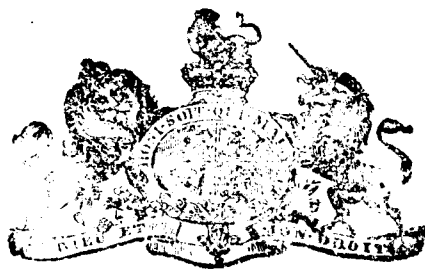


RESOLUTION
ON THE
ADMINISTRATION OF FAMINE RELIEF
IN THE
NORTH-WESTERN PROVINCES AND OUDH
DURING
1896 AND 1897.



ALLAHABAD.
NORTH-WESTERN PROVINCES AND OUDH GOVERNMENT PRESS.
1897.

RESOLUTION

ON THE

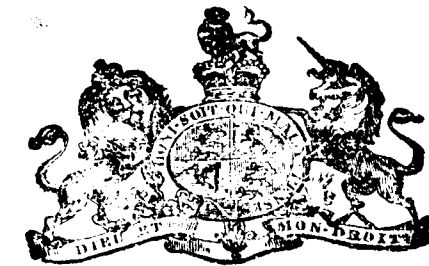
ADMINISTRATION OF FAMINE RELIEF

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NORTH-WESTERN PROVINCES AND OUDH GOVERNMENT PRESS.
1897.

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Government of the North-Western Provinces and Oudh.

NARRATIVE AND RESULTS OF THE MEASURES ADOPTED FOR THE RELIEF OF FAMINE DURING THE YEARS 1896 AND 1897.

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REFERENCES.

Group.	District.	Percent- age of relieved to population.		Group.	District.	Percent- age of relieved to population.
I.	Banda, ...	42.3			Gorakhpur, ...	
II.	Jalaun, ...	34.8			Benares, ...	
III.	Hamirpur, ...	25.1			Azamgarh, ...	
IV.	Allahabad, ...	21.7			Fyzabad, ...	
V.	Hardoi, ...	15.8			Farukhabad, ...	
VI.	Jhansi, ...	15 to 10			Bareilly, ...	
	Lucknow, ...				Bijnor, ...	
	Cawnpore, ...	10 to 5		IX.	Gonda, ...	2 and under
	Rae Bareli, ...				Etah, ...	
VII.	Unao, ...				Shahjahanpur, ...	
	Sitapur, ...				Kheri, ...	
	Jaunpur, ...	5 to 2			Moradabad, ...	
	Mirzapur, ...				Basti, ...	
	Fatehpur, ...				Dehra Dun, ...	
	Agra, ...				Budaun, ...	
	Muttra, ...				Mainpuri, ...	
VIII.	Bara Banki, ...					
	Etawah, ...					
	Sultanpur, ...					
	Pilibhit, ...					
	Partabgarh, ...					

Map
of the
N. - W. PROVINCES & OUDH,
showing

THE INTENSITY OF THE DISTRESS WHICH PREVAILED IN
CERTAIN DISTRICTS AS BASED ON THE PERCENT-
AGE OF PEOPLE RELIEVED IN EACH OF THESE
DISTRICTS TO THE DISTRICT POPULATION,
DURING 1896-97.

Scale—53 Miles = 1 Inch.

Government of the
North-Western Provinces and Oudh.

(SCARCITY DEPARTMENT.)

NARRATIVE AND RESULTS OF THE MEASURES ADOPTED
FOR THE RELIEF OF FAMINE DURING THE YEARS 1896
AND 1897.

No. 2469.

*Extract from the Proceedings of the Government of the North-
Western Provinces and Oudh in the Scarcity Department,—
under date Allahabad, November 23rd, 1897.*

READ again—

Resolution No. 3545S., recorded by the Lieutenant-Governor and Chief Commissioner on the 20th October 1896, reviewing the relief operations in Bundelkhand and in certain other districts of the North-Western Provinces and Oudh during the spring, summer, and autumn of 1896.

Letter No. $\frac{196}{S-73}$, dated 23rd November 1896, reporting on the extent to which the early cessation of the rains of 1896 had injured the *kharif* harvest, prejudiced the prospects of the ensuing *rabi*, and affected the condition of the people at large.

Correspondence and Minutes of conferences between the Lieutenant-Governor and Chief Commissioner and Commissioners of Divisions, the Chief Engineer, District Officers, Superintending Engineer and others regarding the organization and conduct of relief measures from October 1896.

Read also—

Communications under various dates from Commissioners of Divisions, Collectors of Districts, and Superintending Engineers in whose jurisdictions famine or scarcity prevailed during 1897, reporting on the organization, progress, termination, and results of relief operations carried out under their supervision and control.

RESOLUTION.

INTRODUCTION.—This narrative deals with the famine which visited the North-Western Provinces and Oudh during the years 1896 and 1897. These Provinces cover an area of 107,500 square miles, and in 1891 contained a population of 46,905,085, or nearly 47 millions. It is believed that the population has since increased. At one period or other

during 1896 and 1897 every part of this great territory was to a greater or less extent affected by crop failure, entailing scarcity of food or high prices. In one-third of the area there was famine; in another third there was scarcity; and in the remainder there was the pressure which famine prices cause. Previous famines or scarcities—and there have been many—affected only limited portions of the Provinces. This is the first occasion within historic memory that the entire country has been so severely afflicted.

The local famine in Bundelkhand last year declared itself on the failure there of the *rabi* or spring harvest: the general famine of the present year immediately followed on the failure of last year's autumn or *kharif* crops. But neither famine was produced by the loss of a single harvest: the causes which culminated in these visitations must be sought much further back than the local or general crop failures of 1896.

The year 1896 was only the last and worst of a series of years marked by adverse conditions of climate, and by the deficient harvests which such conditions produce. To explain the events which, beginning in 1896, reached a climax in 1897, it is necessary to review, as briefly as may be, the character of the preceding years and to narrate the repeated disasters which befell those extensive regions in which famine or scarcity subsequently developed.

CHAPTER I.

Economic condition of the North-Western Provinces and Oudh from 1892 to 1896.

SINCE the last scarcity of 1877-78 the welfare of the United Provinces had up to 1892 met with no serious check. There had been, it is true, deterioration, within limited areas depression and even local distress. But these troubles were no more than the fluctuations of agricultural prosperity that might be expected in any large tract of country; and the period of fifteen years that followed the famine of 1877-78 was a period of progressive welfare throughout the United Provinces generally.

In 1892 the country was at a stage of full normal prosperity. Prices were moderate and bad harvests in Europe gave an extraordinary stimulus to the Indian export trade. From April 1891 to June 1892 the rush of wheat to the sea-ports had been in excess of anything formerly known: and it is calculated that during 1892 the Provinces exported surplus grain to the value of nearly four crores of rupees. An alarm was raised that the money thus brought into the country was the price of a dangerous exhaustion of the local food supply; but this was disproved by a special inquiry which Government instituted into the state of the existing stocks, and the alarm was further dissipated by the trade reaction in the following year.

The harvests that bore the brunt of all this export were distinctly good. The spring crops gave an outturn which was for the most part normal and nowhere, except in the Azamgarh district and in the Kumaun division, under 75 per cent. of a full average. Favoured by a timely and well-distributed monsoon rainfall, the autumn crops were sown over an exceptionally large area, and their produce was as good as that of the foregoing spring harvest, except in parts of Bundelkhand and in the rice lands of the Benares and Gorakhpur divisions. These latter tracts suffered from droughts and floods, and the consequent failure in the rice crop, on which these divisions largely depend, had to be met by considerable imports of that grain from Bengal.

The winter of 1892-93 was an unusually wet one, and was followed by years of excessive rainfall, which have had no small part in leading up to the recent distress. The spring harvest of 1893, though giving fully an 80 per cent. outturn for the Provinces as a whole, was by no means of uniform excellence. Magnificent crops were produced on unirrigated and light soils; but the wet and cloudy weather that prevailed up to harvest time induced rust and blight in lowlying lands

and on the heavy black soil of Bundelkhand. The ripening crops, too, in many places were devastated by storms of hail that swept over the country in March, and necessitated revenue remissions in 12 districts, amounting to close on 2½ lakhs of rupees. The southern and western districts of the Provinces showed excellent harvests; but Azamgarh and three-fourths of Bundelkhand suffered severely from the combined effects of hail and excessive moisture.

The monsoon rains began early and continued abnormally heavy. The autumn harvest was generally impaired by the constant wet, which culminated in a cyclonic storm in October. Except for rice, which turned out unusually well, the yield on the whole was not quite 70 per cent. of the average. It was best in the Meerut, Rohilkhand and Agra divisions, and worst in Oudh and in the Banda, Allahabad, Ghazipur, Ballia and Azamgarh districts of the North-Western Provinces.

This deficiency in the harvests produced its natural effect on the activity of the export trade, which indeed had begun to wane by the end of 1892. There was some surplus of export from Meerut and Rohilkhand; but the pinch of light harvests began to tell in the Allahabad and Benares divisions, which had to import respectively about 4,600 and 3,250 tons of food grain for their own consumption.

1894.

The year 1894 opened with much promise. The copious rains of the preceding autumn had led to spring sowings which covered over a million acres more than in 1893. But the winter rains, besides being irregular in distribution, were interspersed with long intervals of cloudy weather, and were followed before harvest time by untimely high winds. Blight and rust accordingly followed; but still the crops looked good, and it was not till they came to the threshing floor that a distinct lightness of the grain in the ear became apparent. The yield of wheat was the poorest for ten years past, nowhere except in the Doab exceeding two-thirds of a normal outturn. The coarser cereals did better, and sugarcane was very successful; but the harvest on the whole was again not above 70 per cent. of an average outturn, and it was particularly disappointing in the eastern divisions. In Bundelkhand the wheat and linseed crops were most seriously damaged by rust, and in the Jhansi and Jalaun districts further havoc was wrought by hailstorms.

To an indifferent spring outturn succeeded a still more unfortunate autumn harvest. Exceptionally heavy rains again characterised the season; and over large areas the autumn sowings were washed out of the ground. In October and early November came fresh storms of rain, followed by disastrous floods along the courses of all the larger rivers by which many houses were wrecked and much property destroyed, necessitating large remissions of revenue. In the tracts visited by inundations the millets and autumn

pulses were almost entirely destroyed and the rice crop was seriously damaged except on high ground, where it is scantily sown. This only mitigated the loss. For the provinces as a whole the estimated outturn was barely above half of a normal average. In the districts of the Lucknow and Benares divisions and in Banda, Basti and Azamgarh it was considerably less. The inclemency of the season started severe epidemics of cattle disease, which decimated the agricultural stock. Nor was the autumn more favourable for men than for cattle: malaria and cholera raged nearly all over the Provinces, and in the district of Gorakhpur alone the latter disease claimed close on 20,000 victims.

To what extent of distress the short harvests of the year and the weakening of the agricultural resources would have led if help from external markets had not been available, it is difficult to say. But the money that had poured into the country during the preceding export seasons now saved the position from being critical, and the Provinces were able to spend about 1½ crores of rupees in supplementing their food stocks from outside. Both 1893 and 1894 had been years of plenty in the Panjab, and from its teeming granaries came an influx of grain that penetrated into the most distant parts of these Provinces. Between April 1894 and March 1895 the Panjab imports by rail alone were well over half a million of tons, exclusive of large supplies that must have crossed the border by road. And now it was that the unequal fortunes of the different parts of the Provinces first began to come out in high relief. During the busy season of 1894-95 the Gangetic Doab was not only able to act as a clearing house for the drafts on the Panjab, but to send out a substantial surplus of its own, the net exports from Meerut and Agra being about 111,000 and 60,000 tons respectively. Rohilkhand held its own and somewhat more, paying for the grain it imported by large consignments of home-grown sugar. But in all the other divisions the imports far exceeded the exports.

Such then was the position in the beginning of 1895. The harvests generally had been deficient, markedly so in the eastern districts, in Bundelkhand, and in the valley tracts along the main rivers. Disease had been rife and prices were rising briskly, stemmed only by the influx of grain from the Panjab. Of the nine divisions in the Provinces only four were supporting themselves, and only two of these were helping their neighbours: the other five, with a population of 30½ millions, had become partly dependent on food supplies from outside.

Thus when 1895 began the prospects for the future were only moderately bright. The winter had once more been a wet and cloudy one, and the harvest month of March was visited by more than usually damaging hail and duststorms. The extraordinary excess of the autumn rainfall of 1894

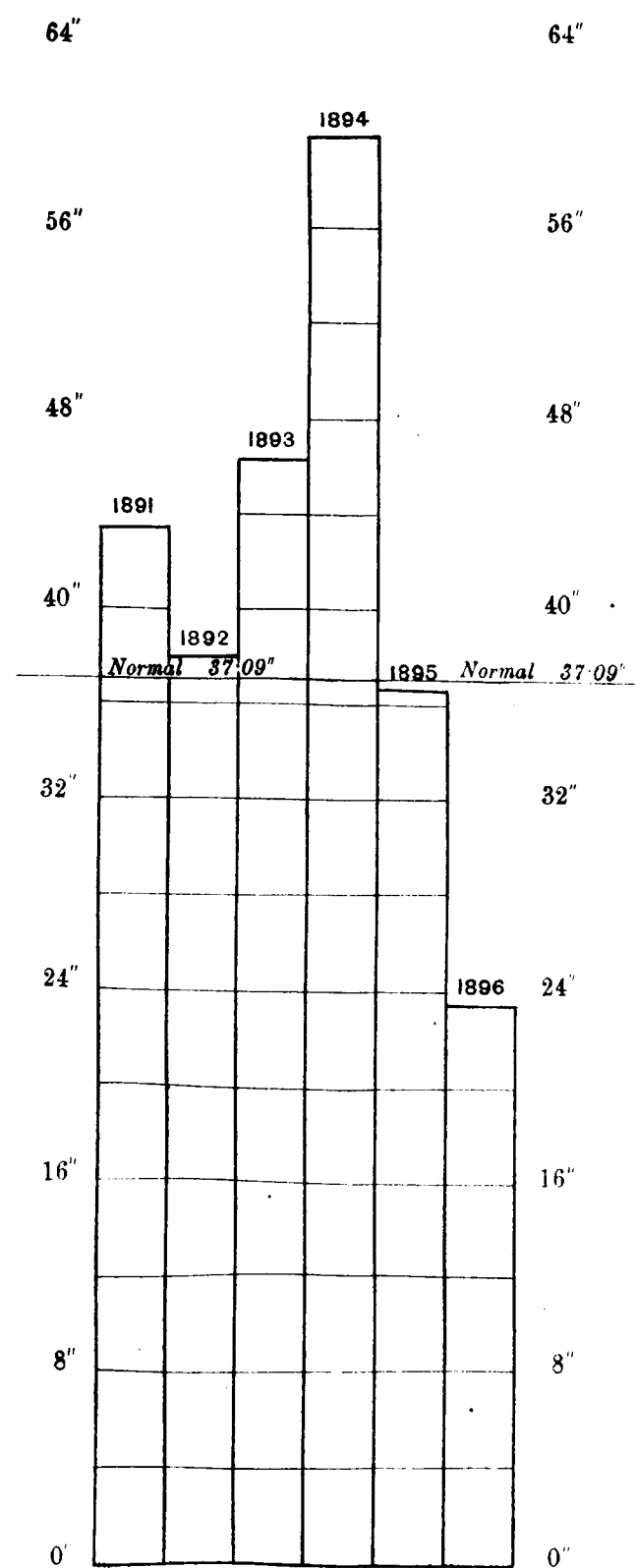
1895.

