>Shupakchu-khau</i>	Dinner.
301.	<i>Siana</i>	Village elder man.
302.	<i>Soja</i>	Superior.
303.	<i>Sora</i>	Small sickle.
304.	<i>Sorang</i>	Tank.
305.	<i>Spal</i>	A local root.
306.	<i>Sqalch</i>	Rack.
307.	<i>Tag</i>	Barley.
308.	<i>Tapobhoomi</i>	Land of devotion.
309.	<i>Tapru-se-balzanu-pono</i>	Footwear of an exquisite design.
310.	<i>Tapru-se-chhanli</i>	A shawl with exquisite design.
311.	<i>Tapru-se-dhori</i>	A local garment for women having an exquisite design.
312.	<i>Tapru-se-sutan</i>	Trousers with exquisite design.
313.	<i>Tarmim bandobast</i>	Revised settlement.
314.	<i>Teg boba</i>	Elder father in a polyandrous family.
315.	<i>Tegsowang</i>	A local dance.
316.	<i>Thai</i>	A local measure.
317.	<i>Thana</i>	A police station.
318.	<i>Thatha</i>	A ceremony performed to ward off the evil spirit.
319.	<i>Thepang</i>	Woollen cap.
320.	<i>Thungru</i>	A local dance.
321.	<i>Togang</i>	Balcony.
322.	<i>Tokche</i>	Hand hoe.
323.	<i>Toknya</i>	Menial worker.
324.	<i>Toshimig</i>	To sit together.
325.	<i>Umbu</i>	Wool.
326.	<i>Wajib-ul-araz</i>	Village administration papers.
327.	<i>Wass</i>	Honey.
328.	<i>Wassphasur</i>	Alcohol distilled from honey.
329.	<i>Wasyang</i>	Bee.
330.	<i>Wizarat</i>	Area under the jurisdiction of a wizieer.
331.	<i>Yangluk</i>	Woollen shawl.
332.	<i>Zalore</i>	Wooden fringe.
333.	<i>Zama</i>	An earthen pot.
334.	<i>Zira</i>	Cumin.
335.	<i>Zo</i>	Cross breed from yak and cow.
336.	<i>Zomba</i>	Woollen shoe.
337.	<i>Zongfa</i>	A tray for winnowing.

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INDEX

Acts—

- the Bhoodan Yajna (1954) 252.
the Central Sales Tax (1956) 254.
the Child Marriage Restraint (1929) 102.
the Company's (1956) 172.
the Court Fees (1870) 254.
the Criminal Law Amendment (23 of 1961) 204.
the Food Adulteration (1954) 304.
the Guardian and Wards 264.
the Himachal Forests (1954) 32.
Pradesh Abolition of Big Landed Estates and Land Reforms (1953) 249, 250, 251.
Land Reforms 123, 232, 233.
Revenue 232, 233, 246, 249.
Panchayat Raj (1952) 266, 267, 286, 288.
Passengers & Goods Taxation (1955) 254.
Tenants (Rights Restoration 1952) 250.
the Hindu Marriage (1955) 102, 232, 264.
Succession (1956) 93.
the Indian Arms (1878) 33.
Court Fees 255.
Fisheries 147.
Forests (1927) 33.
Limitation 263.
Motor Vehicles (1939) 266.
Registration 232.
Stamps 255.
Succession 264.
the Limitation 255, 263.
the Minimum Wages (1948) 306.
the Payment of Wages (1936) 265, 306.
the Personal Injuries (Emergency Provisions 1962) 306.
the Provincial Insolvency 264.
the Public Gambling (1867) 106.
the Punjab Excise (1914) 105, 254.
Fisheries 147.
General Sales Tax (1948) 254.
Land Revenue (1887) 249.
Redemption of Mortgages (1913) 263.
Re-organisation (1966) 313.
State Aid to Industries (H.P. Amendment 1964) 173.
Tenancy (1887) 249, 250, 267.
Tenants (Security of Tenures 1950) 249.
Wild Birds & Wild Animals Protection (1933) 33.
the Rajasthan Weights & Measures (Enforcement 1958) 191.
the Registration (1908) 233, 265.
the Rent Restriction 264.
the Small Causes Courts 264.
the State Aid to Industries 175.
the States Re-organisation (1956) 311, 312.
the Union Territories (1963) 312.
the Vaccination (1880) 305.
the Workmen's Compensation (1923) 232, 265, 306.

Administration—

- Land Revenue 234.
Single line 231.
Afghanistan 141.
Agnihotri, B.S. 13.
Agrarian movements 252.
Agricultural diseases 137.
implements 135.
Agriculture 127-30.
multipurpose societies 179.
research centres and schools 140-42.
State assistance 154-55.
Ahan 329.
Ajanta 49.
Ajmal 51.
Akpa 4, 69, 70, 203, 205, 230.
All India Handloom Board 175.
Radio 278.
Almora district 56.
America 143.
Amritsar 158.
Amurch 53.
Amusements 113-15.
Animal diseases 147.
husbandry 142-48.
Anodan 23.
Apsarases 48.
Aran 254.
Aran jhula 188.
Area under different fruit crops 134.
Arjuna 49.
Arki tahsil 210.
Aryan 50, 51.

Ashrams—

- Mahatma Gandhi 295.
Pandra Bis Kalyan 295.
Thakkar Bappa Kinner 295.
Asrang 4, 23, 24, 35, 38, 70, 73, 81, 88, 126, 205, 284, 303.
Assam 56.

Associations—

- Bar 269.
Consumers' 190.
Merchants' 190.
Athara Bis 3, 38, 241, 327.
Australia 143, 145.
Ayod Srungus 51.

- Badri Dass 60.
Nath 53, 54, 55, 121, 319.
- Balramgarh 59.
Balsan 58.
Baltistan 52.
Banasur 13, 14, 53, 54, 55, 57, 329.
Banks 179-82.
Central Co-operative Land Mortgage 182.
State Co-operative 178, 181, 219.
- Bara Kamba 4, 9, 199.
Barang 4, 199, 287, 303, 316.
Bari 4, 164, 244.
Barnes, G. 62, 151, 237, 238, 240, 241.
Barot 42.
Barua 4, 146, 147, 149, 168, 169, 205, 279.
Batchelor 151.
Batsari 4, 35, 164, 199, 203, 205, 320.
Baturi 29, 168.
Beesh 119.
Bei 10.
Bekhur 184.
Bhabha 4, 141, 146, 164, 169, 199, 205, 230, 241, 243, 244, 260, 279, 287, 302, 305.
Bhaji 150, 213.
Bhakra Complex 168.
Dam 143.
Bhima Kali 76, 84, 321, 322, 323.
Bhoodan movement 252.
yajna board 252.
- Bhot 52.
culture 51.
empire 51, 52.
language 52.
period 51, 52, 56.
ruler 52.
- Bhutan 157, 186.
Bhutas 48.
Bilaspur 57, 64, 168, 210, 264, 266.
Birth customs 88.
- Blocks-
- Kalpa 160, 167, 225, 226.
Morang 225.
Nachar 160, 167, 226.
Puh 160, 225, 226.
Sangla 225.
- Boktu 140.
Border Security Force 206.
Brahma 329.
Brandis, Dietrich, Sir 151, 152.
Brelangi 307, 316.
Brindavan 319.
British force 60.
Government 60, 61, 63, 151, 218, 238, 239, 245, 263.
period 191.
- Bruske, J.T. 294.
Bruske, Mrs. 294, 296.
Buddhism 50, 52, 78-83, 97, 245, 326.
Buddhist culture 318.
deities 80.
temples 80, 108, 120, 324, 326.
- Budh, Prakash, Dr. 49.
Buneug Sering 168.
- Bureau-
- Intelligence 233.
Special Security 233.
- Bushahr 14, 49, 54, 55, 59, 62, 63, 64, 65, 76, 81, 83, 87, 150, 151, 152, 153, 186, 191, 228, 234, 238, 239, 240, 241, 294, 301, 319, 320.
Government 235.
rulers 53, 158, 234.
State 3, 14, 48, 55, 57, 60, 61, 63, 64, 65, 128, 140, 150, 153, 157, 158, 183, 184, 188, 213, 215, 228, 234, 237, 240, 241, 242, 245, 247, 250, 256, 258, 263, 264, 295, 302, 321.
troops 60.
- Chabagid 332.
Chagaan 4, 9, 23, 24, 169, 205.
Chamba 117, 169.
district 69.
Chandervanshi 54, 55.
Chandika 82, 325.
Changla 319.
Chango 4, 9, 15, 80, 81, 147, 165, 200, 205, 231, 260, 279, 287, 303, 307, 318, 319.
Changrizang 15.
Charing 4, 10, 70, 71, 72, 200, 287, 303.
Chasu 4, 169, 320.
Chatrol 108, 119.
Chatur Bhuj 238.
Chauhra 3, 4, 5, 6, 12, 188, 196, 198, 199, 203, 205, 206, 263.
Chaupal 314.
Cherring 149.
Chervang 300.
Chharing Dutt 300.
Chharingma 81.
Chharing Namgyal 303.
Chhitkul 4, 11, 15, 16, 35, 69, 70, 72, 145, 184, 205, 215, 283, 284, 303, 319, 320.
Chhodas 58.
Chhog-dik 81.
Chhot 31.
Chhota Kamba 4, 9, 147, 199, 205, 279, 303.
China 160, 184, 185, 194, 218.
Chinese cloth 186.
invasion 145.
Tartary 184.
- Chini 4, 8, 21, 25, 43, 53, 84, 158, 168, 179, 205, 206, 225, 241, 242, 255, 258, 294, 301, 302, 311, 321, 322.
tahsil 1, 3, 184, 213, 218, 228, 229, 230, 235, 237, 238, 241, 242, 245, 258, 263, 301, 310, 311.
- Choba Chertzin 300.
Chonda 31.
Chuling 4, 9, 53, 200.
Chungsa 184.
Cleghorn 150.
Climate 42-47.
Coinage 183.
Coldstream 234.
Collet, Henry 24.
Consumer's Store 180.
Co-operation in prices 189.
Co-operative societies 179, 180, 181, 188, 219.
Credit societies 179, 180, 181, 182.

- Industrial societies 180.
Multipurpose society 180.
Non-credit society 180, 181.
Rang Foch Simant 185.
Transport society 180, 185.
Union 179, 189.
- Course of trade 183-86.
Cultivation of crops 130-33.
Cumming, C.F. Gordon 1.
Currency 183.
- Dab Kopochka 59.
Dabbling 4, 28, 70, 74, 196, 203, 205, 215, 259, 260, 333.
- Dak-bungalows 204.
Dakhrain 120.
Dalai Lama 58, 81, 82.
Danielou, Alain 48.
Dapalkhore 52.
Darkoti 58.
Dasrath 54.
Dattatreya, Muni 81.
Death customs 89-91.
Decorations 108-9.
Dehra Dun 125.
- Deities-
- Badrinath 320, 321.
Berang Nag 320.
Bushahru 331.
Chalang 328.
Chola 331.
Dabla 319, 324, 331, 332, 333.
Deo Dum 330.
Gyalbo 319.
Kali 54, 83, 84, 120, 121, 322, 336.
Kamakhya 320.
Kamrakh 321.
Kilbalu 324.
Kuldeo Narain 331.
Mahadeo 80, 83.
Mahakali 81.
Mahalakshmi 81.
Mahasu 83, 120, 121.
Mathi 319.
Nages 334, 336.
Narain 322.
Narenas 319, 320, 324.
Shang-che-kyung 332.
-sha-res 320.
Tangtashu 326.
Yulsa 319, 335.
- Delath 64.
Delhi 58, 118.
- Departments-
- Agriculture 127, 134, 135, 137, 140, 167, 190, 233, 284.
Animal Husbandry 143, 145, 146, 185, 233, 278.
Civil Supplies 189.
Community Development 138, 219.
Co-operative 180, 190, 233, 280.
Economics & Statistics 276.
- Education 233, 285, 295, 296, 297.
Fisheries 41, 147, 284.
Forests 204, 233, 281, 283, 289, 302, 324, 334.
Home Guards 233.
Horticulture 137, 233.
Industries 170, 172, 183, 223, 233, 280.
Medical & Public Health 233, 302, 304.
Multipurpose Projects & Power 270, 274, 275.
Panchayats 233, 279, 298.
Police 233.
Posts & Telegraphs 206, 233.
Public Relations & Tourism 204, 233, 275, 277.
Works 196, 204, 231, 233, 270, 274, 331, 332.
- Revenue 204.
Transport 206, 233.
Treasury 233.
Welfare 233, 275, 295, 296, 302.
Wild Life 283.
- Devindra Singh, Raj Kumar 64.
Dev Purna 13, 14, 53, 54.
Dhadi 64.
Dhali 182.
Dhami 59.
Dhaola Dhar 1, 2, 4, 5, 6, 15, 49.
Dharam Chand 327.
Dharmaraja 81.
Dhaul 59.
Dhumthan 320.
Dialects 70-71.
Dispensaries 302-3.
District Federation 179, 181, 189.
Divorce 102-3.
Dodra Kwar 61, 63, 64.
Dolma 81, 88.
Dowry 101-2.
Dreams 85.
Dress 109-11.
Drinking 104-5.
Droughts 155-56.
Dubling 70, 74.
Dukar 81.
Duni 4, 168, 171.
Durga 8.
Singh 241.
Dutch stamps 205.
Dwarka 300.
Dwellings 106-8.
- Earthquakes 24.
Earthtremors 24.
Economic dependence of women 103-4.
minerals 22-24.
professional groups 123.
Emerson 242, 243.
Emigration 68-69.
Employment exchange 223-24.
Europe 159, 167.
Excise 253, 55.
Exports 186-87.
- Fairs 118, 188-89.
Faiths, beliefs and superstitions 84-87.
Famine 155-56.

Farms—

goat breeding 146.
poultry 146.
seed multiplication 140.
sheep breeding 146.
trout 148.
yak breeding 145.
Fateh Ram 60.
Singh 62.
Fauna or Zoology 35-42.
Ferries 203.
Fertilisers 136-37.
Festivals 88.
Festivities 118.
Floods 155-56.
Flora or Botany 24-35.
Fodder crops 142.
Food 111-13.

Forests—

Bushahr 150, 151.
Dippi 151.
Kaksthal 151.
Kastiarang 151.
Kochi 150, 153.
Management 149.
Pandrabis 151.
Products 153-54.
Runang 151.
Sapni 151.
Tangling 151.
Forestry 148-54.
Frank, Dr. 84.
Fraser, J.B. 1, 59, 77, 87, 157, 169, 186, 209, 228, 234, 256.
Furniture 108-9.
Galdan Chhoikar 326.
Gambling 206.
Game sanctuaries 34, 35.
Ganas 49.
Ganbo Chhag-du-gba 81.
Gandharvas 48.
Ganesha 81.
Garha 186.
Garhwal 54, 58, 61, 319.
Garoo 184, 187, 209.
Gartok 79.
Genealogy 55.
General boundaries 1.
education 297-98.
level of prices 212.
Geology 20.
Gerard, Cant. Alexander 1, 7, 12, 15, 17, 35, 66, 67, 69, 78, 79, 87, 128, 157, 163, 167, 169, 182, 184, 186, 187, 190, 194, 209, 217, 229, 234, 256.
Germany 143, 145.
Gharshu 3, 199.
Giabong 4, 10, 59, 70, 80, 141, 147, 198, 205, 231, 279, 287, 295, 303.
Ginam 326.
Glaciers 19.
Glover 152.
Gobind Sagar 32.
Grajayadoke 58.