DIAGRAMS SHOWING THE RAINFALL

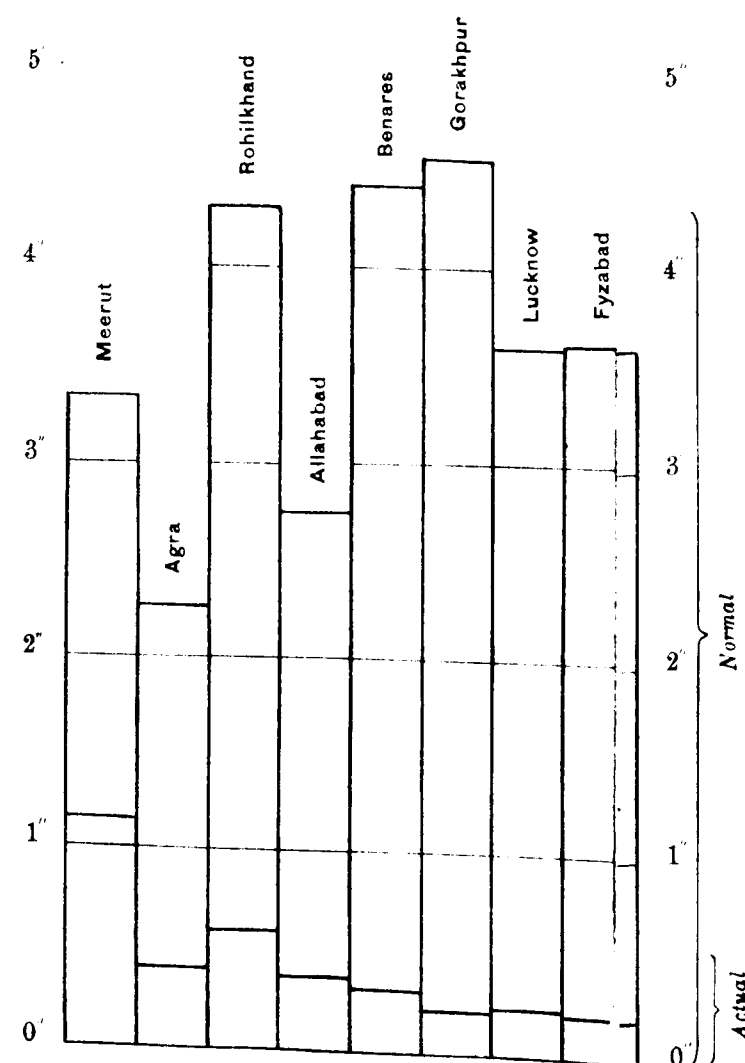
in the

N. W. PROVINCES & OUDH

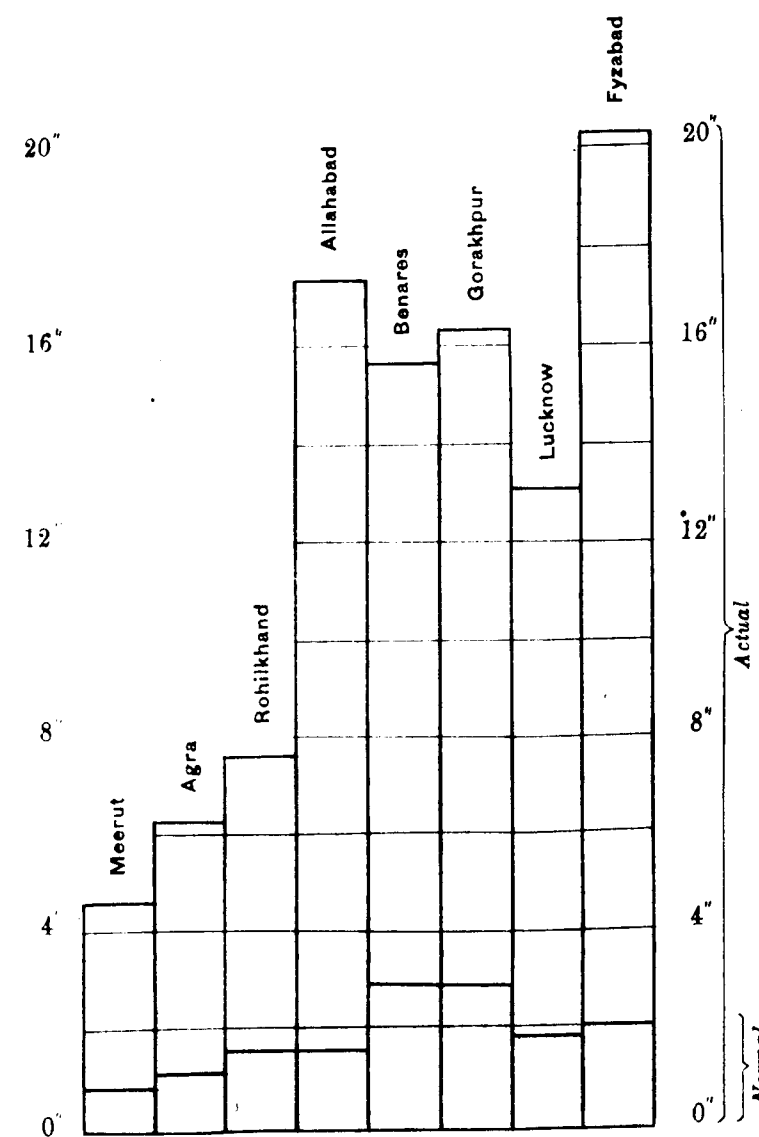
DURING THE PERIOD PRECEDING THE MONSOON OF 1896.



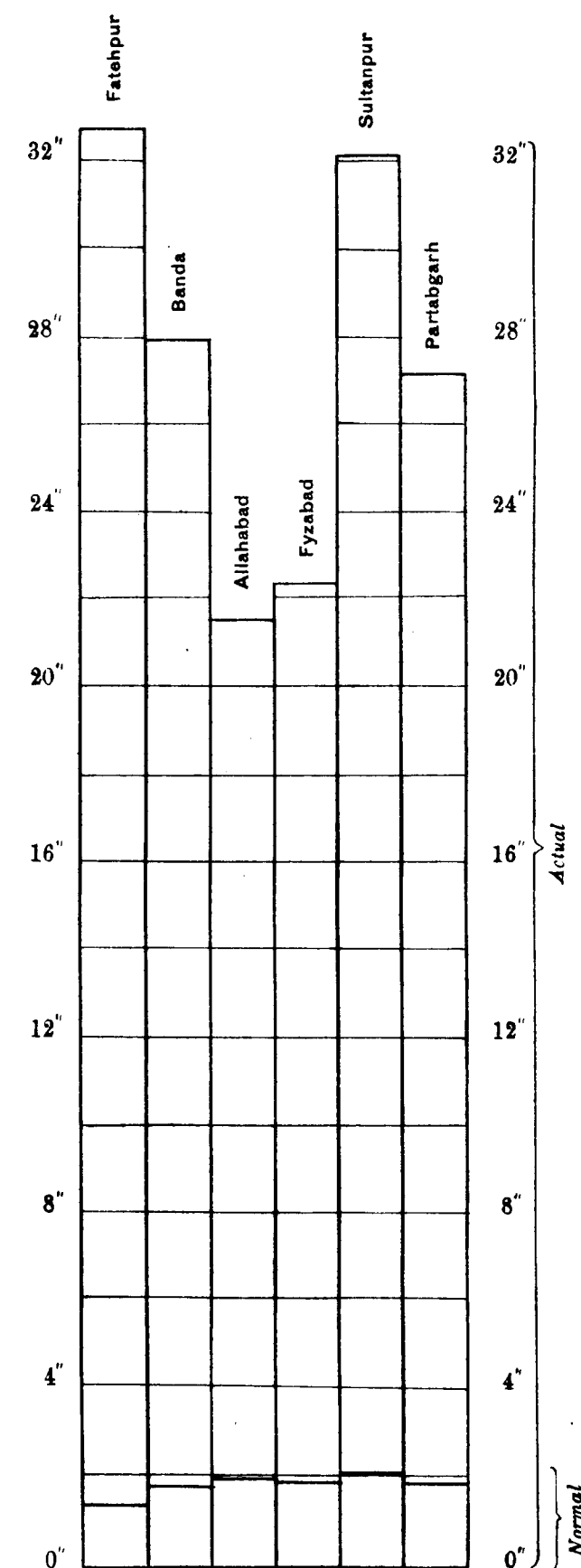
MEAN ANNUAL RAINFALL, 1891-96.



RAINFALL BY DIVISIONS, (Plains only),
during period
1st October, 1895—30th April, 1896.



RAINFALL BY DIVISIONS, (Plains only).
1st October—31st December, 1894.



RAINFALL IN SOME DISTRICTS
in
October and November, 1894.

is graphically shewn in the accompanying diagrams. In many places it had been impossible in the driving rain to plough the fields in time for the spring harvest; the sowings had been late; and in extensive tracts they had failed and had had to be repeated. The area actually sown, however, was up to the normal; and in the early spring the crops looked full and promising. But as they were ripening, clouds brought rust and blight, or high winds shrivelled the grain and reduced the produce. In Meerut and Agra alone was the outturn satisfactory; in these divisions the people (who had saved very largely in canal dues as irrigation was superfluous) reaped a harvest which was over 80 per cent. of the normal. In Rohilkhand the result was fairly good, except in the Sháhjahánpur district, where it fell short of half the average: elsewhere it was much below average, especially in Oudh and in Bundelkhand, where the important linseed crop was barely 25 per cent. of the average: while the wheat was little better. In all the five eastern and southern divisions the crops gave little more than half an average yield.

During the summer of 1895 there could thus be little doubt that in many parts of the country the poorer classes were not far removed from distress. In the Rae Bareli, Sitapur and Hardoi districts of Oudh test relief works were opened, and in the two latter districts large remissions and suspensions of revenue were made. Nearly two lakhs of revenue were remitted on account of crop failures in Bundelkhand; while Jalaun and Hamirpur received considerable reductions in their deteriorated tracts. Partly through these concessions and partly by virtue of continued grain imports from the Panjáb and the Gangetic Doáb, acute distress was staved off. A plentiful mango season, too, eked out the food stock of the poorer classes, and prices remained wonderfully steady, though with a natural tendency to rise.

The monsoon rains of 1895, anxiously awaited, began in due time with heavy and sudden falls, but afterwards lightened off considerably. A fairly normal area was shown as cultivated, and up to the beginning of September there was every hope of a good harvest. But, save for some scattered showers, the rains virtually ceased on the 5th of September and the drought thereafter reduced the harvest by about 20 per cent. short of the average. In the greater part of the Provinces the harvest was not bad enough to be the cause of anxiety had it followed a series of normal seasons and found the people prepared for hard times. But the cumulative results of indifferent harvests and climatic troubles were beginning to tell severely in Bundelkhand and in most of the eastern districts. In Bundelkhand, where nature is rarely propitious, the *káns* weed, stimulated in its growth by the previous heavy rainfall, was spreading and weakening the failing resources of the cultivator: in the autumn of 1895 the area under the plough had contracted by

nearly one-seventh, and the staples of the tract—the great millet, cotton and sesame—were largely ousted by poorer and coarser crops. In the eastern divisions, where the population is densest and the struggle for life most acute, the ravages of the floods of 1894 had been followed by the loss over large areas of the 1895 rice crop, the mainstay of the local agriculture. In Oudh and in the two eastern districts of Rohilkhand the depletion of food stocks was assuming a scarcely less serious phase. The year, too, was again an unhealthy one, the great heat that followed the premature close of the rains sowing the seeds of cholera and malaria. Among cattle the mortality from rinderpest was excessive, and an epidemic of foot-and-mouth disease followed the use of fodder injured by the untimely drought.

To add to their misfortunes the Provinces were now deprived of the help hitherto freely given by the Panjáb. The exuberant harvests of that Province had ceased in 1895, and its exports markedly declined in the latter half of the year. From April 1895 to March 1896 the rail-borne traffic in grain from the Panjáb was only 222,000 tons as against 500,000 in the preceding 12 months. The canal-irrigated divisions of Meerut and Agra as usual continued to show a balance of export in their favour; but the admitted surplus of the other seven divisions dwindled to insignificant figures, while their net food imports aggregated over 337,000 tons, and they would no doubt have taken more had the outside market been easier.

As a natural consequence of the tightening of stocks 1896. prices at last began to rise, and with no uncertain movement. By the beginning of 1896 the staple food grains were in the majority of districts 25 per cent. dearer than the normal, and prices rose sharply up to the end of February. The spring crop was then within sight of harvest, but its prospects were far from promising. The drought of the preceding autumn had reduced the area practicable for sowing. In many districts the dry baked ground defied the plough; and where irrigation was impossible the cultivator hesitated to risk his seed. For seed was scarce and very dear; and the chances of its germination in unirrigated soil grew fainter as the year wore on and rain held off. The area actually sown was fully an eighth below the normal. In Bundelkhand alone it shrunk by over a quarter of a million acres; and the total defect for the Provinces was over two million acres.

With the exception of some showers in the beginning of December, there had been no rain between the early close of the monsoon on 5th September 1895 and the end of January 1896; but these showers had been of no material value in Bundelkhand, nor were they anywhere sufficient for the growing crops after such a prolonged drought. In the end

of January there was some irregular and badly distributed rain, ample enough to be valuable only in the Muttra district and in the Meerut and Rohilkhand divisions: elsewhere the fall was trifling, and it altogether passed by the Benares division and Bundelkhand, where it was most sadly needed. Hot winds, too, began to blow before the end of February, prematurely ripening the crops. Irrigation had gone far to relieve the strain in tracts where water was available. The canals were efficiently protecting the irrigable area in Meerut and Agra, and small temporary wells were being dug in exceptional numbers throughout Rohilkhand and the submontane tracts where the water-level is high. But for the Provinces as a whole little more than a third of the cropped area had access to an effective supply of irrigation, and in Bundelkhand, where the season was driest, the irrigable area was insignificant.

The harvest began early. The irrigated crops were up to the average or very little below it. Sugarcane, gram, peas and the *arhar* pulse gave a satisfactory yield; wheat did well wherever it had got water; and the harvest of food grains as a whole was probably not under 65 per cent. of a normal harvest. But this left a very large deficiency. Had the defect been equally spread over all the tracts in the Provinces, the storm might have been weathered: the third part of a harvest had been lost before, without reducing the general population to dangerous straits. But the disparity of fortune between the different parts of the country, originating in the troubles of the preceding years, had become now more accentuated than ever. To them that had, to the prosperous and protected districts of the Upper Doab, was given: from them that had not, from the waterless expanses in Bundelkhand, from the submontane tracts, and from the far east, was taken much of what they might have had. In the Allahabad division the harvest was 55 per cent. of the normal, and individual districts ran through the gamut of affliction down to 47 per cent. in Jalaun and 38 per cent. in Banda. As the poverty of the threshing floors became apparent prices rapidly stiffened, and by the end of April they were approaching rates which had hitherto been unknown except in years of famine. Imports from the Panjáb virtually ceased; the cultivators, fearful of even harder times than the present, shut up their grain and refused to sell; and a slow and painful dribble from the Doab to the eastern districts and Bundelkhand was now the only appreciable movement in trade. The period of famine had begun.

CHAPTER II.

The Bundelkhand Famine of 1896.

IN the preceding chapter it has been shown that the unfavourable conditions which assumed the unmistakeable shape of famine in 1896 had their origin as far back as 1893. The region which had suffered most persistently was the region where distress was first to develop, namely the four districts—Banda, Hamirpur, Jalaun and Jhansi—known as British Bundelkhand. The southern part of the Allahabad district lying beyond the Jumna adjoins this tract and resembles it in physical conformation; it shared its misfortune. Bundelkhand, it has been shown, had suffered from agricultural depression for the previous three years. With the exception of the comparatively small area commanded by the Betwa Canal it is unprotected by irrigation. In point both of the fertility of its soil and of the industry and agricultural skill of its population it compares unfavourably with the rest of the Provinces. Since the autumn of 1893 the outturn of the autumn crops there had been uniformly poor, while that of the principal spring crop (wheat mixed with either gram or barley) had been worse. The abnormal succession of bad seasons had also encouraged the growth in the culturable area of the coarse grass known as *kans*. The result of this prolonged period of adversity was a decrease in 1895 of 192,672 acres, or 13·5 per cent. in the normal autumn crop area, and this was followed by a still more serious decrease in 1896 of 292,362 acres, or 19 per cent. in the normal spring crop area. The monsoon of 1895 ceased early in September, and the winter rains entirely failed. The stock of grain in the villages, reduced by double sowings, became low; prices began to rise before the end of the year, and the impoverished landowning classes were unable to assist their tenants. By the beginning of 1896, when the Lieutenant-Governor visited Bundelkhand, it was manifest that the region was on the brink of famine.