Gras-pa-De 51.
Guge 51.
empire 52.
period 52.
Guhyakas 48, 49.
Guldenchhen 58.
Gurkhas 59, 61, 228, 234.
Army 59, 234.
Force 59, 60.
War 51, 228.
Hamilton 152, 153.
Hango 4, 9, 81, 194, 200, 295, 303, 332, 336.
Hangrang 7, 78, 87, 89, 90, 99, 110, 117, 150, 155, 265, 295, 318.
sub-tahsil 4, 70, 80, 81, 95, 107, 132, 173, 230, 231, 232, 233, 246, 318, 325.
Hansbeshan 2, 40.
Hardwar 89, 91, 209.
Harung Ghat 184.
Hatka Desa 49.
Highways 194-95.
Hills and Mountains 5-8.
Himachal Pradesh 1, 2, 3, 33, 34, 41, 64, 69, 105, 107, 129, 134, 140, 142, 170, 171, 174, 175, 176, 178, 181, 189, 190, 191, 202, 204, 205, 206, 212, 224, 230, 243, 247, 248, 249, 254, 255, 260, 261, 266, 276, 278, 281, 283, 288, 295, 296, 305, 307, 310, 312, 313, 315, 317.
administration 225.
emporium 172.
Government 105, 174, 185, 204, 206, 231, 249, 272, 298, 303.
Khadi & Village Industries Board 172.
Legislative Assembly 224, 250, 313, 315.
State Small Industries Corporation 172.
Himalayas 4, 5, 6, 12, 14, 15, 16, 20, 24, 42, 45, 48, 49, 51, 54, 78, 128, 150, 157, 169, 183, 240, 318, 329.
Hinduism 78, 82, 83, 89, 91.
Hindustan 183.
History 48-65.
Home life 106-15.
Homte 10.
Horticulture 133-34, 141.
Hubert, Capt. 8.
Humidity 45.
Huri 10.
Hutton, Thomas 129, 214, 228, 262.
Ice caves 19.
Immigration 67-68.
Imports 186-87.
Incidence of crime 256-58.
Indebtedness 178.
Independence 64, 196, 213, 310.
India 20, 51, 128, 151, 185, 222, 263, 312, 313, 320, 333.
Government of 191, 196, 204, 225.
Survey of 152.
Indian coinage 183.
Council of Agricultural Research 135, 140.
Indo-Gangetic chain 8.
plain 50.
Indo-Tibetan border 36, 51.
Police 233.

Frontier 17, 58.
Languages 57.
Trade 212.
Indra (king) 329.
Industrial Development Corporation 174.
loans 183.
potential 173-74.

Industries—

Basketry 164.
Bee-keeping 167-68.
Blacksmithy 162-63.
Chambaka flower making 168.
Cottage 170-73.
Distilling 165.
Large Scale 169.
Medium Scale 169.
Metalware 160-62.
Oil Extracting 164-65.
Old time 157-68.
Ornaments 160-62.
Painting 168.
Paper making 168.
Pono making 163.
Small scale 170-73.
Textile 158-60.
Wood work 163.
Wool weaving 157.
Inheritance 92-93.
Inter-caste relations 92.
Ireland 146.
Irrigation 125-27, 129.
Isri Singh, Kanwar 64.
Jacquemont, Victor 1, 324.
Jagjivan Ram 315.
Jails & lock ups 262.
Jammu & Kashmir 134, 202.
Jangi 4, 9, 21, 70, 73, 78, 80, 146, 147, 197, 205, 262, 279, 303, 320.
Jani 4, 18, 120, 199, 200, 302.
Jeri 144, 146.
Johri, Sita Ram 56, 58, 83, 117, 118.
Joint Family System 92, 158.
Joktiaring 19.
Jongching 327.
Joshi, Tikka Ram 74.
Jubbal 64, 314.
Junsar 186.
Jutogh 168.
Kachang 3, 199.
Kafnu 10.
Kaksthal 146, 279.
Kalanmal 51.
Kali Dass 49.
Kalpa 4, 5, 8, 9, 17, 20, 27, 28, 35, 44, 45, 46, 53, 70, 71, 84, 132, 135, 140, 141, 147, 163, 169, 171, 172, 178, 179, 180, 188, 196, 197, 198, 203, 204, 205, 206, 207, 222, 223, 224, 232, 233, 254, 255, 259, 260, 262, 264, 265, 266, 270, 274, 275, 278, 279, 280, 281, 282, 284, 285, 287, 294, 295, 297, 298, 302, 303, 304, 305, 307, 314, 316, 317, 318, 320, 323, 324, 326, 332.
sub-division 4, 66, 76, 107, 129, 136, 225, 230, 232, 333.

tahsil 4, 69, 70, 80, 81, 132, 140, 141, 169, 230, 249.
Kamba 147, 243.
Kamlahi 146.
Kamru (Mone) 4, 13, 40, 54, 55, 56, 57, 60, 80, 84, 117, 120, 121, 141, 197, 199, 205, 230, 262, 287, 303, 320, 321, 322, 323.
Kanahi 4, 200.
Kanam 4, 9, 21, 70, 73, 76, 78, 79, 158, 190, 194, 197, 203, 205, 231, 260, 287, 295, 303, 304, 305, 323, 331, 333.
Kanauras 1, 49, 84, 85, 86, 105, 118, 119, 178, 185, 209, 210, 211.
Kandar 3, 4, 199.
Kangos 4.
Kangra 24, 313.
district 64.
Karaba 10.
Karchham 11, 13, 15, 19, 35, 45, 146, 188, 196, 197, 198, 203, 205, 206, 222, 259, 260, 270, 275, 279, 303, 304, 319, 320, 334.
Karsog tahsil 311.
Kashinagar 53.
Kashmir 37, 50, 88, 175.
Kasturba Gandhi Smarak Nidhi 317.
Kasumpti 262, 281, 306, 314.
Katgaon 10, 146, 279.
Kaurik 2, 3, 14.
Keonthal 58, 59, 60.
Khabo 4, 12, 70, 74, 196, 198, 203, 260, 333.
Khaneti 64.
Khangli 169.
Khargyudtanzin 300.
Kharo 203.
Kharwa 186.
Khashgir 50.
Khaskar 8.
Khawangi 4.
Khepa 122.
Kilba 4, 9, 20, 27, 28, 35, 43, 44, 46, 141, 144, 147, 149, 168, 169, 171, 203, 205, 279, 287, 294, 295, 302, 303, 304, 307, 324, 335.
Kimpurushas 48.
Kinner Kailas 5, 7, 8, 12, 13, 23, 27, 28, 30, 31, 49, 58, 84, 120, 121, 122, 149, 325, 334.
Kirang 260.
Kirat or shu 49, 50, 51.
Kitchingman 153.
Kohal 61, 228.
Kooshtwar 187.
Koot-laha 186.
Koshtampi 324, 325.
Koigarh 60.
Kothi 168, 205, 230, 287, 307, 316, 324, 325.
Koti 150.
Kotkhai 58-59.
Kufri 5.
Kulu 6, 59, 60, 61, 213.
district 1, 3, 69, 134, 313, 314.
State 59.
Kumaon 56.
Kumarasambhava 49.