The affected area was fortunately well served by railways (the result of a wise employment of the Famine Insurance Fund), and it was from the first apparent that private trade would be capable of supplying all the food required, and that no heavier burden would fall on Government than attaches to the provision of relief works and of those other measures of charitable or gratuitous assistance which are described in the Famine Code. In the first week in February, when the failure in the spring harvest had been placed beyond doubt, and when the first signs of commencing want had become apparent, test works were started in the

form of improvements and repairs to roads in all the districts of Bundelkhand and in South Allahabad. At the same time preparatory steps were taken to deal with more severe distress when it should show itself. The executive staff of the various districts was strengthened; relief circles were formed, and officers to take charge of them were nominated; sites were selected for poorhouses; the programme of relief works was revised and expanded; a staff of hospital assistants was deputed to supervise sanitary arrangements on relief works and administer medical comforts in temporary hospitals; provision was made for the relief at their homes of indigent persons enfeebled by age or disease or debarred by national custom from appearing in public; and the opening of the Government forest to pasturage and collection by the people of edible produce was arranged. The administrative framework necessary for the management of large relief operations was thus held in readiness at the beginning of the emergency, and all that was afterwards necessary was to fill it in as necessity required.

The number of applicants for employment on the test works opened soon became so considerable that, on the 28th February, these works were converted into regular relief works under the Famine Code. With a view to an useful subdivision of work and responsibility it was ordered that large operations, such as roads, should be managed by the Public Works Department, and that minor works, such as village tanks or reservoirs, and all poorhouse and village relief should be carried out by local agency controlled by the District Officers.

In Bundelkhand the population, which contains a considerable admixture of aborigines, depends a good deal for sustenance during the summer on the *mahua* (*Bassia latifolia*) crop and other edible forest products. But by April it became manifest that the *mahua* crop had failed, while the prices of the staple food grains rose steadily and the numbers on relief works increased. It had been estimated by the local officers in March that at the period of greatest pressure the numbers in receipt of relief would not exceed 140,000; but by the middle of April that number was exceeded and the numbers continued to rise, till in the third week of May they reached their maximum pitch of 263,961. The unprecedentedly low rate of wages paid, combined with the not unsubstantial outturn of work done, proves that the people were in real need of help.

In addition to the relief afforded by public works, by the establishment of poorhouses, and by the distribution of assistance to respectable but indigent people, much help was also given by granting advances of money, under the Agriculturists' Loans Act, and by suspensions and remissions of revenue. The actual sum distributed by way of recoverable

advances without interest was Rs. 1,85,118; and the actual amount of revenue suspended by the Commissioner was Rs. 2,16,000 on account of the autumn instalment of 1895 and Rs. 8,78,000 on account of the spring instalment of 1896. In this way substantial assistance was afforded to the landowning and cultivating classes, as the suspension or remission of revenue carries with it, under the North-Western Provinces Rent Act, the suspension or remission of double the amount in rent.

At the beginning of June the Government laid down the policy to be adopted after the breaking of the rains with the object of inducing the people to return to their ordinary avocations as soon as possible. Village works being carried out by Civil Officers were to be contracted to a minimum on the opening of the monsoon, and no further grants for such works were to be made, it being left to the Commissioner's discretion to continue the distribution of gratuitous relief in villages and at poorhouses when absolutely necessary. With regard to road works, orders were issued that all operations under the control of the Public Works Department should be reduced to a skeleton at the break of the rains in the districts of Jhānsi and Jalaun, where the distress was judged to be less acute; and that in Banda and Hamīrpur the extent of the works should be greatly contracted. The works remaining were to consist in stone-breaking and quarrying, which were considered suitable for the rainy season as they could be done under cover. Task work was to be strictly exacted, and only persons capable of earning a living on task work were to remain on the public works, debilitated persons being provided for in poorhouses. It was also laid down that, with a view to inducing people to revert to agricultural work, no wages should be paid to any person on relief work in excess of the minimum subsistence wage (or its money equivalent) prescribed by Article 108, Famine Code.

The combined effect of these measures, reinforced by the certainty of ordinary agricultural employment when the rains would set in, and also to some extent no doubt by the fear of cholera, was seen in a great decrease of relief workers. The numbers, which in the third week of May had exceeded 260,000, fell by the third week of June, when the rains had broken, to 52,619. By the middle of July all relief works under control of the Public Works Department had been closed except in Banda, where a few quarry works were still open; and all village works had been closed except in Jhānsi, where some were still unfinished. The relief administered after that time consisted almost entirely of that given at poorhouses and of the gratuitous relief administered through the agency of village officials to respectable persons debarred by national custom from appearing in public. At the end of August the total number in receipt of any

form of relief in Bundelkhand had fallen to 5,904, and without doubt this number would have melted away, too, had not the threatenings of the far greater difficulties to come completely altered the situation.

In March prices throughout Bundelkhand, as elsewhere, were substantially above normal rates. The difference between wheat and the coarser grains was, however, well marked. During the summer wheat for a short period slightly relaxed in price, but the other staples rose steadily in value. By the end of August wheat had risen to the rate prevailing in March, and there was a significant approximation to it in the price of the coarse grains.

The following statement compares the average prices current in Bundelkhand for the food grains principally used during March, May and August 1896, with the normal prices during these months :—

Seers per Rupee.

MONTH.	Wheat.		Gram.		Arhar pulse.		Juir.	
	Normal.	1896.	Normal.	1896.	Normal.	1896.	Normal.	1896.
March ...	18.56	11.36	25.31	19.23	26.19	15.20	24.03	15.69
May ...	17.43	11.94	22.75	15.37	22.43	13.30	22.31	14.55
August ...	16.19	11.04	21.62	13.69	24.50	12.25	20.87	13.68

High as prices were, there can be no doubt that they would have been much higher but for the active importation of food grain which went on during the whole period of distress. The imports and exports of food grains at the railway stations situated in the Bundelkhand districts were carefully recorded. From January to July the total net imports amounted to about 27,500 tons. Besides this rail-borne traffic there was a considerable import by road from Cawnpore and other neighbouring centres across the Jumna. In this and the greater trouble which awaited it, Bundelkhand owes its safety to the facilities for transport of food supplies afforded by the Indian Midland Railway.

In the earlier months of the famine the death-rate rose little above normal. The health of relief workers remained on the whole very good all through. They were often, when first coming on the works, in an emaciated and reduced condition. But later on, when the distressed tracts were visited by the Inspector-General of Civil Hospitals and the Sanitary Commissioner, these officers found no appearance of starvation among the people on the works. Had there been, the relief operations would have failed of success.

Later in the spring influenza and small-pox swelled the mortality, and in the summer months cholera appeared in a very virulent form and claimed many victims. Towards

autumn fever of a peculiarly virulent type was prevalent, especially in the Hamirpur and Jhansi districts, and added much to the mortality. It apparently had not its origin in famine, for it was observed to visit the rich and poor alike, and was not of the remittent type. Through the whole of this period few deaths, if indeed any, could be traced to actual starvation; but the following mortuary statistics, extracted from the Sanitary Commissioner's Report for 1896, may be taken as evidence that the pressure of hard times claimed many lives, mostly among the old and the very young.

Statement showing Death-rate per thousand, month by month, in Bundelkhand during the Famine of 1896, with Average Death-rate for ten previous years.

DISTRICT.	January.		February.		March.		April.		May.		June.		July.		August.		September.	
	1896.	Average, 1886—95.	1896.	Average, 1886—95.	1896.	Average, 1886—95.	1896.	Average, 1886—95.	1896.	Average, 1886—95.	1896.	Average, 1886—95.	1896.	Average, 1886—95.	1896.	Average, 1886—95.	1896.	Average, 1886—95.
Hamirpur ...	2.64	2.72	2.15	2.40	1.98	2.20	2.08	2.09	4.35	2.64	3.91	3.53	3.91	4.44	5.33	4.39	6.78	4.31
Banda ...	2.19	2.52	1.85	2.24	1.89	2.09	1.94	1.81	7.09	2.24	4.12	3.34	2.53	2.88	3.23	2.47	3.84	2.86
Jalaun ...	3.15	2.70	3.25	2.39	3.40	2.24	2.90	2.22	3.72	2.81	3.69	3.37	3.10	3.44	3.83	3.60	3.05	3.93
Jhansi ...	3.50	2.54	3.48	2.27	3.48	2.52	5.42	2.49	5.02	2.75	7.77	3.27	5.58	3.31	7.53	3.67	7.09	3.72

The same causes which affected Bundelkhand necessitated also some measures of relief in the Allahabad district, the Hardoi district of Oudh, the Pilibhit district of Rohilkhand, and the Garhwál and Almora districts of Kumaun. In the part of the Allahabad district bordering on Bundelkhand, and resembling it in climate, soil and population, the distress was for a time severe, and in Hardoi also there were signs of the serious trouble which followed; but fortunately in none of the other districts did the reality come up to the local officers' early apprehensions. The relief measures adopted in these districts do not call for any lengthened description. They were carried out by the District Officers without assistance from the Department of Public Works, and comprised repairs to unmetalled district roads, poorhouses and some gratuitous relief under Chapter X of the Famine Code. In all the districts except Hardoi the pressure practically ceased when the rains had regularly set in; but in Hardoi, during the latter portion of July, when there was a prolonged break in the rains, distress threatened to assume serious proportions.

During the operations in Bundelkhand described in the preceding paragraph, the expenditure incurred in relief

works controlled by the Public Works Department amounted to Rs. 7,15,088, classified as follows:—

	Rs.
Paid as wages for work done ...	5,37,608
Do. as gratuitous relief to dependants ...	43,758
Do. cost of temporary establishment, tools and plant ...	1,33,727
Total ...	7,15,088

The work done consisted of 345½ miles of road constructed or repaired, with wayside tanks re-excavated, and 47 large reservoirs constructed. The wages fell at the rate of Rs. 9.62 per 1,000 cubic feet.

The number of people relieved, expressed in units for one day, was 12,343,200, and the average daily cost per head, all charges above included, was 10⅔ pies.

In addition to the relief afforded by the Public Works Department, the District Officers expended Rs. 3,60,061 on village works, gratuitous village relief, and maintaining poor-houses. The work done is returned as follows:—

132½ miles of road remodelled.	
559 village tanks	} re-excavated.
225 village wells	
39 reservoir embankments constructed.	

The cost of work per 1,000 cubic feet done is shown as Rs. 4-8; the explanation of the low rate of cost lying in the fact that the village proprietors, who benefited by the work, controlled the expenditure of the money and made it go as far as possible. But this had its disadvantages from a relief point of view, as probably none but able-bodied workmen were employed.

The total number of persons relieved by the expenditure for one day amounted to 5,533,391, and the cost of relief for each averaged one anna per head.

In the rest of the other districts of the North-Western Provinces and Oudh where relief operations were undertaken the number of persons relieved (in units for one day) reached to nearly one million, while the cost amounted to Rs. 1,05,004. The average cost per head was here higher than in Bundelkhand, reaching 1½ annas per day. The explanation lies in the heavier incidence of the cost of establishment computed with reference to the smaller numbers in relief.

Throughout the Provinces, therefore, the total number of persons relieved was about 19½ millions and the total expenditure was Rs. 11,80,153. The cost of relief was 11.6 pies, or something less than one penny sterling per head daily.

CHAPTER III.

Proximate cause and premonitory symptoms of the general Famine of 1897.

THE proximate cause of the famine of 1897 was the premature cessation of the monsoon rains of 1896. These rains began favourably. The normal date in these Provinces for their commencement is the 25th June. Some preliminary showers fell during the early part of that month; but taking one district with another, the true monsoon rains of 1896 opened on the 21st of the month.

In parts of the Gorakhpur, Agra, Bareilly, and Lucknow divisions and in the Banda district the rainfall at the commencement was insufficient, but elsewhere there was enough. Bundelkhand in particular had good rain everywhere except in Banda. At the end of June, therefore, prospects were on the whole favourable. Moderate but still sufficient rain was received early in July; but in the second week a break set in, which threatened the crops then full of promise. The danger was averted by a timely fall in the latter part of the month, and prospects became bright again except in some tracts of Oudh and Gorakhpur, where serious damage was reported. At the end of July the rainfall was in general much below normal except in the Meerut division. The average defect was about 40 per cent. of the normal quantity.

August began well. At first the rain, though sufficient, was irregularly distributed; but by the middle of the month it had become general, and the defect was limited to parts of the Benares and Gorakhpur divisions. In the third week, the situation was full of promise. The large area of autumn crops had made excellent progress. The quick-growing staples, such as maize and the early millets, were already ripening, and their first fruits had brought visible relief in the shape of a timely addition to the food supply. Field work was in full swing, and the demand for labour had rendered it possible to close relief works in all districts except Hardoi. The poorhouse population had substantially diminished, several poorhouses had been closed, and outdoor relief had been curtailed as private charity again became operative. Fodder became plentiful, and the Government forests, which had been thrown open for free grazing, were again closed, though permission to make use of the edible products was continued for the time. The people of the affected tracts were regaining confidence and, equally with the Government and its officers, looked forward to an early termination of all their troubles.

At this period the prospects of the autumn crops were very favourable. The average area cropped at this season for the entire Provinces is rather over 21 millions of acres. Almost 8 per cent. of this is ordinarily irrigated and 92 per cent. unirrigated. In 1896 almost the full normal area was sown and over 15 per cent. of it was irrigated. The area under food crops in this season is ordinarily 82 per cent. of the whole. In 1896 it was 81 per cent. The area of autumn crops was deficient in some districts of the Benares division and in the Lucknow and Gorakhpur divisions owing to the diminished cultivation of rice. In the districts of Jalaun and Fatehpur there was also deficiency; but owing to the favourable character of the early rains of 1896 a larger area than usual was sown chiefly with maize and large millet in the Meerut division, in Bundelkhand, and to a smaller extent in parts of the Agra and Rohilkhand divisions.

Thus the prospects at the end of August were generally favourable. But from the third week of August the rainfall became lighter, and it had practically ceased entirely by the fourth week. At its close the totals for the month were in serious defect in the Agra and Allahabad divisions, which had received only about 60 and 40 per cent. of the normal allowance. Rohilkhand and Fyzabad divisions recorded moderate excess, and elsewhere the fall was normal or in slight defect.

With favourable rain in September a good outturn might have been expected. But instead of fostering weather in September there came the hot winds and the blazing sun of May. Barometric conditions were established which brought the west winds down the Gangetic plain. Over the whole Provinces early in September the skies cleared, and under the hot sun and the dry west wind the scanty moisture rapidly disappeared from the soil. Hope revived when clouds appeared and some showers fell in the eastern districts about the 18th. But the current proved too weak, and in a few days the skies had become clear again and the hot west wind blew as before. Except for a few moderate showers in Mirzapur and Ballia, September was, for all practical purposes, a rainless month.

The drought which characterized September continued into October. Throughout the month the temperature remained abnormally high, the air unusually dry, and the winds much stronger and more westerly than they ought to be. The rainfall of the month was an absolute failure. A few districts recorded a sprinkling, little more effectual than a heavy dew. In the rest the record was a blank. The diagrams in Chapter I bring out clearly the abnormal characteristics which distinguished the monsoon of 1896—particularly the abrupt termination of the rains at the end of August.

The following statement exhibits the percentage of defect of rainfall in each division :—

DIVISIONS.	The period from 1st May to 31st October.		
	Actual total.	Normal total.	Percentage of defect.
Meerut (exclusive of Dehra Dún)	21.38	25.85	—20
Agra	13.21	28.46	—54
Rohilkhand	28.59	37.91	—25
Allahabad	19.24	33.73	—43
Benares	24.59	37.29	—34
Gorakhpur	23.37	41.68	—44
Lucknow	21.02	34.70	—40
Fyzabad	25.42	36.68	—31

The maximum defect recurred in the ill-fated Banda district, which received only 31 per cent. of its average.

The abrupt termination of the monsoon a full month before the normal time was even more injurious than its deficiency. Excessive evaporation proved as harmful as deficient rainfall. Six weeks of hot west winds at a critical period not only destroyed much of the autumn crops which otherwise would have given a moderate yield, but jeopardized the prospects of the spring harvest.

The consequences of this drought, and of the critical condition of the harvests which it entailed, were quick to make themselves manifest.

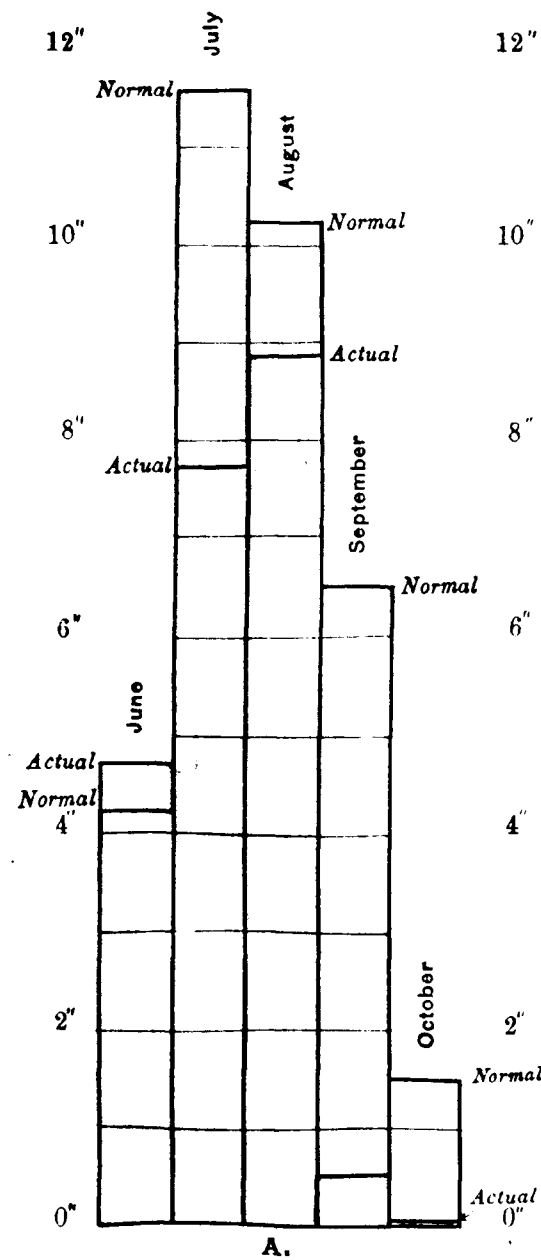
As the rains held off and a hot wind set in which dried up the soil and withered the crops, a feeling of grave anxiety became apparent. It was not confined to the districts which had already suffered, but spread to other and larger tracts which had hitherto required no special care. The reports which reached Government began to give most gloomy accounts. The standing crops were drying up or being fed down as fodder; the hot hard ground was unfavourable to the sowings of the spring harvest, which were sadly restricted. There was no failure of food supply as stocks were maintained in the distressed tracts by imports which were resumed on a brisk scale and as a great part of the produce of the early autumn crops had been stored in their own houses by the cultivators, who were filled with apprehension for the future. This latter movement, useful in itself, excluded from the market much grain which usually found its way there and so served to enhance prices. The day-labourers soon exhausted the scanty stores they had saved from their grain wages during the short autumn harvest and came to the market as purchasers. Under these influences prices everywhere steadily rose, and before the end of September had in many places reached the famine level.

DIAGRAMS SHOWING THE RAINFALL

in the

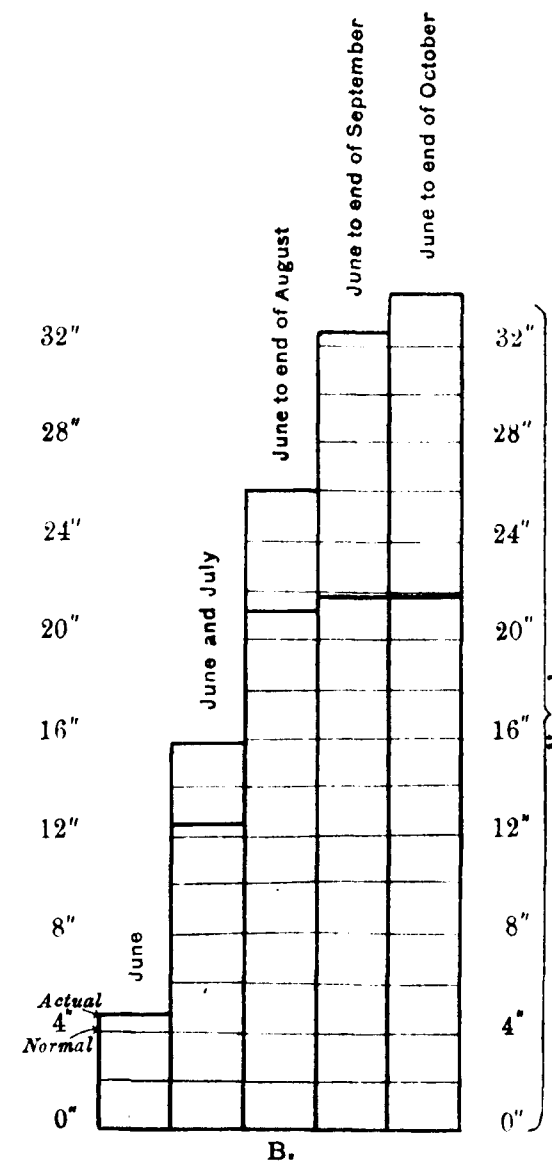
N. W. PROVINCES & OUDH

DURING THE PERIOD OF THE MONSOON OF 1896.

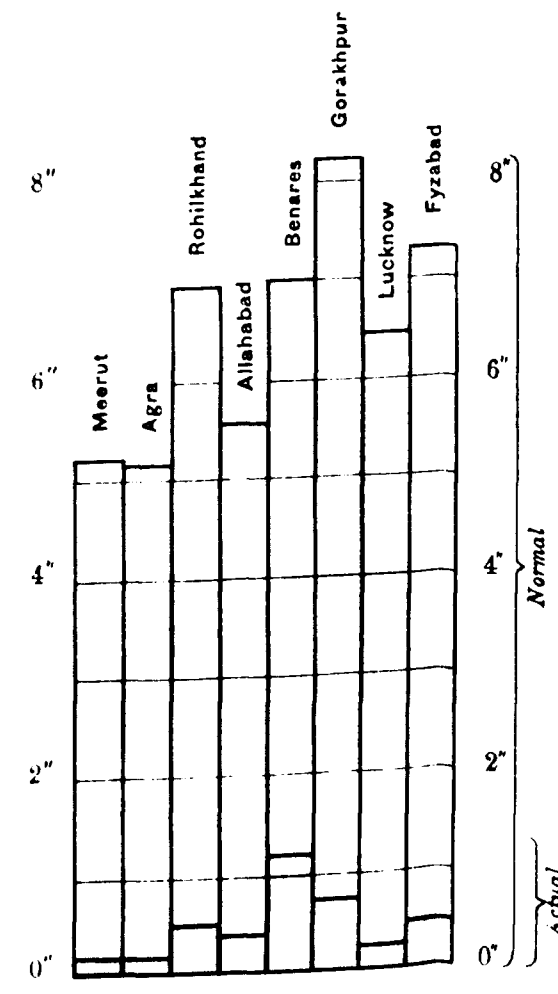
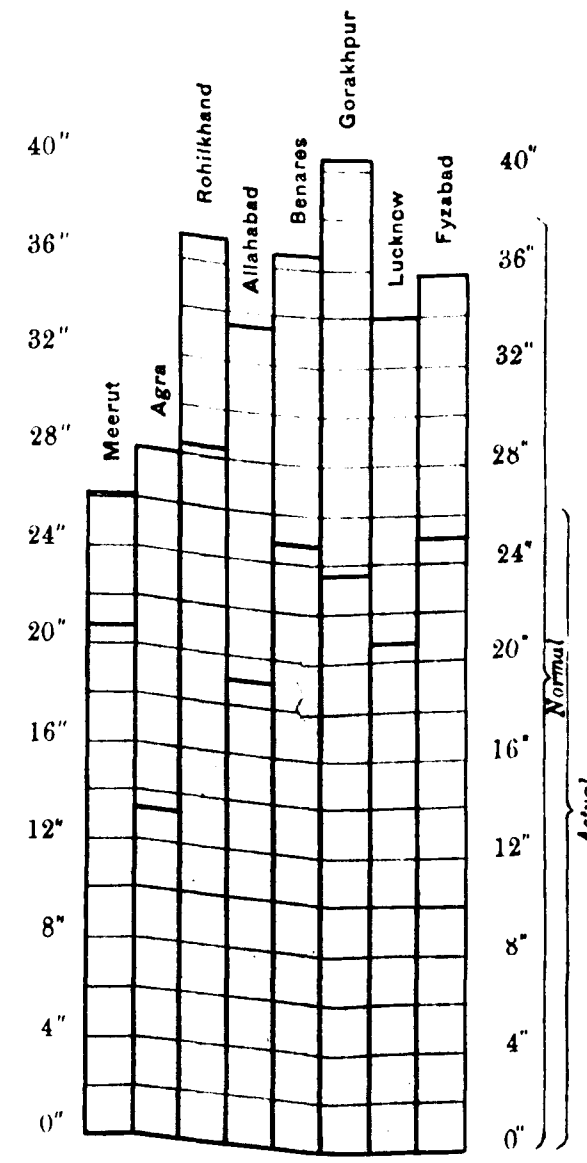


A. MEAN MONTHLY RAINFALL, (Plains only),
June—October, 1896.

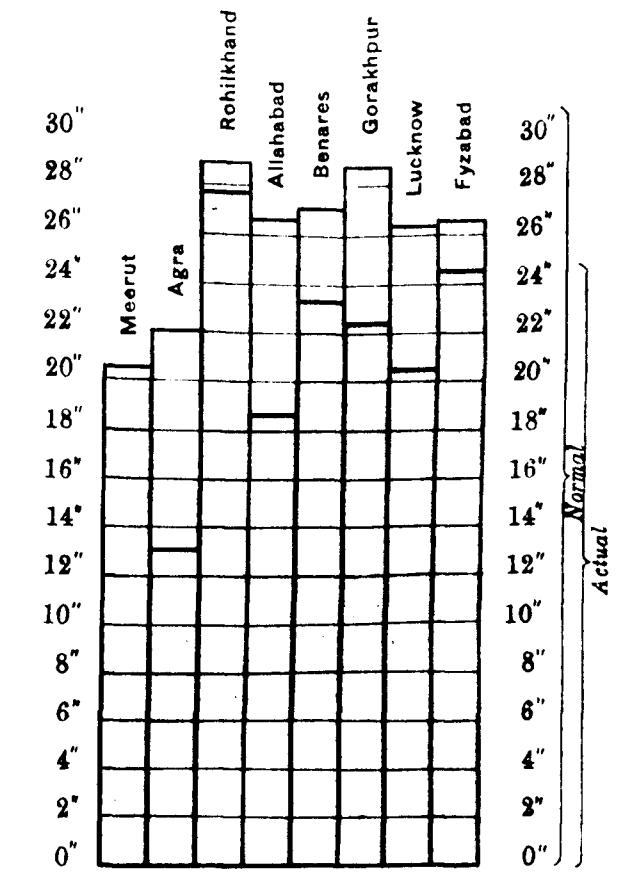
B. MEAN TOTAL RAINFALL, (Plains only),
throughout period
June—October, 1896.



RAINFALL BY DIVISIONS, (Plains only),
during period
1st June, 1896—31st October, 1896.



in
September, 1896.



RAINFALL BY DIVISIONS, (Plains only),
during period
1st June, 1896—31st August, 1896.

The following statement compares the prices current on the 1st October for the chief food grains ordinarily consumed with the normal prices, as stated in Appendix A of the Famine Code:—

Seers per Rupee.

	Wheat.	Barley.	Gram.	Rice (common).	Juar.	Maize.	Arhar.
	Srs. c.	Srs. c.	Srs. c.	Srs. c.	Srs. c.	Srs. c.	Srs. c.
Normal ...	14 12	19 9	20 12	12 2	20 2	20 14	15 9
1st October 1896 ...	8 13	11 1	10 14	8 14	12 0	13 2	10 13

The immediate effect of this great increase of the prices of food grain was to drive the poorer classes to eke out their diet by such wild produce as they could gather in the fallow and waste lands. Cultivators at this stage had still some reserve from the last crops which they economized by restricting their rations. They still further husbanded their resources by doing, with the help of their own families, a larger share than usual of whatever field labour there was to be done. This again had the effect of further limiting the employment available for day-labourers, who suffered already from the conditions which restricted ploughing and sowing—a limitation which would have been even more serious but for the work afforded by the unusual spread of artificial irrigation, to which reference will presently be made. A feeling of apprehension and unrest became perceptible, first in those tracts which had already passed through one season of distress, and then spreading to fresh regions as prospects grew more gloomy. It showed itself in various characteristic ways. The public works which were still open began to attract more labourers and the poorhouses more inmates. In both cases the new admissions included persons in reduced condition. Private charity contracted, and beggars became numerous in the towns and bazárs. The traditions of the Indian people had made migration the only effective remedy in time of famine. The practice had its origin in the circumstance that no previous Government of the country ever attempted on a systematized and large scale to provide food for famishing people and that, from the imperfection of communications, the task would have been almost hopeless if attempted. But though the conditions have changed the instinct survives, and one of the first symptoms of impending famine is an impulse to wander, whereof indications were now observed. The movement was not serious—it soon ceased; but it was significant. At this stage parties of people from the adjoining Native States were observed passing through British Bundelkhand in search of employment or charity. Some made their way as far as Northern Oudh. This immigration was later on to assume very considerable proportions.

Along with this unsettled feeling could be detected certain symptoms of the spirit of disorder which hunger and distress naturally produce. The sudden increase of prices brought much hardship to those numerous classes who had to purchase their daily supplies, while it brought large profits to the grain-dealers who had laid in stocks when rates were easier. In other and more civilized countries than India it has been common for the masses to attribute famine prices to the concerted machinations of grain merchants, and to proceed to give practical effect to their belief by calling on the authorities to fix and enforce reasonable prices or, where authority is weak and passions strong, by plundering the grain stores. Neither at this nor at any later stage was such a feeling allowed in these Provinces to take active shape in deeds of violence or open defiance of the law. But a few isolated and insignificant occurrences of the sort, although promptly repressed, added significance to the rumours and signs which were now abroad, that such a feeling of exasperation against the grain-dealers was coming into existence and later on might become a force with which Government would have to reckon. Such rumours were themselves a source of danger, for grain-dealers, professing fear of plunder, threatened in some instances to close their shops. Such action would undoubtedly have precipitated a crisis among the people deprived of all means of obtaining food and persuaded that the merchants' object was to hold up their stores and still further multiply their profits.

Another disquieting and significant circumstance was the high rate of mortality reported from many of those districts where distress had prevailed through the summer. Two of the four districts in Bundelkhand and four of the six in Rohilkhand showed death-rates for September which much exceeded the normal mortality, and the October returns were even worse. It was true no starvation deaths were reported, and that special diseases, such as a peculiar form of fever affecting poor and rich alike, accounted for many deaths; but there still remained reason to apprehend that where the crops had failed, scanty or unsuitable nutriment had rendered a portion of the population unusually susceptible to disease or had weakened their power of resistance.

These circumstances arising from an abnormal season, following on seasons also unfavourable, had never ceased to cause anxiety to the Government, and this anxiety grew as September wore on without rain. By the middle of September that situation had become sufficiently grave to call for preparatory or precautionary action; and accordingly on the 21st September this Government sounded the first warning note in a letter addressed to the Commissioners of divisions. In this letter it was pointed out that generally speaking it might be said that, except in parts of

the Agra, Gorakhpur, and Lucknow divisions the state of the crops up to the last week of August had given no substantial ground for anxiety. The rainfall had indeed in almost every district been tardy, and less than the normal quantity had fallen : in several districts very much less ; but the rain which had fallen was on the whole opportunely distributed, and the crops had germinated well. But since the latter end of August in some districts, and in others from an even earlier date, there had been no rain of any consequence : the outturn of the early autumn crops had not been good, while in some districts these crops had seriously failed. In view of these warnings—the abnormal character of the season ; the damage which the crops had already suffered over large areas ; and the reduced circumstances of the people who had experienced a succession of bad harvests—the local officers were directed to take the following steps. *Firstly*, they were directed to make a complete survey of the agricultural condition of each district, which the fiscal organization enabled them without difficulty to do ; to ascertain the exact condition of the autumn crops and the prospects of the sowings for the ensuing spring harvest ; to estimate the degree of the failure threatened and the extent to which relief would in each event be required. *Secondly*, the District Officers were directed, should their inquiries establish the imminence of serious distress, to begin without further orders to organize the agency and methods of relief which, following the general lines of the Famine Code, were specified in the letter : and where symptoms of distress might appear, to open test relief works. In conclusion it was pointed out by the Lieutenant-Governor that in dealing with famine relief the all-important point to bear in mind was this—that the preparation should be well in advance of the pressure. “ If pressure supervenes while preparations are incomplete, numberless embarrassments result. If, on the other hand, the executive is not surprised or overtaken by the famine, matters go as smoothly as in such cases they can go.” It was pointed out that if rain were to fall before the end of the month, the situation might be saved, and there might be no necessity to undertake relief measures on a large scale ; but “ the necessity is not increased by timely preparation ; while the cost to the State is greatly lessened and the advantages to the distressed population greatly enhanced by the existence beforehand of a settled programme and an organization ready to be called into immediate activity.”