Kumharsain 58, 59, 63, 64, 150.
 Kuno 4, 10, 70, 71, 72, 184, 200, 205.
 Kunzum 14.
 La Togpo 14.
 Kut 3.
 Labrang 4, 53, 70, 73, 78, 80, 197.
 Lace, Mr. 152.
 Ladakh 9, 52, 58, 88, 163, 184, 186, 187, 202.
 Laffan Rimbochhe 325.
 Lahul & Spiti district 1, 3, 14, 16, 67, 82, 140, 194, 294, 313.
 Lakes 18.
 Lakshmi 81.
 Lamaism 82, 89, 91.
 Lama Tashi Nargu 303.
 Lambagraon 64.
 Land reclamation 124.
 reforms 248-52.
 utilization 124.
 Langang Darze 81.
 Lavi fair 158, 160, 184, 188.
 Lawrence, John, 62.
 Leh 58, 187, 209.
 Leo 4, 9, 15, 16, 81, 140, 147, 200, 203, 205, 206, 231, 259, 279, 287, 295, 303, 325.
 Lepcha La 200.
 Lhasa 52, 77, 78.
 Libraries 298-99.
 Life Insurance Corporation 182.
 Lila Devi 312.
 Lippa 4, 23, 24, 35, 38, 70, 73, 78, 80, 81, 126, 146, 168, 173, 205, 213, 279, 283, 284, 287, 298, 303, 326.
 Livelihood pattern 209-12.
 Locha-rimbochhe 81, 82.
 Lohughat 56.
 Longden, Capt. 150.
 Lo Patech, Prof. 58.
 Lord Buddha 80.
 Dalhousie 150, 320.
 Krishna 54, 55, 56, 57.
 Siva 13, 57, 84, 122.
 William Hay 62, 237, 238.
 Ludhiana 158.
 MacNabb, J. W. 238, 241.
Mahabharata 14, 49, 50, 55, 326.
 Mahasu district 1, 2, 3, 56, 64, 82, 133, 143, 144, 146, 194, 204, 205, 210, 258, 262, 264, 266, 278, 281, 285, 297, 306, 310, 311, 313, 314, 317, 323.
 Mahavir Prashad 314.
 Malgad 31.
 Malingpa 332, 333.
 Malling 4, 9, 80, 90, 200.
 Manasa 49.
 Manasarowar 52, 89, 115.
 Mandi 58, 63, 89, 150, 281, 315.
 district 42, 115, 143, 168, 171, 210, 310, 311.
 Meneoti Dhar 25, 117, 198.
 Mangat Ram 63, 263.
 Manners & Customs 87-91.
 Manohar Dass 61.
 Mansukh Dass 61.
 Marital age 102.

Marriage alliances 95.
 and morals 93-101.
 customs and rituals 95-101.
 Mathura 319.
 Matrarchy 92.
 Mehbar 4, 19, 168, 199, 205, 295.
 Metric system 191, 193.
 Mineral Development Corporation 174.
 Mining 168-69.
 Minniken 152.
 Miru 4, 80, 168, 205.
 Mirza Haider 58.
 Mitchell, 242.
 Modes of conveyance 194-5.
 Moghul emperors 58.
 Money lenders 179.
 Monogamy 93-94.
 Moohumud Shahee 183.
 Morang 4, 9, 53, 69, 70, 80, 81, 170, 147, 169, 184, 190, 200, 203, 205, 206, 215, 225, 259, 264, 265, 270, 279, 280, 287, 295, 300, 302, 326, 327.
 tahsil 4, 70, 80, 81, 94, 132, 172, 213, 232, 233, 246, 326, 327.
 Moravian Mission 159, 294, 302.
 Mukherji, R. K. 48, 49.
 Nab 330.
 khampa 330.
 Nachang lochan 319.
 Nachar 4, 9, 18, 19, 20, 21, 25, 26, 27, 28, 33, 43, 44, 46, 137, 141, 144, 147, 150, 153, 164, 170, 171, 172, 188, 190, 194, 197, 198, 200, 205, 206, 222, 233, 244, 254, 259, 264, 265, 279, 280, 281, 283, 287, 295, 303, 304, 305, 312, 317, 327, 328.
 sub-division 4, 66, 76, 107, 129, 136, 199, 225, 230, 232.
 tahsil 4, 18, 19, 69, 70, 80, 132, 169, 176, 230, 232, 246, 327.
 Nahan 8, 262.
 Nakayang 328.
 Nako 9, 18, 80, 200, 205, 303, 330.
 Nam-chhra 81.
 Namgya 4, 9, 12, 70, 74, 78, 80, 98, 200, 205, 303, 331, 333.
 Nanganio 328.
 Narayan 81.
 Nargu 61, 300.
 Natpa 3, 4, 9, 19, 168, 199, 230, 244, 259, 287, 295, 302, 312.
 Navalkishore 314.
 Nawur 186, 323.
 Neelung 16, 36, 184.
 Negi, Thakur Sen 314.
 W. C. 74.
 Nelang 2.
 Nepal 49, 50.
 Nesang 4, 70, 71, 72, 80, 81, 115, 117, 168, 184, 200, 203, 205, 215, 298, 303, 331.
 New Delhi 307, 315.
 Newspapers 315.
 Ngulsari 144, 147, 172, 203, 205, 259, 279, 302.
 Nijalingappa, S. 315.
 Ningmet-cheebe 81.
 Nockchebaba 300.
 Nogli 168, 222.
 Nurpur 61.

Orders-

Arable land (1950) 250.
 de-limitation of the Council
 Constituencies (H.P. 1956) 311.
 Foreigners (Protected Areas 1958) 204.
 Parliamentary & Assembly
 constituencies (1956) 311.
 Territorial Council constituencies
 (H. P. 1962) 312.
 Ornaments 111.

Padam Singh, Mian 263.
 Paldan-lamo 81.
 Panchayats 286-92.
 Pandavas 49, 326.
 Pandrabis 4, 25, 26, 27, 28, 38, 40, 59, 151, 153, 199, 241.
 Pangi 4, 9, 17, 21, 80, 81, 168, 194, 197, 205, 270, 287, 307, 316.
 Panwi 4, 200, 260.
 Paras Ram 62.
 Parduman 53, 54, 55.
 Pargial 19, 330.
 Parliament 312.
 Partap Mal 51, 52.

Parties-

Communist 312.
 Congress 310, 311, 312, 313, 314, 315.
 Jan Sangh 310, 311, 315.
 Kisan Mazdoor Praja Parishad 310.
 Lok Raj 314, 315.
 Praja Socialist 312, 314.
 Scheduled Caste Federation 310, 311, 315.
 Socialist 310.
 Swatantra 312, 313.
 Parvati 8, 84, 322.

Passes-

Borasu 2, 194.
 Buran 2, 194, 259.
 Chungsakhago 11.
 Hangrang 7, 200.
 Khimokul (Gumrang) 2.
 Kimilay 2.
 Lami 2.
 Lamkhaga 2, 194.
 Manirang 3, 5, 194.
 Nalgan 2, 194.
 Pin Parbati 3.
 Raniso 2.
 Rupin 2.
 Shakarog Khengo 3, 194.
 Sharangchu 2.
 Shathal 2, 3, 194.
 Shimdang 2.
 Tarikhango 3, 194.
 Tungrug 331.