To this call on their energy and local knowledge the Commissioners of divisions, the Collectors of districts, and their various subordinate officers responded well : and to this timely preparation must be attributed much of the success which has rewarded their exertions in dealing with the famine. Experience of famine administration teaches no lesson more clearly than this—that in famine times acute distress appears with

suddenness, and that confusion, loss, and suffering are certain to ensue unless an adequate organization has been matured beforehand and made ready to meet pressure when it comes.

As September drew to its end without any rain, the anxieties of the Government were confirmed, and the time had come to address the Government of India. Accordingly, on the 30th September the Lieutenant-Governor laid before the Governor-General in Council a premonitory statement of the then existing condition of the Provinces, of the mischief already done by the drought, and the steps taken to counteract it ; of the extent of the calamity which might be anticipated if no rain should fall ; and of the measures which would be adopted to relieve the severe distress which would then inevitably ensue. In particular the various large projects of railway and canal construction which might possibly be undertaken as relief works were arrayed, and the question of food supply and prices were considered. This latter question had begun to agitate the public mind very much : various representations were made to the Lieutenant-Governor in connexion with it by local bodies and influential private individuals : the universal feeling in Native society being that the Government should intervene to stop exportation and to regulate prices. The following extract from a letter, which the Lieutenant-Governor caused to be addressed to one of the Oudh Associations, will explain what attitude this Government took up in this connexion :—

“ I am to say, with reference to the first of these proposals, that the Lieutenant-Governor and Chief Commissioner is unable to assent to the proposition that Government should enter into competition with the grain-dealers of the country. So far from being beneficial, such competition would, in His Honor's opinion, be mischievous in the extreme. There is no reason for fearing that private trade will be unequal—while there is good reason for expecting that it will be more than equal—to the task of meeting the demand for grain. It must not be forgotten that the grain trade of the country is of enormous extent ; that the free flow of this trade has been immensely facilitated in recent years by the construction of roads and railways (the product of a wise employment of the Famine Insurance Fund) ; that stocks from other countries are finding their way to remunerative markets here ; and that, as the great economist Mr. Mill said (in exposing the errors of the proposal which you renew), ‘ though a Government can do more than any one merchant, it cannot do nearly so much as all merchants.’ The intervention of Government, more especially at this early stage, would have the effect of crippling, discouraging and disorganizing the existing machinery of private trade for the supply and distribution of grain, without affording any adequate substitute.”

Later on the Governor-General in Council, addressing the Government of Bengal, gave the sanction of his great authority to this view of the question. The result has signally vindicated the wisdom of this decision.

October had now been reached, and with it that state of public feeling which has been described in the foregoing

paragraphs. Famine, though imminent, had not actually declared itself: for the people had in the scanty produce of the autumn crops then being harvested something to live upon. The Government had taken measures sufficient to guard against a sudden surprise and to enable it to deal with distress when and where it should arise; and there was nothing more to be done in this direction until the submission of the replies to the Circular letter of the 21st of September should place the Lieutenant-Governor in possession of the actual condition of each locality. But the state of public feeling was threatening, and every rainless day that passed placed in greater jeopardy the prospects of the spring harvest of 1897. A failure of the spring harvest meant utter disaster. Prompted by the dread of such disaster, the plan was conceived of promoting such an extension of artificial irrigation as would counteract to some large extent the deficiencies in the rainfall, save some of the standing crops, and permit of the spring crops being sown. The Lieutenant-Governor's hope was that if by means of artificial irrigation the cultivators were enabled to sow a substantial area, the winter rains would, under God's providence, come, and bring the crop to maturity in ordinary course. Accordingly, throughout October and until the season for sowing the spring crops had ended, the supreme object of this Government's policy and endeavour was to encourage the people to make the utmost use of the canal systems for irrigating the standing crops and preparing the ground for further sowings; and by means of direct advances of Government funds to cultivators and suspensions of the revenue due from the landlords to stimulate the construction of *kachcha* or temporary wells for irrigation purposes. The results of this policy will be exhibited in figured statements in an appendix; but here it may be said that the success attained exceeded all expectation. In normal years the autumn crop area irrigated from canals is 765,000 acres. In 1896 it reached the great total of 1,240,000 acres. In ordinary years the spring crop area irrigated from canals is 1,219,000 acres. In 1896-97 it rose to 1,880,000 acres. As reported by the Chief Engineer in the Irrigation Department:—

"The estimated value of the crops in 1896-97 raised by this irrigation amounts to nearly 13 crores of rupees, the average value of the crops being taken at Rs. 42 per acre—a sum which exceeds by 50 per cent. the total cost of the canals. One and one-half million tons of edible produce were rendered available as food for the people—a quantity sufficient to feed for 12 months one-fifth of the entire population of the North-Western Provinces."

In the canal districts the competition for water was so great that only careful executive management was called for whereby the water should reach the fields with the minimum of delay to the cultivators. But on the Betwa Canal, in the Jalaun district, the Lieutenant-Governor thought it prudent to reduce the water-rates in order to induce the people of

that district, unaccustomed to the use of canal water, to avail themselves of the boon. Partly owing to this reduction in water-rates, partly to other reasons, it came to pass this year that the irrigated area in the Jalaun district rose (to quote from the Chief Engineer's Irrigation Report) from about 8,000 acres in 1894-95 to nearly 82,000 acres. The canal watered altogether 87,306 acres in its three districts.

"In these 87,306 acres no crops could have been grown without the aid of canal water. The value of the crop thus produced is estimated to be 23 lakhs of rupees—a sum equal to one-half the capital cost of the canal. The weight of food produced derived from the irrigated area is estimated at 27,500 tons—a quantity sufficient to feed about one-third of the population of Jalaun for one year."

The Betwa Canal is a protective work and pays as yet no interest on its capital; but without it this year it would have been more than difficult to save the Jalaun district.

But great though these results in the canal districts have been, it was in the districts unprovided with canals, in which category all Oudh falls, that the policy under notice of forcing irrigation received its most striking vindication. It is customary for the Government to assist landholders and tenants by making advances of money for the improvement of their land or the cultivation and protection of their crops. Two Statutes are in force which authorize and control advances of State money for these purposes, prominent among which are masonry wells. These wells can be constructed almost everywhere; but their construction is slow and costly; while water for irrigation was wanted at once. In this emergency the full force and influence of this Government was directed to encouraging the construction of *kachcha* or temporary wells. Over very large tracts of country it is possible to construct cheap temporary wells without any masonry lining, supported at most by an interior framework of rough wickerwork or wattle coils. Where such wells are practicable, the tenantry are skilled in their construction and can make them for a small cost. Each well, it is true, serves but a small area, but many wells would irrigate a large area. When it became evident that the rains had failed and artificial irrigation was necessary to save a portion at least of the crops, and to ensure a successful sowing of the spring crops instructions were issued to District Officers to encourage and assist the people in every way to construct temporary wells, and for this purpose and for the purchase of seed grain the sum of 31 lakhs of rupees in round numbers was, with the sanction of the Governor-General in Council, placed by this Government at their disposal. In view of the special circumstances, these advances were to a large extent made free of the interest usually paid. At the same time steps were taken to associate the landlords with the Government in this measure and thus greatly enlarge its

scope. This was effected by suspensions of revenue whereby the landlords were freed from the necessity of pressing their tenants for rents, while the tenants were enabled to spend in wells what they would have, in other conditions, to pay as rent. Moreover many landlords, relieved from the immediate pressure of the revenue demand, came forward to help their tenants. The suspensions of land revenue sanctioned at this time, with the consent of the Governor-General in Council, amounted to 105 lakhs of rupees. Discretion within this limit was given to the Board of Revenue and to District Officers acting under the Board's control: it was however found possible to secure the desired object by suspending one crore of rupees in round figures.

The effect of these measures can scarcely be over-estimated. Not only did the resources thus placed at the disposal of the people enable them to save crops which would otherwise have perished and cultivate land which would otherwise have lain fallow, but the example thus given roused many who, with the apathy of the fatalist, would have sat waiting events and staking their existence on the chance of rain which did not come. Stimulated by the Officers of Government, who went freely among them urging them to exertion, they shook themselves free of their traditions, and encouraged by the prospects of protection and support in their efforts at self-help, the agricultural community rose to the occasion. A census taken by districts gives the number of temporary wells constructed under this stimulus at the enormous number of 550,759. The number of masonry wells constructed is placed at 4,227, and many others were repaired and improved. Other facilities for irrigation, such as embankments and tanks, were largely extended. Altogether it is calculated that the additions made to the various sources of irrigation at the moment were sufficient to protect 1,381,494 acres and produce 465,000 tons of food. The policy of stimulating the construction of temporary wells was thus signally justified by the result.

The moral effects of these measures were scarcely less beneficial than the material advantages. The Commissioner of the Fyzabad division, writing in November 1896, refers to the advances for wells in these words:—

“ I would invite attention to the marked spirit of energy aroused among the agricultural classes by the system introduced of giving timely advances for earthen wells to village communities on the joint security of proprietors and tenants. In many villages a system of co-operative labour has been organized out of the funds so advanced, with the very best results: every man having an interest in seeing that the money is devoted to the purposes for which it was given. The stimulus so imparted has been widespread, and has led indirectly to the construction of many wells other than those paid for out of Government funds. The people have thus responded to the aid so opportunely given them in a manner that must be seen to be realized; and the heart given them has enabled them

to meet the crisis with a spirit that in 25 years' residence in India I have never seen equalled.”

The Collector of Cawnpore writes thus, referring particularly to the advances for seed-grain:—

“ Everybody was buying corn and nobody would sell at a reasonable price: it was feared that cultivators would not get seed. At this time Government stepped in and gave advances freely. Government officials used their influence with landlords and money-lenders to help their tenants as usual. The moneyed classes, seeing what Government was doing, came forward to give seed. I have no hesitation in saying that if Government had not given advances on a large scale, then the area sown would have been very much less. It was not merely the actual sum distributed which made the difference, but the feeling of confidence engendered. It was the ‘*Ikbal-i-Sarkār*,’ and to use a colloquial phrase, Government was ‘backing its luck.’”

Besides the advances made by Government under the Agricultural Loans and the Land Improvements Acts to which reference has now been made, great assistance at this time was given by the operations of the Opium Department. The statistics furnished by the Benares Agency show that advances made for construction and repair of wells during the famine period aggregate about a lakh of rupees and represent an addition of about 37,500 acres to the irrigated area. The other sums paid in advances to poppy cultivators between July and December 1896 amount to no less than Rs. 35,40,000. This very large sum, which represents in effect a vast number of loans made without interest to the cultivating classes, gave most valuable and opportune assistance to a large number of distressed districts. In one of them alone—Rae Bareilly—the villagers received in this way loans amounting to almost 2½ lakhs of rupees. Later on in the spring of 1897, when the opium was gathered and weighed in, payments were made to the cultivators aggregating over 8½ lakhs, and when the accounts were finally closed in October the further payments then made came to about 13½ lakhs. Besides these large sums about 34½ lakhs were advanced from August to October 1897 on account of the coming crop. The cultivators of these Provinces were thus financed during the Scarcity period by the Opium Department to the extent of nearly 168½ lakhs of rupees (equal to over one million sterling at current rates of exchange). Nearly all these transactions took place in distressed districts, as poppy is not grown in the Meerut and Kumaun divisions, which alone escaped the famine.

Satisfactory as was the material outcome of these measures, their moral result in securing the peace and order of the community was no less beneficent. By this time the people had begun to realize their position. The autumn crops had failed disastrously in extensive regions; the spring crops were threatened with equal failure; prices had already reached famine height; stocks had run low, and the food supply at any price seemed precarious to many. The people found themselves

face to face with a famine, and by their traditions a famine meant starvation, death or wholesale migration. State relief on the scale that has now been given had not entered into their conceptions. A feeling of apprehension and unrest had arisen which had its dangerous aspect. There were ominous signs that a spirit of turbulence was growing among those classes who would not quietly submit to starve while there was food for others. In other famines such signs have found visible shape in gang robberies, incendiary fires which give opportunities for plunder, food-snatching from shops, the multiplication of petty thefts; and have been reflected in the panics which led grain-dealers to close their stores. Some of these crimes occurred in these Provinces in October 1896, but they were never aggravated; and the authorities were prompt and powerful to repress them. But to Government, watching the signs of popular feeling, they were significant and disquieting. At this crisis the action of the Government which has been now described turned the minds of the people to peaceful pursuits, supplied them with means to secure a substantial part of the harvest which nature was denying, and by ensuring a crop to watch and tend and reap, bound them to their homes. Above all it created a feeling of confidence that Government was alive to their difficulties and prepared to protect and assist them with all its great resources. The forces which make for order were rallied and the bonds of society which showed signs of relaxation were drawn tight again. Thenceforth crime ran in the ordinary lines, as will be shown in the sequel. Offences were, it is true, far more numerous than in times of plenty; but they were mostly pilferings, the work of individuals rarely moved by a common or concerted motive, and not the outcome of a spirit in which the body of the people shared or sympathized. The community as a whole displayed a spirit of patience and discipline so admirable and so general, that it was deemed unnecessary to strengthen, to any appreciable extent, the ordinary police force of the Provinces. On the great Public Works which found employment for more than a million and a quarter of people order was preserved by the people themselves.

One other protective measure should be noticed here. When it became apparent that there would be an extensive failure of the ordinary crops, District Officers were consulted as to the desirability of encouraging and assisting the cultivation of quick-growing vegetables, which mature rapidly and yield a large outturn in a small area—an important point where water for irrigation was scarce. The general opinion was favourable to the proposal, and carrot and potato seed were selected as the most suitable and generally used. Potato seed was procurable from the hill districts and other localities not affected by scarcity in sufficient quantities. Indigenous

carrot seed was also to some extent procured and distributed among the people; but the quantity available proved quite insufficient to meet the demands of District Officers, and indents were made on the Government of India and the Secretary of State for large quantities of European seed. The response was prompt and helpful, but the larger portion of the consignments arrived late. It was found that the imported seed requires the whole cold weather to mature and must, to be thoroughly successful, be in the ground by October. The portion of the English seed which arrived first turned out moderately well; but on the whole the seed did not yield the results which were hoped from it. The real value of this resource in time of famine will not be known till the coming year shows the outturn of the seed which remained unsown, and which has been held over for timely planting this year.

The indigenous or acclimatized carrot seed germinated excellently, and though the potato seed did not do so well in some districts, yet the general result proved most beneficial. An unusually large quantity of cheap and wholesome vegetables became available in advance of the ordinary spring cereals, and made a timely and valuable addition to the food supply of the people.

Reference has already been made to an important measure of relief: namely the suspension of portion of the land revenue; but a more detailed reference to the matter is desirable. The land revenue instalments which are paid out of the proceeds of the autumn harvest fall due in these Provinces, generally speaking, in November and December. When the time for collection drew near, it became evident that in the distressed tracts many of the poorer proprietors would be unable to meet their liabilities or would be able to meet them only by recourse to the moneylender. Lenience in enforcing the claims of the State on revenue-payers was clearly necessary, and accordingly inquiries were set on foot and the resources of the revenue-payers and their claims to consideration were duly weighed. In districts and villages where the crops had succeeded the high prices of produce placed both tenants and proprietors in a position to meet their engagements with unusual ease. Where the crops had failed, the condition of the agricultural community called for moderation in enforcing the State demand. In the end sums aggregating in round figures one crore of rupees were suspended out of the autumn demand and held over for future consideration.

Later on, when the spring instalments of revenue fell due in May and June 1897, further suspensions were made, aggregating about 4½ lakhs of rupees, while fresh enhancements of revenue in Oudh, amounting to about 3 lakhs of rupees, were postponed. The total suspensions made on the autumn and spring land revenue instalments amounted, therefore, to nearly one and one-half crores of rupees.

This large measure of relief had an excellent effect on the capacity of the people to withstand the pressure of hard times. It saved the landholder from grave embarrassment, freed him from the necessity of contracting debt, and left him in a better position to assist his tenantry. It saved the tenantry from the full pressure of paying their rent. By the law of the North-Western Provinces the suspension of revenue to the landholder carries with it a suspension of double the amount in rent to the cultivator. Though no such provision exists in the Oudh law, yet the proprietors were at least relieved from the necessity of forcing on their rent collections, and but few instances have come to the Lieutenant-Governor's notice in which the Talúqdárs of Oudh have not shown to their tenantry the same lenience which Government has shown to them.

Since the termination of the Famine the Lieutenant-Governor has, in conference with the Board of Revenue and in the light of the most recent local information on the state of the country and condition of the people, considered how far these suspensions should be entirely remitted and written off the Government accounts as irrecoverable. The country had passed through a trial of very great severity; and although wonderful recuperative power had been shown, there was no doubt that cultivation and industry would be depressed by the burden of debt, while it would be stimulated and encouraged by the reduction of the arrears within moderate limits. The conclusion arrived at was that, subject to the approval of the Government of India, offers should be made to the landlords to write off 60 lakhs, or about 42 per cent., of the arrears on condition that the remissions were passed on to their tenants in accordance with the relevant provisions of the law referred to above. The Governor-General in Council has now signified his approval of this liberal measure of remission. The balance of the arrears will be collected by instalments commencing from next spring and extending over two years. Thus the land-owning and cultivating classes of these Provinces will be enabled to replenish their grain stores from the present abundant harvest and to face the future with cheerfulness.

Map
of the
REVENUE DISTRICTS
in the
N.-W. P. AND OUDH.

Scale—53 Miles = 1 Inch.

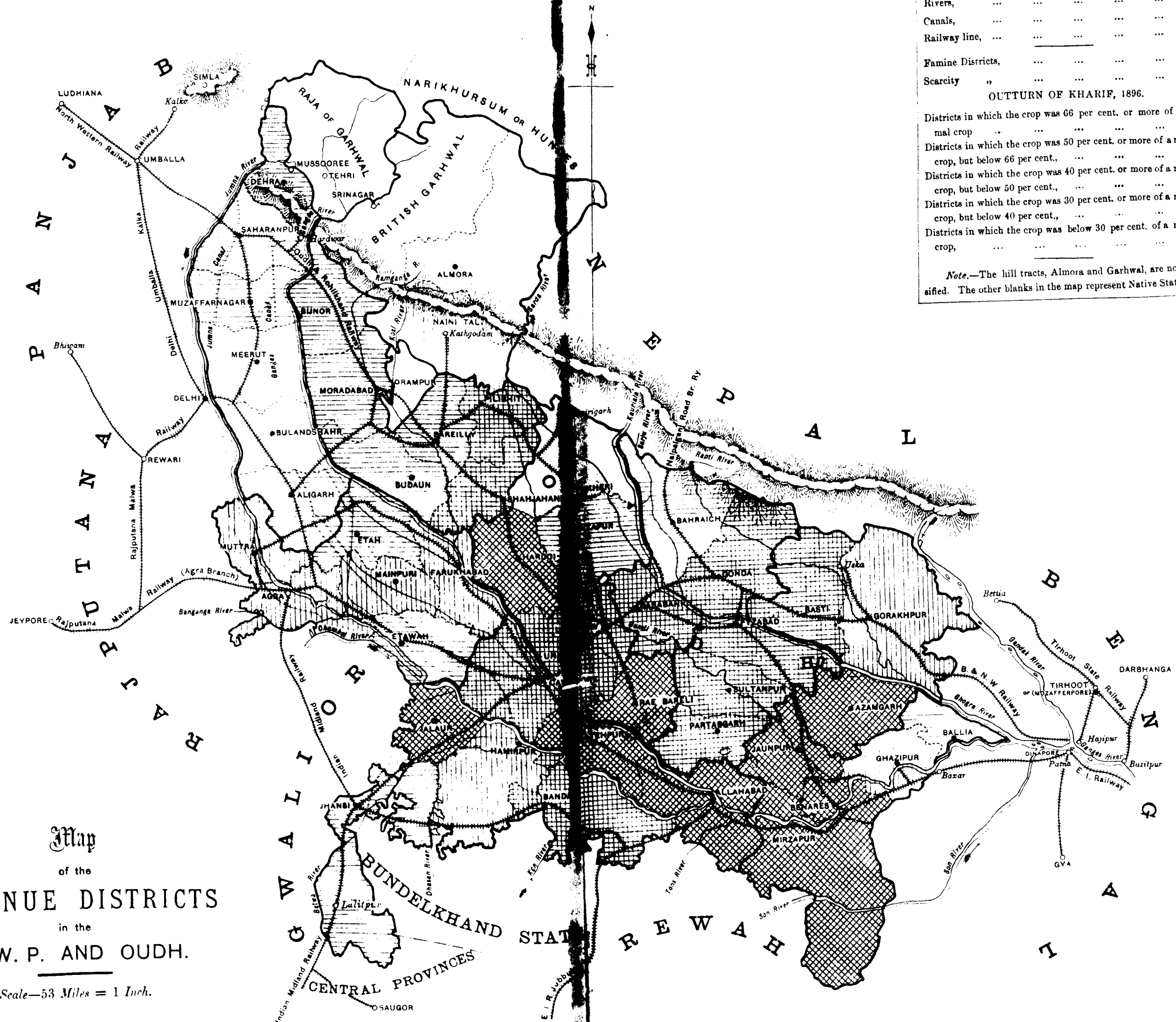
REFERENCES.

Divisional Boundary, ...	...
District Boundary, ...	...
Head-quarters of Districts, ...	...
Rivers, ...	...
Canals, ...	...
Railway line, ...	...
Famine Districts, ...	...
Scarcity, ...	...

OUTTURN OF KHARIF, 1896.

Districts in which the crop was 66 per cent. or more of a normal crop, ...	...
Districts in which the crop was 50 per cent. or more of a normal crop, but below 66 per cent., ...	...
Districts in which the crop was 40 per cent. or more of a normal crop, but below 50 per cent., ...	...
Districts in which the crop was 30 per cent. or more of a normal crop, but below 40 per cent., ...	...
Districts in which the crop was below 30 per cent. of a normal crop, ...	...

Note.—The hill tracts, Almora and Garhwal, are not classified. The other blanks in the map represent Native States.



CHAPTER IV.

Extent of the failure of the "kharif" or autumn harvest of 1896.

IN the preceding chapter the nature of the failure in the monsoon of 1896 and the efforts made to counteract its worst effects have been stated: it is now necessary to display the effects which the failure produced on the autumn crops which form the chief sustenance of the poorer classes of the people of these Provinces; and in the prospects of the ensuing *rabi* or spring crops.

The reports of the various Commissioners and District Officers, rendered in response to the call made on 21st September, and subsequently supplemented by detailed statistics furnished by the Agricultural Department, showed that, generally speaking, the harvest was good in the Meerut division and in the canal-irrigated parts of the Agra division; that there was considerable failure in the remainder of the Agra division, in part of Rohilkhand, the north of Oudh, and parts of the Benares district; still more severe failure in the rest of Rohilkhand and parts of the Gorakhpur, Fyzabad, and Allahabad divisions, and that the failure was greatest in the Lucknow division and in outlying districts to the east and south. The area least affected contained about 12,000 square miles with a population of about six millions: the area of considerable failure consisted of something under 25,000 square miles with a population of $12\frac{1}{2}$ millions. The area of severe failure covered 31,000 square miles with a population of something over $13\frac{1}{2}$ millions, while the area of greatest loss contained something over 25,000 square miles also with about $13\frac{1}{2}$ million people. The area of the Kumaun division is excluded from these calculations, as from the beginning its condition was not such as to cause disquietude.

In the first of these four portions the autumn harvest yielded not less than three-fourths of the normal outturn, and here no difficulties were experienced except such as arise from sustained high prices; in the second portion the outturn varied from one-half to three-fourths of a normal yield; in the third portion the outturn fell between one-third and one-half; but in the fourth portion the outturn did not exceed one-third of an average harvest with considerable areas of total failure. The circumstances of Bundelkhand, however, which had suffered from famine in the spring, summer, and early autumn, and which thus entered on the period of greater stress with greatly reduced resources, call for its classification with the worst portion, although in three out of its four districts the

outturn of the autumn crops slightly exceeded one-third of an average harvest. In this way the area of greatest failure may be regarded as covering about 35,000 square miles with a population of 15½ millions.

An estimate has been framed by the Director of Land Records and Agriculture, which aims at showing how far the actual outturn of the autumn harvest fell short of an average outturn. In this estimate due allowance is made for the failure of those crops which, though included in the sowings, never bore fruit. The best calculations which can be made on this basis show that the outturn of food crops of the autumn harvest was only 39·25 per cent. of an average yield. Sugarcane and the *arhar* pulse have not been included in this estimate, because, though sown with the autumn crops, they are gathered with the spring harvest; but the estimate includes the area of the larger millet (*jawār*) recorded as "food crop." This millet is, however, also very largely grown as a fodder crop, and it happened this year that a great deal sown for food was eventually cut for fodder. It is a large crop, and if allowance is made for the transfer from food to fodder area, the total provincial outturn of the autumn harvest will be reduced to 38 per cent. of an average harvest.

Though the heaviest failure was in rice, yet it has not followed that the largest rice-growing districts were the most seriously affected. Rice is always a more or less precarious crop, being dependent not only on sufficient but on timely rainfall. The failure of a single crop does not involve acute distress, as a full rice harvest will carry the cultivator through one or two poor seasons. But in many districts the harvests before 1896 had been poor, and it was in those districts where the people had been impoverished by several successive years of deficiency that the failure of the autumn crops of 1896 was followed by the most serious consequences which this narrative discloses.

The Director of Land Records and Agriculture has submitted estimates quantifying the loss of food grain thus caused. A great deal of uncertainty enters into all quantifications of crop outturn or crop failure, and nothing more than an approximation to the truth can be claimed for them. But with this qualification it may be said that in an average year the total yield of food grain from the autumn harvest in these Provinces is estimated to be 5,370,000 tons. Last year the yield was about 2,055,000 tons. The loss was therefore 3,315,000 tons, which at normal prices may be valued at not less than 16½ crores of rupees (about 11 millions sterling at current rates of exchange). If it be remembered that the coarse rice, the great and lesser millets, and the maize, all of which are autumn crop staples, furnish the ordinary food of the poorer classes, it will be at once perceived what a terrible disaster had overtaken the Provinces.

The forecast of the ensuing spring crops increased the gloom, as the area of the spring sowings was estimated at this time to be only 58 per cent. of the normal cultivation. Fields which had not been ploughed while the rains still continued became baked and would not yield to the share. This was specially the case in the double-cropped lands, for the rains had ceased before the autumn crops could be removed from them. To a great extent they had to lie fallow. Even where the land could be ploughed, the dry and heated soil was adverse to the germination of the seed. The gram crop, which is the earliest sown and is a coarse staple largely consumed by men as well as by animals, suffered so severely that later on its price exceeded that of wheat. It was in this emergency that the construction of temporary wells already referred to was forced on; and even this resource—the unusual and forlorn resource of irrigation to secure the spring sowings—was contracted by the extraordinary demand for water to irrigate the standing crops. In the canal districts, where a large supply of water was available, the area usually watered for the purpose of sowing is quite inconsiderable: in 1896 almost the entire irrigated area (1,888,125 acres) was so treated, although in these districts the later rains had not failed so completely as elsewhere. On the whole, there were at this time serious apprehensions that the failure of the autumn harvest would be followed by an equal or even greater failure of the spring harvest.

The extent to which each part of the Provinces suffered from these adverse conditions will be shown hereafter in more detail. But here it may be noticed that the deficiency of the rainfall and the other obstacles to the cultivation of the spring crops pressed most heavily on the unfortunate Bundelkhand districts, where the area sown for spring reaping varied from about one-fourth to one-half of the usual extent, and what was sown remained much more dependent here than elsewhere on the further rainfall for its security. By the same fatality the afflicted district of Hardoi came off worse than any of its neighbours in Oudh or Rohilkhand. One-half its fields remained unsown.

All these facts bear witness to the severity of the failure in the autumn and to the poor prospects of the spring harvest, and taken in conjunction with the agitated condition of public feeling which prevailed, they placed beyond doubt the imminence of a great famine in large regions and scarcity in the rest of the Provinces. Opinions differed as to the degree of destitution which would prevail before the next year's harvests should have replenished the food supply; but District Officers were satisfied that if widespread mortality from starvation was to be avoided, Government would have in the interval to support for six months a daily average of it

might be one million, or it might even be nearly two millions of souls. The least sanguine estimate placed the maximum number that would require relief for one day at 335 millions: while even the most sanguine estimate did not place this number at less than two-thirds of that appalling total. The numbers that actually came on relief were 284 millions, exclusive of 30 millions more relieved from the Indian Charitable Relief Fund.

CHAPTER V.

Organization of the Relief System.

SUCH was the state of affairs when in the end of October the Lieutenant-Governor commenced his tours through the famine and scarcity districts, which with necessary intermissions lasted till the end of July 1897. The objects of the first tour were these. In the first place the Lieutenant-Governor wished, being himself newly come to the Provinces, to make the acquaintance of every gazetted officer on whom, each in his own sphere, would devolve the duty of carrying out the relief system according to the principles of the Famine Code or the orders of Government. In the serious business on which all were entering success might often depend on the choice of particular men for particular duties and on the establishment of harmonious relations between the Head of the Government and the local officials. (In testimony to the high average of administrative capacity possessed by the services of these Provinces be it here said that the Lieutenant-Governor during the entire campaign hardly ever found it necessary to remove any officer from the position in which the previous accident of service had placed him.) But the chief objects of the first tour were these—in conference on the spot with the officers of each division, the Commissioner, District Officers, Sub-Divisional Officers, Police Officers, Medical Officers and officers of the Public Works Department, to examine again in detail the condition of each district in turn; to gauge in the light of the agricultural statistics for each district, which had now been verified, the degree of crop failure and the extent of the impending distress; to fix the strength of the establishments which to begin with (for they were expanded afterwards with the rise of pressure) were necessary to dispense relief and conduct the administration; to scrutinize the programme of relief works and guard against any works—except works of public utility—being undertaken from public funds; to assert the principle that the Commissioner should have within his division control of all relief agencies (his control over the Public Works Department not, however, extending to professional matters), and the Collector similar control within his district; subject to the preceding principle to allot to the Public Works Department its proper sphere of action and to Civil Officers their legitimate field of activity; to prescribe the functions of the Civil Officers and their subordinates in promoting village relief works, stimulating private charity and controlling the great field of gratuitous relief; and to establish independent local relief committees as an auxiliary to official endeavour. Generally speaking, the Lieutenant-Governor wished in these early

tours to receive suggestions, explain his own views, and decide doubtful points in the light of the best local knowledge.

The preceding objects were concerned chiefly with the organization of official action; but the Lieutenant-Governor was specially anxious to bring the Government from the very beginning into close touch with the landlords of each district and to associate them each in his own estate with the Government in the administration of relief and especially in bearing part of the cost of and the carrying out of village relief works. With this object informal darbárs or conferences of landlords and other influential local residents were held at all divisional headquarters: they were repeated afterwards at district stations for the particular district. These darbárs or conferences were very largely attended, and resulted in the establishment of cordial relations between the authorities on the one hand and the landed proprietors on the other, whereby the administration of relief has been much benefited. At these conferences the landlords were not slow to represent their own difficulties, which in many instances were further explained at private interviews with the Lieutenant-Governor, and the information thus gained was of great use in enabling the Government to see how far joint action and responsibility with the landlords was practicable and to decide on the precise extent to which the collection of the land revenue should be suspended pending the advent of better times.