Paths-

Gyanthing valley 200.
 Namgya-Chango 200.
 Rupin 199, 279.
 Rupin-Natpa 199.

Sangnam-Shyalkhar-Sumra 200.
 Shaung Khad-Batseri 199.
 Shongtong-Kamru 199.
 -Tirung khad 200.
 Taranda-Barua khad 200.
 Tidong valley 200.
 Wangtu-Bhabha 199.
 -Kilba 199.
 -Natpa 199.
 Patriarchy 92.
 Paunda 3, 4, 172, 198, 200, 205, 230, 287, 312.
 Pawari 4, 9, 60, 61, 63, 121, 147, 168, 188, 203, 205, 228, 279, 287, 327.
 Jhula 189.

Peaks-

Chagle 2.
 Ghata Kanda 3.
 Gushu Pishu 3.
 Hansbeshan 2, 3.
 Leo Pargial 2, 5, 6, 7, 18.
 Poh 3.
 Termi 3.
 Peo 144, 146, 147, 196, 205, 275, 276, 279.
 Pilgrim centres 115.
 Pir Panjal range 6.

Plans-

Annual 231.
 First Five Year 134, 307.
 Fourth Five Year 170, 174, 175, 176, 197, 299.
 Hamilton's Working 153.
 Hart's Working 152, 153.
 Kitchingman's Working 153.
 Lace's Working 153.
 Madan's Working 153.
 Second Five Year 141, 169.
 Third Five Year 126, 169, 204, 221, 226, 227, 297.

Plateaus and Plains 8.

Police-

Armed 260.
 Force 258-60.
 Polyandry 94-95, 103, 209.
 Polygamy 94.
 Population 3, 66.
 Prahlad 54.
 Prater S. H. 35.
 Pre-Aryan history 49.
 period 51.
 Bhot period 51, 56.
 Historical period 48, 68.
 Khash period 51.
 Progeny orchards 140, 141.
 Prostitution 106.
 Protected species 34.
 Public games 122-23.
 Puh 4, 9, 12, 27, 28, 70, 71, 74, 80, 110, 122, 147, 158, 172, 185, 188, 189, 190, 194, 198, 203, 205, 206, 207, 222, 233, 254, 259, 261, 264, 279, 280, 283, 285, 287, 294, 295, 302, 303, 304, 305, 307, 317, 319, 320, 325, 330, 332, 333.

sub-division 4, 18, 66, 76, 129, 136, 225, 230, 232, 270, 304, 320, 325, 326, 332.
 tahsil 4, 70, 80, 81, 107, 132, 141, 169, 230, 232, 246, 323, 331, 332.
 Punjab 4.
 Punjab 11, 55, 62, 142, 158, 241, 243, 248, 295, 296, 313.
 Government 305.
 Railway Co. 150.
 Puranas 13.
 Purbani 4, 20, 23, 28, 43, 44, 46, 169, 200, 205, 303, 304, 334.
 Raghu 49.
 Raghunath Singh, Tikka 61, 62, 63, 238, 241, 263, 335.
 Rainfall 43-44.
 Rajas—
 Anand Chand 312.
 Anurudh 55.
 Banasur 56.
 Bavasa Dev 54.
 Bidhi Singh 59.
 Chatar Singh 57.
 Chubal Singh 55.
 Jamal 55.
 Kehri Singh 57, 58, 59.
 Mahinder Singh 59, 61, 228, 237, 238.
 Man Singh 59.
 Padam Singh 63, 64, 65, 294.
 Ram Singh 59.
 Rudar Singh 59.
 Shamsher Singh 60, 61, 63, 64.
 Udai Singh 59.
 Ugar Singh 59.
 Vijay Singh 59.
 Vir Bhadra Singh 55, 64, 314, 315.
 Rajgram 241, 243, 244, 324, 335.
 Rakas Tal 13.
 Rakchang 4.
 Rakchham 4, 16, 35, 69, 70, 72, 147, 197, 203, 205, 279, 284, 287, 303, 320, 333.
 Raldang 5, 7, 15, 17, 19, 84, 115, 320, 334.
 Ramchandra 57.
 Ram Nand 303.
 Ramni 4, 18, 199, 200, 205, 230, 279, 287.
 Rampur 56, 57, 62, 133, 158, 160, 161, 165, 177, 184, 186, 188, 204, 205, 207, 209, 213, 219, 235, 245, 254, 258, 262, 274, 295, 297, 314.
 tahsil 1, 3, 4, 234, 237, 242, 254, 328.
 Ran Bahadur Singh 61, 63, 64.
 Rangbar 22.
 Rangreeto 80, 115.
 Rangritungma 115.
 Repang 336.
 Rarang 4, 9, 31, 69, 70, 80, 164, 169, 171, 197, 205, 287, 303, 307, 316.
 Rasbir 300.
 Rawan Hard 12.
 Rawin 60, 328.
 Religion 76.
 Rest-houses 169, 320.
 Retail centres 188.
 Ribba 4, 9, 69, 70, 80, 135, 141, 147, 172, 200, 205, 279, 287, 303, 334.

Ribbentrop 151.
 Ridung 7, 8, 334.
 Rirang 334.
 Rispa 4, 69, 70, 80, 168, 200, 205, 215, 298, 334.
 Rivers—
 Baspa 5, 6, 10, 11, 12, 15, 16, 19, 27, 35, 38, 41, 42, 148, 150, 184, 197, 203, 223, 274, 319, 333, 334.
 Brahmaputra 13.
 Chandrabhaga 49, 50.
 Ganga 1, 8, 50, 77, 89, 90, 91, 157, 169.
 Indus 13.
 Jadh Ganga 2.
 Jhelum 49.
 Muksung 14.
 Pare Chhu 2, 3.
 Sampoo 14.
 Satluj 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 21, 22, 23, 25, 26, 27, 28, 29, 32, 35, 37, 49, 50, 60, 91, 127, 141, 150, 151, 152, 169, 187, 194, 196, 197, 199, 200, 203, 223, 236, 265, 318, 320, 323, 324, 326, 327, 331.
 Satrudra 14.
 Satloda 14.
 Shatadru 14.
 Spiti 2, 3, 5, 6, 7, 9, 12, 14, 15, 16, 18, 27, 148, 203, 223, 245, 318, 325, 331.
 Sumudrung 14.
 Sutoodra 14.
 Yamuna 1, 8, 49, 77, 157, 169.
 Zang-tee 14.
 Riwalser 89, 115.
 Roads 195-200.
 Bridle 198-200.
 Hindustan-Tibet 17, 31, 194, 197, 204, 333.
 Jeepable 197-98.
 Kalpa-link 196.
 Karchham-Sangla-Chhitkul 197, 198.
 Kilba-Shaung khad 198.
 Motorable 196.
 Nachar-link 197.
 Namgya-link 198.
 National Highway No. 22. 3, 5, 17, 29, 189, 196, 197, 198, 199, 200, 203, 204, 219, 221, 260, 320, 323, 332.
 old Hindustan-Tibet 197, 260, 320, 323, 326, 327.
 Ropa-Shyaso valley 198.
 Taiti valley 197.
 Upper Hindustan-Tibet 39.
 Rogi 4, 9, 21, 168, 174, 197, 205, 295, 307.
 Rohru 56, 63, 177, 194, 219, 245, 248, 314.
 tahsil 1, 2, 6, 235, 236, 237, 242, 248, 323.
 Rokchang-Kachang 199.
 Rokti 169.
 Roodok 184.
 Ropa 4, 10, 22, 23, 69, 70, 80, 163, 168, 169, 186, 198, 300.
 Rose, H.A. 1, 321.
 Rotation of crops 136.
 Royle, J. Forbes 24, 35.