The result of the Lieutenant-Governor's first tour was reported to the Government of India on the 23rd November in a letter which, with its appendices, displayed in detail the exact position of each district in regard to the failure of the autumn crop; the prospects of the spring harvest; the state of the markets; the anticipations of famine or distress; the magnitude of the difficulties to be dealt with; the manner in which the Provincial Government intended to deal with them, and other relevant circumstances calculated to place the Governor-General in Council in possession of all the facts of the situation. This letter with its appendices was subsequently published in the *Gazette of India* for general information.

It will be convenient at this stage to describe in some detail the relief organization which has been adopted in these Provinces: for although it followed in the main the principles of the Famine Code, experience dictated the necessity of various additions to, and modifications of, the Code rules. These additions and modifications were introduced at various times on the suggestion of actual practice and necessity, and it was not until February 1897 that the system assumed in all respects its final shape. But the following description will give the finished product without regard to the sequence of improvement or development.

The principle which guided and inspired the administration of relief was at an early date declared in the following words:—

“The only limitation to the relief to be given will be the necessities of the people.”

It is believed that this principle is reflected and preserved in each branch of the relief system of these Provinces now to be described. But the task of making each department instinct with this principle, and at the same time safeguarding it from dishonesty and lavishness, committed the Administration to constant struggles with chicanery and deceit. It is not suggested that assistance never reached those who might have dispensed with it, or that it was never intercepted, or that imposture was always unsuccessful. To the importunacies of the multitudes to be dealt with, there was no limit or restraint, while rapacious subordinates could not always be at once detected. But as the staff settled down to their work, the opportunities for deception or peculation were narrowed down, till it is believed that from an early stage of the operations but little Government money reached the hands of any who did not stand in real need of it.

The relief system prescribed by the Famine Code may be classified as follows:—

- I.—Employment on large relief works entered on the administrative programme (Article 17 of the Code) and controlled by the Department of Public Works.
- II.—Employment on small relief works (Article 65 of the Code) controlled by District Officers.
- III.—Employment at their homes for indigent respectable people who are incapable of labour on relief works or debarred by national custom from appearing in public.
- IV.—Gratuitous distribution of relief in poorhouses, State kitchens and hospitals to the poor and infirm unable to labour, until they had become fit to labour, or to be sent back to their homes.
- V.—Gratuitous distribution of relief at their homes to persons who are unable to labour and are reduced to distress.

RELIEF WORKS.

The first, and numerically the most important, form was relief works designed to afford employment to all who could not find it elsewhere and could not subsist without it. It was a cardinal principle of relief administration in the North-Western Provinces and Oudh that some labour should be exacted from everyone seeking relief who was not incapacitated for work by age or infirmity, or in rare cases (chiefly in case of women) by social status. From the able-bodied a full task,

from the weakly and from the children over 7 years of age a smaller task, graduated according to their various capacities, was required. This was the key-note of the system, and in judging of the system's material results, should not be forgotten. In pursuance of this principle vast numbers of inefficient labourers have been employed (to the lowering of the outturn of work done per rupee of expenditure); but it was deliberately decided that in the best interests of the people themselves industry should be encouraged and idleness or sloth discouraged. The best proof of the complete success of the policy adopted is to be found in the fact noticed in the sequel, that the relief works had no attraction, and that on the first opportunity the people returned, undemoralized and with cheerfulness, to their ordinary avocations.

Relief works were divided into two classes: (1) large projects of general utility affording employment to usually not less than 5,000 labourers, the bulk of whom were obliged to leave their homes and reside on or in the neighbourhood of the works; and (2) lesser projects, serving some local purpose and affording occupation to a smaller number of workers in the neighbourhood of their homes. The former class were managed by the Public Works Department: the latter were controlled by the District Officer through his immediate subordinates or through the resident village proprietors. In both alike earthwork was the almost universal employment as being the only one suited for unskilled labour. The embankment of roads and the excavation of tanks were the chief projects selected.

The first step on a large work is to divide the work-people into gangs containing a certain number of groups of diggers and carriers (usually one digger to three carriers), and aggregating about 60 effective workers. To each gang is assigned a certain measured task, calculated to represent a reasonable day's work for average unskilled workers, and this task is usually subdivided among the component groups. Weakly persons are assigned proportionally smaller tasks. When the allotted task is finished, the labourers are free to go, having earned the daily wage calculated, on a sliding scale according to the price of grain, as sufficient to purchase a day's ration. Under this system it is not open to the labourers to earn a higher wage by doing a larger task. If the allotted task was not completed, a proportional deduction was made from the wages of the entire gang or of the group of labourers who were at fault, subject to a minimum which represents a penal or bare subsistence ration. Below this wages could not be reduced. The object of the arrangement was to secure to each person sufficient to maintain life in return for a reasonable task, and at the same time to make the work unattractive to persons who could support themselves or find employment elsewhere. The system did not enable

workers to earn enough to support those helpless members of their families who must remain with them and cannot earn their own living. Gratuitous relief was accordingly provided at the works for those dependants who, from age or infirmity, were themselves unable to render any task. The great bulk of the dependants were young children who formed about 90 per cent. of the whole dependant class. Dependants were paid on the lower scale provided for non-workers. They have naturally been more numerous at some places and seasons than at others; but from first to last the provincial average was one dependant for every five workers.

The Famine Code lays down that "while in the late stage of a famine 'large works' will be the backbone of the system of relief, small works should be utilized in the early days of a scarcity." From this principle the Lieutenant-Governor found it desirable to depart, for reasons which were duly communicated to the Government of India. While utilizing small works at all seasons to meet urgent demands for relief, he found it advantageous to employ them chiefly when the advance of the hot weather and the scarcity of water or the outbreak of cholera had, in many localities, rendered it difficult or dangerous to keep large crowds of workpeople assembled in one place. But from the time famine declared itself till the works were finally closed, large works as a rule formed the backbone of the system wherever there were large numbers seeking employment and no natural obstacles, such as dearth of drinking water, interposed to render such projects impracticable. It is far easier to provide on large works than on small works that unceasing supervision of European officers which is essentially necessary to preserve proper organization.

The form of relief employment above described was restricted to "famine districts," that is districts in which distress was acute. But in "scarcity districts," that is in regions where distress was less severe, another form of relief work was employed which stands half-way between the Famine Code works just described and the system of contract labour by which public works are executed in ordinary years. It has been designated the "Intermediate system." A full description of the circumstances which led to its adoption will be found later on; but here it may be said that the essential difference between it and the system prescribed by the Famine Code is the substitution of piece-work for task-work and the exclusion of the minimum wage. Rates are prescribed and payments made according to the amount of work done; but a maximum task is fixed which limits the amount that can be earned in one day. The amount earned is divided between the diggers and carriers according to a fixed scale. The object of the system is to secure a proper outturn of work for the money paid, to prevent the congregation of a large number of ineffective workers, and to encourage

or enforce industry. At the same time the maximum task operates to prevent earnings becoming more than sufficient for reasonable subsistence. Under this system free doles are not given to dependants of the works, but the rates and tasks are so fixed as to permit workers earning enough to support the non-working members of their families. In some localities where this system was enforced it was found necessary to distribute free rations of cooked food to the very young children of the workpeople. This additional relief was not necessitated by any deficiency in the rates of earnings, but by the callous neglect of their children by parents whose natural instincts were weakened by continued scarcity. The same necessity arose sometimes on Code works and even in home relief where the cash doles given to children were appropriated by their parents, and the authorities were compelled to substitute cooked food and see it eaten by the children in their presence. This method of relief was known as State kitchens. To these arrangements, which illustrate, with perhaps a lurid light, the difficulties against which Relief Officers had to contend, thousands of little children owe their lives.

Besides the relief works carried out by the officers of the Public Works Department a number of relief works were executed by private persons, either in a purely charitable spirit at their own expense or with the assistance of subventions by Government. Both alike usually took the shape of improvements in the estates of the persons concerned, the most common being the excavation of tanks. The former were entirely under private management. For the latter the cost of the project, according to official plans and estimates, was advanced by Government and an engagement taken from the person receiving it to repay within a certain time a fixed portion, generally one-half, of the entire outlay. The management of the work was left to the proprietor; but he was bound to pay labour at specified rates, and the work was kept under regular inspection to ensure that the funds were properly applied and the relief afforded to those who required it.

HOME EMPLOYMENT.

One more form of relief work remains to be enumerated. Women of a respectable class accustomed to support themselves wholly or in part by needlework, embroidery, and kindred occupations, men of good birth, unused to any form of labour, decayed families whose scanty means were outrun by famine prices—for such classes home work of a suitable character was provided without the loss of self-respect involved in the acceptance of charity. No class of the community demanded more commiseration than these patient sufferers, who would starve and die in silence rather than seek or accept alms. Such persons were sought out and relieved through the agency of private persons of their own community. This form of relief was most commonly required in

towns, and the cost was largely met from private subscriptions and the Indian Famine Fund, assisted by liberal State subventions. But the agency of distribution was under official control.

In several cities arrangements were made to find work at their own trades for artisans, chiefly weavers, whom the prevailing distress had deprived of employment. In Benares in particular, which contains a large community of impoverished weavers, numbers were thus enabled to carry on their ordinary occupation.

GRATUITOUS RELIEF.

In the ways enumerated above, employment was provided for all who required relief and were able to work. But beyond these is a great multitude of persons who are unfit for labour and accustomed to rely on others for their subsistence. Such persons do not comprise merely the ordinary mendicants who trust to the charity of the public, but also the helpless members of families who in all countries are a burden on their natural protectors. What may be called domestic charity is very far-reaching in India: it requires that those of all classes who have means should support or assist their distant relations, connections, and even caste brethren, who in Western countries would be left to State relief. This social piety is in fact the Indian substitute for the poor law of England.

For the members of these classes who were unfit for work it became necessary to provide gratuitous relief. As distress intensified and the resources of the people became exhausted, the efficiency of private and domestic charity was weakened. The poor were less and less able to support their poor dependants, and State intervention became necessary. Gratuitous relief was provided in different forms. One has been already described—the grant of free doles to the dependants of labourers on relief works. The rest may be divided under the two heads of the *poorhouse* and the distribution of *outdoor or home relief*.

Poorhouses were established at all district and sub-divisional headquarters in famine districts and in suitable centres in the districts which were less distressed. They were open to all who were willing to submit to the test of residence and the necessary discipline. Except in the few cases where a suitable structure was already available, the buildings were of a temporary character, constructed on certain uniform principles to secure the health, safety and comfort of the inmates. Arrangements were made for cooking, sanitation and conservancy. Hospital accommodation and medical aid were provided, and clothes or blankets were supplied to those who required them, either at State expense or at the cost of the Indian Famine Fund. Though every

care was taken to avoid caste objections and to secure the well-being of the inmates, yet poorhouse life was always repugnant to the people generally. The inmates consisted so largely of persons broken down by disease or infirmity that the institutions might have been more correctly described as infirmaries. Whatever there was of repulsive or shocking in the aspects of the famine, was to be found in the poorhouses, which, broadly speaking, were asylums for the reception of starving vagrants or homeless cripples.

The place occupied by the poorhouse in the scheme of relief operations was that of receiving house or temporary shelter for all who could not be otherwise relieved. The only permanent inmates were the infirm vagrants. The rules required the District Officer to sort out periodically the inmates of the poorhouse, to draft to the relief works those who were capable of labour, and to send to their homes those helpless ones who had any fixed residence, there to be brought on the village relief lists. In this way it was designed that the gratuitous relief system should consist, broadly speaking, of two great forms: *first*, relief on works for all in need of relief who were able to labour and their dependants; *second*, relief at their homes for all unable to labour, but in need of relief. The poorhouse remained then the refuge of the homeless infirm from whom it was hardly ever possible to exact labour. But when the inmates could work they were made to work.

It may here be also stated that the orphans and other deserted famine waifs were collected, generally at district headquarters, in an orphanage, where they received special treatment. After a short residence the children were found to improve immensely in health and physique.

Outdoor or home relief required a very elaborate organization and a very extensive agency. Its aim was to seek out in their own homes all those who had been deprived of their ordinary means of support and were unable to work for their living, to test the reality of their claims, to bring them on a free list, to arrange for the regular payment of the allowances which, according to the fixed scale, might be found necessary for their support, and to strike off their names as soon as they appeared in a position to earn their own support or to claim it from any one able and bound to maintain them. These operations were carried out in every village in the famine districts, covering an area of 44,000 square miles with a population of 20½ millions, and with less exhaustiveness in the "Scarcity" area of 28,000 square miles with a population of 14½ millions.

The task was a comparatively simple one in towns where the people were collected within narrow limits and where voluntary agency was largely available. But for the

rural tracts the task was so enormous that it could not have been effectively and economically discharged without the agency already existing in these Provinces for the purposes of revenue and general administration. For fiscal and executive purposes the North-Western Provinces and Oudh are divided into divisions varying from about 10,000 to 17,000 square miles in area and presided over by a Commissioner. These divisions are again divided into districts with an average area of about 2,000 square miles and controlled by a Collector-Magistrate or District Officer. Every district is subdivided into subdivisions called *tahsils*, which again are split up into blocks or circles called "*kanungo's circles*," and these *kanungo's* circles are again subdivided till the village or a group of hamlets is reached. The village is under the charge of a "*patwari*" or village accountant, who is a Government official, resides permanently in his village or group, and is personally acquainted with all its inhabitants. Over each circle of villages is a *kanungo* or revenue supervisor and over each group of circles or *tahsil* is a *tahsildar*. One or more "*tahsils*" are under the executive charge of a superior officer, an Assistant or Deputy Collector.

This organization, which was taken as the basis of the relief system, was utilized to the fullest extent. Instead of attempting to introduce a new and special famine organization the original framework of the district administration was maintained and strengthened. Even the usual nomenclature with which the people and the officials are familiar was retained. The original relief circles coincided with the *kanungos* (revenue supervisors) circles—the *kanungo* became the circle officer, and the special staff appointed to the same duty were styled additional or assistant *kanungo*. Even the officers in civil charge of relief works were known as relief *naib* (or assistant) *tahsildars*, and special relief officers of a superior grade were designated relief *tahsildars*. The existing district staff was everywhere utilized to the fullest extent in carrying out relief measures.

In these and other ways it was sought to work on lines with which the officials and the people were acquainted, to preserve official designations which in the people's minds imported a definite degree of responsibility, and to avoid the difficulties which might have arisen in building up an organization which would be unfamiliar to those who had to work it, and might be viewed with suspicion by the people. It was rarely found necessary to increase the "*patwari*" staff or to subdivide the territorial unit entrusted to these officials. But the number of revenue supervisors and assistant *tahsildars* was largely increased, each class being as far as possible recruited from the grade below, so as to secure the advantage of local knowledge and experience while stimulating zeal by promotion. Trained men were also drafted from districts not

affected by distress, and the services of approved candidates for Government service were freely utilized. The extent of country controlled by these officers, each in his own grade, varied in extent according to the physical conditions and intensity of distress in each district. Where communications were difficult or when the prevalence of acute distress required close and sustained scrutiny, the area and population under each officer were narrowed down to limits he could effectively control. Under different conditions, larger charges, it was found, could be managed by a single officer. The organization was commenced early in the famine by taking in every case the supervisor (kanúngo) circle as the unit, and these were subsequently subdivided and additional kanúngos appointed where circumstances demanded according to the growing pressure of distress. As the hot weather and rains drew on and travelling became more difficult the charges were further narrowed. In the 19 districts officially recognised as famine-stricken there were 467 circles with an average area of 95 square miles and population of 44,000. In the 18 districts classed as "scarcity districts," there were 225 circles averaging 125 square miles in area and 64,000 in population. Within these original circles again sub-circles were formed as pressure increased and it became necessary to lighten the charges.