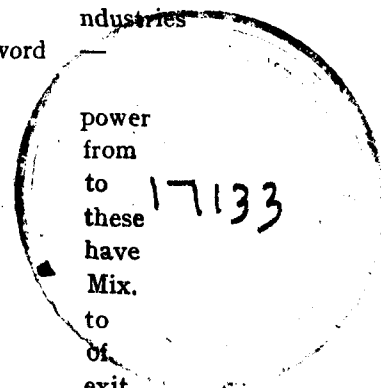
Rupi 3, 4, 9, 20, 31, 120, 146, 147, 199, 203, 205, 230, 243, 259, 279, 287, 302, 312.
 Rushkalang 4, 70, 74, 198.
 Russian leather 187.
 merinos 146.
 Rutarang 203.
 Saksena, R. N. 256.
 Salarang 4.
 Salogra 316.
 Salvation army 158, 301, 302.
 Sanam Plazar 303.
 Sangla 4, 16, 20, 35, 41, 42, 44, 46, 53, 80, 141, 144, 146, 147, 148, 168, 197, 199, 203, 205, 206, 222, 225, 233, 254, 259, 279, 284, 287, 295, 302, 303, 305, 307, 334.
 tahsil 4, 69, 70, 80, 132, 171, 188, 190, 230, 246, 319, 320, 324, 335.
 Sangnam 4, 10, 17, 70, 73, 79, 80, 81, 152, 158, 159, 163, 194, 198, 200, 205, 335.
 Sangri 64.
 Sangya Dorje 303.
 Sanjivayya, D. 315.
 Sankrityayan, Rahul 1, 50, 51, 55, 56, 74, 75, 157, 158, 256, 262.
 Sapni 4, 164, 168, 200, 205, 230, 303, 323, 335, 336.
 Sarhan 13, 53, 54, 55, 56, 57, 60, 76, 87, 153, 185, 319.
 Sarkung 333.
 Sat Khund 52, 55.
 Satyaketu Vidyalankar 49.
 Schreve 159.
 Scotch cogs 163, 186.
 highlanders 218.
 Seeds and manure 135-37.
 Seoni sub-tahsil 210.
 Seraj, Inner 314.
 Outer 59, 314.
 Sewal, Anand Ram 314.
 Sham Lal 61, 62, 235, 236, 237, 238, 239, 240.
 Sharbo 141, 284.
 Sharpsinghe 168.
 Shaung 4, 164, 184, 303, 319.
 Shipki 13, 194.
 La 2.
 Shirgin 333.
 Shiv Lal 314.
 Shohneetpur 13, 14, 56, 57.
 Sholdang 146, 147, 279.
 Sholtu 18, 60, 151, 152, 171, 176, 199, 203, 222, 260.
 Shongtong 27, 188, 196, 199, 200, 203, 260.
 Shorchan Gambo 51.
 Shua 61, 228, 241, 244, 318, 325, 331, 335.
 Shuktu 333.
 Shyalkhar 4, 9, 15, 16, 76, 78, 81, 82, 117, 196, 200, 203, 244, 245, 259, 260.
 Shyaso 4, 10, 17, 23, 70, 78, 205, 295.
 Siangon 10.
 Siapishupa 332.
 Simla 5, 6, 33, 49, 60, 62, 63, 83, 118, 146, 158, 182, 196, 203, 207, 214, 218, 219, 238, 263, 264, 266, 270, 275, 278, 285, 294, 313, 314, 316, 317, 320, 326, 327.
 Hill States 57, 62, 63, 64, 150, 230, 238, 241, 242, 263, 264.
 Sirmur 57, 58, 59, 63, 143, 168, 186, 210, 264, 266, 306, 311.
 Sleen, Dr. Van Der 35, 103, 205, 215, 256.
 Snowfields 19.
 Social life 92-106.
 Solon 262, 275.
 Song-tsen-tampo 51.
 Spain 143, 145.
 Spanish merino ewes 146.
 Spilo 4, 70, 73, 81, 91, 120, 137, 141, 170.
 Spiti 38, 52, 202, 213, 245, 263.
 Sub-division 1, 3.
 Springheads 18-19.
 Spuwa 332.
 Srikand Dhar 1, 3.
 Staging huts 204.
 Stango 184.
 State trading 190.
 Steadman, E. B. 241.
 Stenhouse 151.
 Streams—
 Barang 148.
 Barua 31, 200, 319.
 Baturi 31.
 Baura 5.
 Bering 16.
 Bhabha 17, 223, 274.
 Bonkeo 335.
 Chaladokpo 15.
 Chuling 15.
 Darbung 335.
 Dubling 27, 37.
 Duling 5, 12.
 Gyanthing 5, 12.
 Hango-Chuling 148.
 Hara 15.
 Kabzima 14.
 Kashang 5, 12, 17, 31, 148, 203.
 Kirang 148, 260.
 Kozang 148.
 Leo 148.
 Lipak 15, 173, 325.
 Mulgoon 12, 17.
 Nargani 2.
 Nesang 28.
 Pabar 6.
 Pangi 196, 203.
 Panwi 5, 27.
 Pejur or Taiti 5, 17.
 Pinglung 14.
 Ropa 5, 10, 12, 16, 28.
 Rukti 16.
 Rupi 12.
 Salarang 30, 37.
 Sangnam 38.
 Shaung 198, 199.
 Shohneet 13.
 Shorang 5, 12.
 Shyaso 148, 197, 198, 203.
 Soldang 12, 25, 197.
 Sooreh 17.
 Supin 2.
 Suthi 16.
 Taiti 12, 23, 28, 35, 38, 326.
 Tanglung 23, 148.

- Thatang 16.
 Tikadda 6.
 Tirasang 15.
 Tirung 5, 10, 12, 17, 28, 38, 148, 200, 326, 333.
 Wangar 5, 12, 17.
 Yula 12, 17.
 Yulang 15, 16, 173.
 Zupkia 16.
- Strong, Mr. 150.
 Suhel 59,
 Sui 56.
 Suket 58, 150, 213.
 Sumdo 196, 203, 207, 260.
 Sumra 4, 9, 80, 81, 200, 204, 259, 303.
 Sunam 79, 186.
 Sundernagar 279.
 Sungra 4, 9, 168, 198, 205, 244.
 Superstitions 85.
 Surendra Shah 63.
 Susing Thach 23.
 Sutpitak 50.
 System of Begar 236-37.
- Tabo 3.
 Taling 70, 74.
 Tandon, J. C. 150.
 Tangling 53, 230.
 Tangusta 59.
 Tanks 18.
 Tapri 19, 134, 146, 188, 189, 190, 196, 197, 203, 205, 207, 222, 233, 254, 259, 274, 279, 307.
 Tara 81.
 Taradevi 81.
 Taranda 4, 6, 9, 25, 26, 30, 168, 194, 198, 200, 244, 327.
 Tarema 81.
 Tartary 88.
 Tashigang 80, 200.
 Telangi 4, 168.
 Temperature 44-45.
 Territorial Council 311, 312, 313.
 Teshoo Loomboo 78.
 Tezpur 56.
 Thangi 4, 10, 69, 70, 80, 163, 200, 205, 230, 287, 300, 303, 305.
 Theog 58, 59, 172, 314.
 Tholing Muth 54.
 Thomson, Thomas 1, 24.
 Thornton, Edward 1, 7, 69, 77.
 Tibet 1, 2, 4, 5, 8, 9, 43, 50, 54, 58, 71, 78, 81, 82, 88, 89, 146, 160, 168, 184, 185, 194, 209, 210, 213, 245, 300, 319, 321, 323, 327, 330.
 Tidong 28, 260, 334.
 Tikkam Dass 60.
 Tikker Garh 323.
 Topography 4, 42.
 Trade & Commerce 183-90.
 Traffic in women 106.
 Travel facilities 204.
 Tukpa 61, 241, 244.
 Inner 326, 334.
 Outer 320.
- Urni 4, 9, 23, 29, 168, 197, 205, 230, 287, 303.
 U. S. S. R. 141, 143, 145.
 Utsavasanketas 49.
 Uttarkashi District 1, 2, 194.
 Uttar Pradesh 1, 2, 142, 194.
- Valleys 8-11.
 Baspa 5, 6, 7, 10, 13, 25, 36, 42, 45, 56, 197, 198, 199, 200, 203, 222, 318, 319, 320, 321, 334.
 Bhabha 37.
 Chor Gad 2.
 Gyanthing or Nesang 11, 200.
 Hangrang or Spiti 5, 9, 36, 39, 70, 74, 81, 82, 107, 129, 200, 219, 319, 330.
 Kashang 11.
 Mulgoon 11.
 Pejor or Lippa 11.
 Ropa 5, 10, 141, 169, 200, 215.
 Sangla 10.
 Sangnam 10, 26.
 Satluj 4, 5, 8, 25, 26, 28, 42, 45, 117, 129, 149, 150, 153, 194, 196, 198, 199, 200, 219, 239.
 Shyaso 10.
 Taiti 36, 197.
 Tidong 7, 10, 36.
 Tirasang 200.
 Wangpo or Bhabha 10.
 Yula 11, 80, 167.
- Varanasi 53.
 Vasistha 14.
 Vedas 83.
 Vehicles & Conveyances 201-3.
 Vidyadharas 48.
 Vidyalkar, Jaychandra 49.
 Vinoba Bhawe, Acharya 252.
 Vishnu 54.
- Wages 214-15.
 Wallich, Dr. 128.
 Wangtu 9, 12, 19, 21, 23, 188, 189, 190, 194, 196, 198, 199, 203, 206, 259, 260, 327.
 Water resources 18-20.
 Waterways 203.
 Weights & Measures 190-93.
 West Pakistan 134.
 Widow re-marriage 102.
 William, Major Sir 184, 190, 229.
 Wilson, Andrew 1, 7, 78.
 World War I-153.
 II-153.
- Yadung 259.
 Yaksas 48.
 Yaling 332.
 Yangpa 10, 295.
 Yula 4.
 Yutrang 10.
 Yuwarangi 4, 168, 169.
- Zamesari 327.
 Zaskar 1, 2, 4, 5, 49.
 Zimmer Heinrich 48.

ERRATA

Page	Line	Word	Read	For
1	2	3	4	5
7	6	6	furiously	furibās by
9	7	8	morinda	morina
10	17,18 (Complete)		a picture not of smoothness but ruggedness which has been appropriately described as "a scene of savage grandeur."	appropriately.....grandeur."
26	20	6	dominant	dominent
28	40	4	5,73,189	5,73,139
29	3	12	Two	To
30	9	9	<i>spirea</i>	<i>sniresa</i>
	10	2	<i>balsam</i>	<i>balaam</i>
	11	3	aspects	aspetcs
	18	1	<i>Brachyxystus</i>	<i>Brachyvxstus</i>
	21	5	<i>Fomes</i>	<i>Fomea</i>
	32	8	<i>Tramets</i>	<i>Trameta</i>
31	10	1	avalanche	avalanch
	20	5	and	anp
32	18	10	get	set
	32	—	add 'of' after rehabilitation—	
34	20	2	<i>baz</i>	<i>bar</i>
35	4	9	an	on
	13	5	difficult	dlfficult
	37	1	has	had
	30	1	Kanauras	Kinauras
37	30	1	<i>pishi</i>	<i>nishi</i>
39	13	2	<i>himalayensis</i>	<i>himalayanis</i>
	38	5	<i>leepya</i>	<i>leepva</i>
	39	5	<i>Arborophila</i>	<i>Apbarophile</i>
40	22	4	are	area
42	27	5	147.2	47.2
44	16	2	26.7	126.7
	17	2		
49	40	3	<i>Bhartiya</i>	<i>Bhattiya</i>
50	7	—	अहोसि किन्नर तदा	चहोसि किन्नरी तदा
76	2	5	classes	class
81	2	12	Chango	Change
85	25	11	or	of

1	2	3	4	5
87	31	6	word's	world's
93	16	6,7	polyandrous groups	polyandric group
95	23	8	Chamangs	Chamang
99	32	10	the	fhe
102	31	—	add 'XXX' after 'No.'	—
103	8	—	add 'as' after the word 'long'	—
105	23	2	May	My
107	31	3	family	famiy
108	3	6	may	mav
112	8	9	carrots	carrets
121	4	2	bunch	lunches
130	37	—	add 'no' after the word 'find'	—
143	17	2	enumerations	enumerations
149	29	—	add 'of' after the word 'hectares'	—
152	35	1	intervals	invervals
153	30	8	followed	foilowed
155	35	1	1964-65	1664-65
168	22	5	destroy	destory
170	6	1	industries	ndustries
172	34	—	add 'and' after the word 'Khadi'	—
187	36	3	powder	power
188	30	7	on	from
		10	and	to
	32	13	there	these
191	26	8	has	have
218	34	1	Max.	Mix.
220	10	2	of	to
222	29	8	to	of
233	1	6	exist	exit
	38	9	Field	Held
240	26	1	or	of
262	19	8	female	females
283	3	9	visits	visit
296	5	3	the	this
304	Heading		Kinnaur	Kjnnaur
322	—do—		—do—	—do—

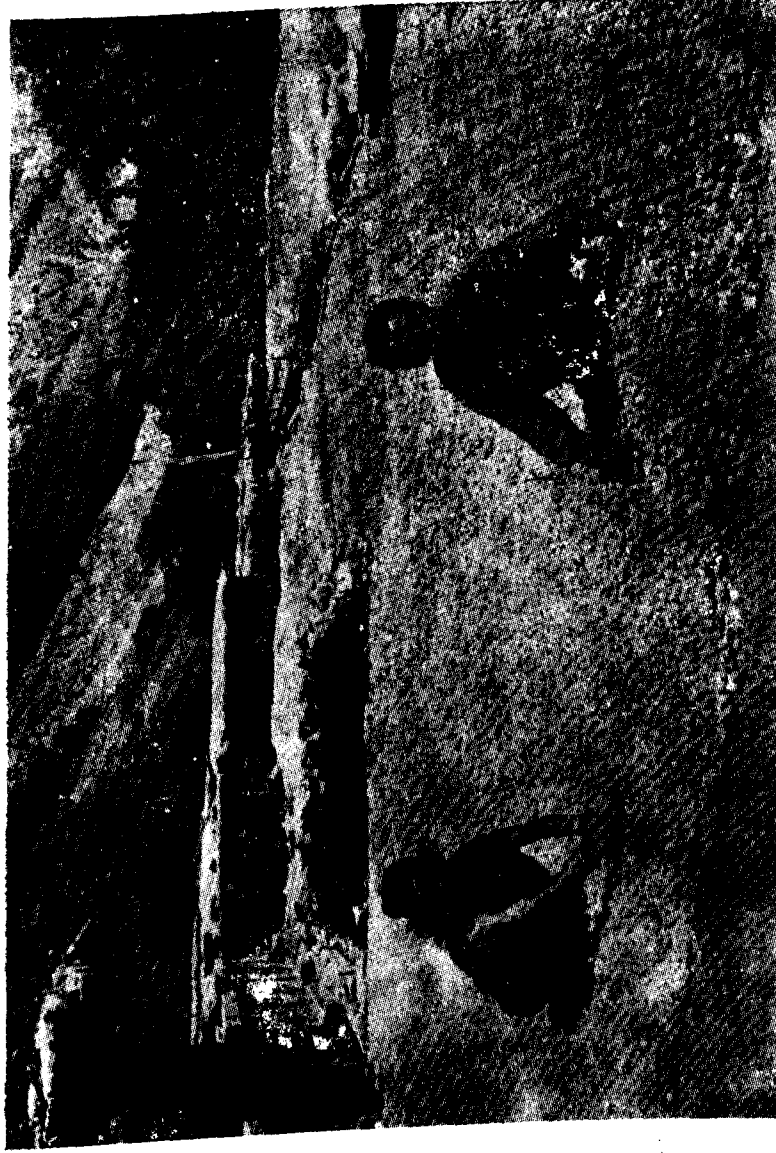




Mrs. Indira Gandhi in a dancing posture



Kinner Kailas with Chini village in the foreground



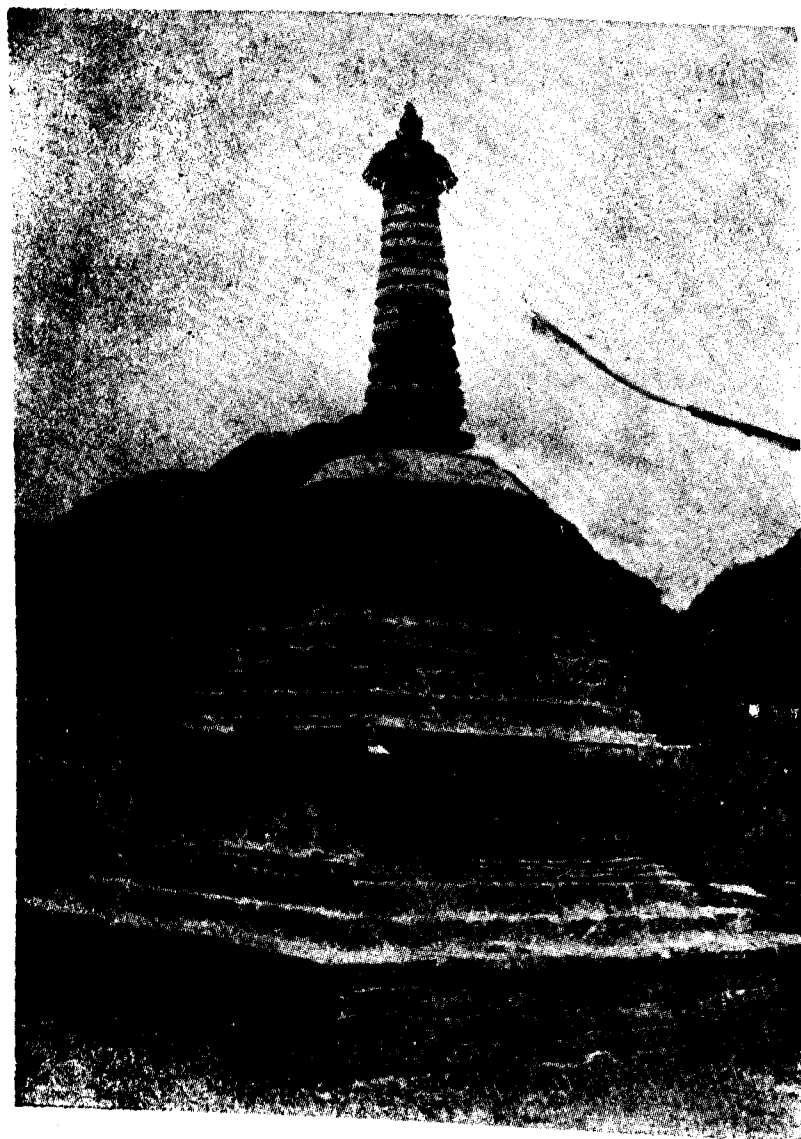
Drying *Chullis* on a house roof at Giabong



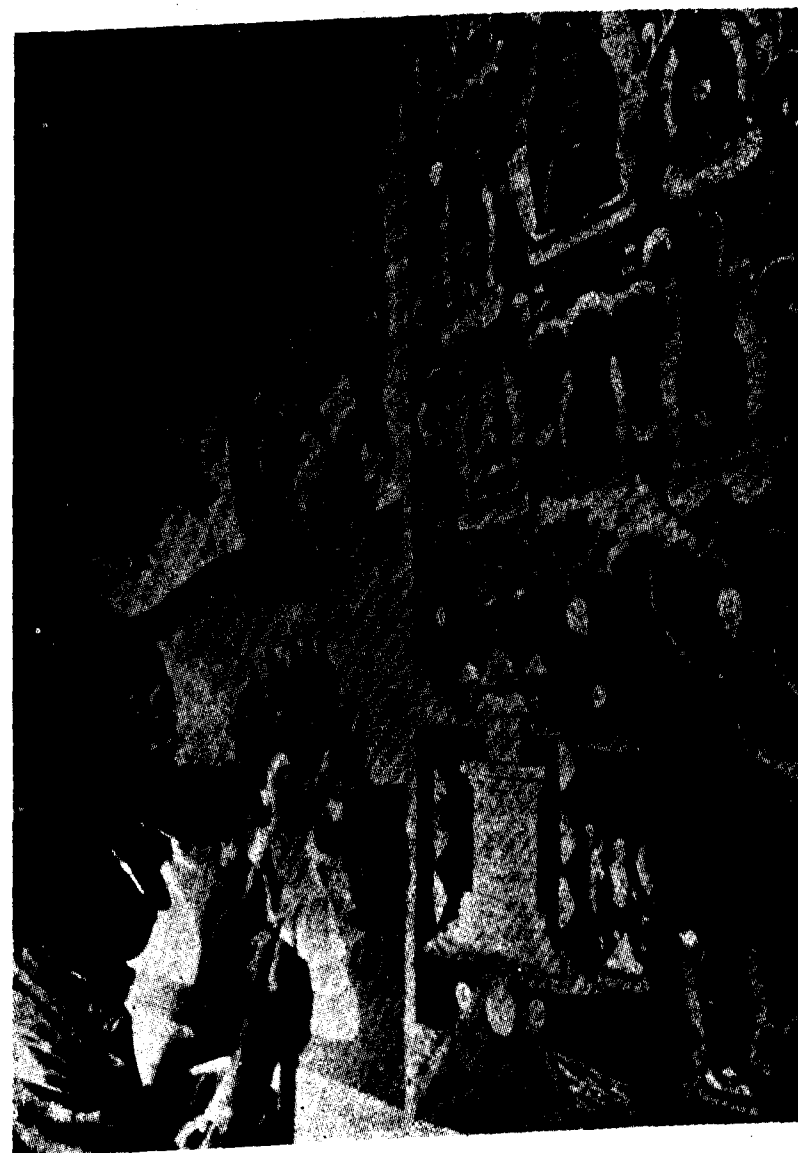
Zos driving a plough



Kanaura damsels



A Buddhist *chorten* at Spilo



Fresco paintings



Kanaura belles attired in festive dresses



Collection of *Chilgoza*



G
12/1/57
171



Brewing local tea in a *dangbo*