The rules drawn up to guide officers in determining the proper recipients for gratuitous home relief are printed in the Appendix. Briefly it may be stated that lists were primarily drawn up by circle officers with the assistance of the village accountant and head-man, the proprietor or his agent, and respectable inhabitants of the place. These lists were made the basis of the subsequent procedure, which was as follows. The whole population of each village in turn in the distressed districts was mustered excepting those whose sex and status forbade them to appear in public. Those who were absent from the village were first accounted for. Then those present who were fit objects for relief were sifted out, and after due inquiry placed on the free list either as permanent or temporary recipients of relief. A *pancháyat* or committee of the respectable inhabitants of the village was then formed, and the claims of the "*parda-nashin*" women and others of that class were considered and allowances were allotted when deserved and required. Thus the entire population of the village—men, women, and children—were passed under review, so that no individual might escape notice or suffer from want of food. The lists so framed were tested and corrected by the superior staff visiting each village in turn, and were in all cases brought under examination by a European officer of the covenanted or commissioned grades. Recipients were furnished with printed tickets corresponding with the lists and showing the amount of relief to which they were entitled. Thereafter each village was visited so far as

possible once every week or ten days by the circle or other superior Relief Officer whose duty it was to review the lists, muster the recipients (excepting women who could not appear in public), remove the names of those no longer entitled to relief, and bring on the lists any new persons who might be shown to be eligible.

The allowances were distributed in weekly or fortnightly doles through the village accountant, head-man or landholder nominated for the purpose; and it was the duty of the circle and supervising officers to see that no fraud was practised on the recipients or on the State.

This village relief was ordinarily given in cash. But, as explained in the case of dependants of workers, it was sometimes found necessary to provide relief in the shape of cooked food for children neglected and starved by parents who appropriated the cash doles for their own uses. In such cases kitchens were established at suitable centres and food distributed to the children who assembled to receive it.

In cities committees were formed consisting of official and non-official members, and directed by the District Officer or City Magistrate. The various quarters or wards of the city were divided between the members, and a house-to-house visitation established to ascertain the persons who stood in need of relief. The great bulk of these were persons, chiefly women and children, of respectable position whose occupation had failed from the pressure of hard times or whose scanty means no longer afforded a subsistence at the high prices prevailing. Such persons were disabled by the custom of the country and their family pride from appearing in public or asking charity. It was in numerous cases even a task of much difficulty to induce them to accept relief or to present it in a form which they could accept without loss of status and self-respect. Considerable difficulty was experienced at first in establishing this system of home relief.

The difficulty was enhanced by the mistrust which attaches to a measure for which there was little precedent, and whereof the motives were imperfectly understood. To mistrust was added the difficulty arising from caste. Many destitute people refused relief at first from fear that it would be followed by expulsion from their brotherhood. Curiously enough these cases were observed among the lower castes and were not confined to people who had a social position to forfeit. It required much judgment and infinite patience to meet both these unreasonable objections and the more reasonable ones based on a commendable feeling of self-respect and independence. For many women of the better class home employment was provided in the shape of needlework, embroidery, and the like, or a market was found for their work. Every city contains houses of good and even imposing appearance, the survival of past wealth, with inmates sunk in the direst poverty. Not even the nearest neighbours or distributors

of relief always knew the amount of silent suffering concealed within such walls. Many devices were employed to ascertain such cases and convey relief in an unobtrusive or secret way, and in the shape least calculated to hurt the susceptibilities of the recipients. In work such as this the services of native gentlemen and of European gentlemen and ladies connected with the various missions or charitable associations were found of the greatest value and fully utilized. The bare subsistence provided by the State was supplemented through the same agency by little comforts from funds provided for the purpose by the Famine Relief Fund.

CASUAL RELIEF.

Besides the regular relief afforded in poorhouses and by the organized village system, provision was made to meet the case of destitute wanderers at a distance from the relief centres. To this end money was entrusted to police officers, village officials, and head-men, wherewith they might succour any starving wanderer found needing relief, give him a meal, and arrange to pass him on to the nearest poorhouse or relief camp. The sum spent in this way was small; but many stragglers were helped who might otherwise have perished by the way. Besides the regular relief there was thus a network of casual relief covering the whole country.

RELIEF FOR CATTLE.

The preliminary preparations against the famine, devised in November 1896, included a careful estimate of the capabilities of the various State forests with the areas available for grazing and the number of cattle which each could support in a time of pressure. Though yielding a considerable amount of edible products, these reserves are chiefly useful in the way of affording fodder and pasturage for cattle in years of drought; and on this occasion there was not the excessive strain thrown on their supplies which might be expected in a great famine. When the abrupt termination of the rains in August 1896 destroyed the grain crops, it found the fodder crops well advanced. In fact a great deal of the crops sown for grain were eventually cut for fodder or grazed down. The winter rains revived and stimulated the wild herbage, and the many trees whose leaves furnish useful food for cattle did not generally suffer from drought. Thus, though the supply of dry and green fodder was defective and its price high, yet there was nowhere any complete failure, and in those distressed tracts where cattle were sold in large numbers they were usually sold in order to purchase food, and not because it had become impossible to support them. Though the urgency then was happily less pressing than it might conceivably have been, yet the resources of the State forests were fully utilized. The forests available for such purposes lie in two main blocks, the first and greatest in the submontane country along the foot

of the Himalayas; and the second, a comparatively small tract, in Bundelkhand. It has been mentioned that the latter tract was thrown open both for free grazing and for the collection of edible products by the people during the Bundelkhand famine in the summer of 1896. The pasturage was closed again when the rains seemed well established in August; only to be reopened later on. Proper conservancy requires that State forests should be held in reserve to carry the cattle over the last pinch, when home supplies have been exhausted and no spontaneous growth can be expected till the advent of the rains. Following this principle, the Bundelkhand forests were kept closed till there were signs that all available fodder supplies in villages were becoming exhausted. When this became apparent, the reserves were thrown open in April 1897 for free grazing and were fully utilized, though the scarcity of water rather than the scarcity of fodder placed a limit on their utility. In the sub-Himalayan tracts it was found sufficient to encourage, by exemption from fees and in other ways, the passage of herds through the belt of reserved forests into the great grazing grounds of Nepal, whose well-watered and lightly-timbered plains possess advantages for pasturage over the closely preserved tree jungles in British territory.

All restrictions on the extraction by the people of the spontaneous edible products of the forests were withdrawn when those products were ripe for consumption. The entire forests were thrown open for the free collection of such products, and were largely frequented for the purpose by the people of the surrounding tracts. They remained open till the 1st November 1897, when the autumn harvest had been secured.

CHAPTER VI.

Progress of famine and relief operations during the winter of 1896-97.

It will be remembered that when the rains ceased at the end of August, relief measures were being still carried on, though in a skeleton form, in some of the Bundelkhand districts and in the Hardoi district of Oudh. Early in September the growing pressure manifested itself by an increase in the number of applicants for relief not only in these districts but elsewhere; during the month of September relief calculated in units for one day was administered to 382,000 persons in nine districts. In October Collectors, acting on the instructions given them in the Government order of 21st September, found it desirable in many other places to begin test relief works. By the end of October distress had made itself manifest in a considerable part of Oudh, chiefly in the Lucknow division. In the Rohilkhand division every district was threatened with partial failure, and in Agra the country outside the canal-protected area had begun to need relief. In parts of the Benares and Gorakhpur districts there were forebodings of the scarcity which subsequently developed there, and test works had become necessary. The hill districts of Kumaun, enjoying good harvests, lay outside the sphere of possible distress, while the Meerut division and part of Agra sat secure in their network of canals.

When the situation was reviewed by this Government towards the end of November, famine had unmistakeably declared itself in several districts and was developing in others. In the Bundelkhand group of districts, as already stated, the distress of the preceding summer, though it had abated with the advent of the rains and the autumn sowings, had never entirely ceased, and relief measures had remained continuously in operation, though on a reduced scale. As early as the beginning of October poor-houses were open in all the Bundelkhand districts and in Lucknow and Hardoi; and Government had also directed that this precaution should be taken in all large towns where the pressure of prices on the very poor classes was beginning to show itself. In Banda, Hamirpur, and Jalaun village relief was in operation, and in all districts of the group works were open and attracting a substantial number of labourers. At first these were in most instances conducted as test works, but before October closed they had been converted to the full Famine Code system in all except Jhānsi; while in the Rae Bareilly district of Oudh a similar measure had become necessary. At the same time test works

had been opened in several districts of the Agra, Benares, Gorakhpur, Rohilkhand, Fyzabad, and Lucknow Divisions—16 in all—while the appearance of destitute wanderers had rendered it advisable to open poorhouses also in some of these districts. During November the development of distress was more rapid and general. Prices continued to rise, and the employment afforded in garnering the autumn and sowing the spring crops had commenced to fail. An increase in crime, the indications of an unsettled feeling, and a tendency to wander in search of employment, gave warning that in the more distressed tracts the time had come for an expansion of relief measures. Here and there, as on the Jasra road in South Allahabad, a sudden rush on relief works showed that in the most impoverished localities the people were beginning to get to the end of the scanty addition which the autumn harvest had made to their resources. These wants were met and preparations were steadily made to anticipate the growing demand. Work projects were matured, tools and plant provided, poor-house accommodation increased, while relief circles were formed and the preparation of village lists of all persons who would, so far as could then be foreseen, require and be qualified to receive gratuitous relief at their own homes, was pushed on in all districts where famine seemed imminent. At the commencement of October the numbers in the daily receipt of all forms of relief were 15,000 in six districts. By the end of that month it had risen to 99,200 and had spread over 29 districts, of which six had been recognised officially as distressed. Of the total number relieved three-quarters were workers, while those gratuitously relieved might be roughly divided into rather less than one-fourth in poor-houses, rather more than one-fourteenth in receipt of home relief, and the remainder dependants of workers. As the causes at work became more potent, the distress grew both more widespread and acute, and the numbers on relief increased with corresponding rapidity. About the middle of November the failure of the late autumn crops became definitely declared, while the employment afforded in garnering them had considerably slackened; the construction of temporary wells, so largely stimulated by advances from Government, approached completion; the spring sowings were arrested for want of rain, and irrigation alone continued unabated for the occupation of agricultural labour. Prices continued to rise and the poor-houses were rapidly filling. Between the 14th and the 21st November the poorhouse population had risen from 7,200 to 19,000, and the later admissions in some parts showed signs of emaciation. Labourers and their families began to flock on the relief works in the more distressed districts, the sphere of gratuitous relief continued to expand, and a certain number of cultivating tenants, too, found it necessary to seek employment or to send the idle members of their families to the works. Finally, signs of distress began to appear amongst

the petty artizans, weavers, and the like whose occupation had ceased along with the prosperity of their customers.

The gravity of the situation at this time was clearly reflected in the prices current of food grains, which in the beginning of November rose to a phenomenal pitch, as shown by the following statement, which gives for the chief markets in the distressed area the amount of grain (in *seers* and *chhattaks*) purchaseable for one rupee, 1892 being taken as a normal year:—

Division.	Wheat.		Barley.		Rice (common).		Juar.		Maize.		Bajra.	
	November 1892.		November 1896.		November 1892.		November 1896.		November 1892.		November 1896.	
	Sr.	c.	Sr.	c.	Sr.	c.	Sr.	c.	Sr.	c.	Sr.	c.
Benares	13	4	7	11	17	9	9	7	11	8	17	13
Lucknow	13	4	7	12	20	8	9	12	12	8	10	8
Cawnpore	14	8	8	0	21	8	9	0	12	0	8	0
Allahabad	12	0	7	4	18	8	8	2	9	0	8	0
Jhansi	16	8	7	12	24	0	9	8	12	0	7	4
Bareilly	13	8	7	1	19	6	8	9	12	0	7	8
Gorakhpur	12	0	7	3	18	0	9	0	12	15	8	9
Agra	12	8	7	8	23	0	8	8	9	8	8	8
Fyzabad	13	4	8	0	18	12	9	8	15	0	9	1

These prices, which are on the whole double the ordinary rates, indicate not only the failure of the harvest, but the shortness of the stocks existing in the Provinces.

At this juncture, when the season for even the latest sowings for the ensuing spring harvest was rapidly passing away, a most unexpected fall of rain occurred.

The retreating monsoon appeared entirely exhausted, and a period had been reached when rain even under ordinary conditions is extremely unusual in these Provinces. During the last 50 years at Cawnpore rain was recorded in November only 4 times, only 5 times in Agra, and only 11 times at Allahabad. The normal rainfall in November for the Provinces generally is absolutely inconsiderable. Yet when all hope had been abandoned, a cyclonic storm which had crossed the Dekkan from the Bay of Bengal into the Arabian sea curved north-eastwards, and the Provinces were visited by a sudden and unexpected rainfall on the 22nd and 23rd November 1896. Its effects were thus described at the time:—

"All officers are agreed that the rainfall of the last week of November was too late to materially benefit such autumn crops as were still on the ground, except *arhar* (a species of pulse) and sugarcane; and also too late to enable spring sowings to be completed under ordinary conditions. They are equally agreed that in whatever locality the fall exceeded one-quarter of an inch the spring crops already sown were greatly benefited, and further sowings effected over an additional area. The peculiarity of the rainfall was its uneven and capricious distribution. In the Meerut division, which, owing to the canals and the good autumn harvest, was already beyond the risks of scarcity, the fall was generally good, varying in most districts from one-quarter to four-fifths of an inch. In this division consequently the spring area will be little short of the normal. In the

Rohilkhand division the average fall exceeded two-fifths of an inch, and was highly beneficial to the sandy tracts. In the Agra division rain was heaviest in the tracts which already were best off and lightest in the worst tracts. But its general effect was to change the situation in this division from one of very considerable gravity to one of distinct hope. Passing over into Oudh, the submontane districts are found to have received the heaviest rainfalls, the district of Bahraich, in particular, having so benefited thereby as to have brought 86 per cent. of the normal area under sowings. In Southern Oudh, comprising portions of both divisions (Fyzabad and Lucknow), the rainfall was slight; but the natural moisture of the soil and the humidity of the climate have done even more than was anticipated, and these advantages were supplemented by extraordinary resort on the part of the peasantry to the construction of temporary wells and to every form of irrigation. In the Gorakhpur division fairly good rain fell in the Basti district, placing it beyond the reach of crop failure, and in the northern part of the Gorakhpur district. The southern and part of the central portion of the latter district and the district of Azamgarh were practically untouched by the rain, and the tract had all along been regarded with considerable apprehension. But here also the natural qualities of the soil and climate have helped the cultivator, and two-thirds of the normal spring area have been sown. In the Benares division serious difficulties were not apprehended even in the absence of rain in November. Most of the districts received a fair amount of rain, and in the division as a whole nearly four-fifths of the normal area have been sown. There remains the Allahabad division, which from the first has been regarded by the Lieutenant-Governor as the weakest area in the Province. In these districts good rain fell in the greater part of Hamirpur and in part of Fatehpur, Cawnpore, and Jhansi. Elsewhere it was too slight to materially improve the spring prospects. Banda and Allahabad, in particular, were practically unaffected by the very light showers which they received. The result is seen in a spring crop which in the whole division is only 44 per cent. of the normal area, and falls to only 25 per cent. in Banda against the November estimate of about 50 per cent. It may be doubted whether in Banda more than 20 per cent. will yield a crop."

This rain, though too late to benefit the autumn harvest, was of immense advantage to the growing crops and added largely to the area of spring sowings. These later sown crops in the end turned out very poorly, and in the unfortunate districts of Banda and Jalaun the fall was too light to allow any material addition. But generally the prospects were greatly improved. Prices steadied or slightly fell, and the people gained heart. With promising crops in the ground the inducements to wander were restricted and the area of prospective distress became curtailed. In Rohilkhand, Agra, parts of Oudh, Gorakhpur, and Benares the anxiety concerning the future was much relieved.

An immediate effect, however, of the rain was to restrict the irrigation work which had afforded much employment. Deprived of this occupation and pressed by high prices, the labouring classes continued to come in increasing numbers on the works or into the poorhouses.

The numbers on State relief had already included many of those who are dependent on private charity for their

support—a class ever the first to feel the pinch of famine. To this category belong not merely the professional mendicant who lives on the public, but also the many women, children, and aged or infirm men whom the custom of the country throws on the charity of their relations. From these classes were drawn the most troublesome persons who came within the scope of relief operations: those who cannot work and will not apply for assistance till reduced to the last stage of emaciation and weakness, and who will again resume their aimless wanderings when they have recovered strength enough to leave the poorhouse, to be again picked up on the roadside in the last stage of starvation and placed in the poorhouse infirmary; those who can work but will not, and who starve till qualified for admission to gratuitous relief, indoor or outdoor, and when restored to condition and drafted to works, abscond to repeat the process over again. It is such cases as these, the despair of the Relief Officer, which go to swell the mortality of the famine.

As the pressure of famine increased this circle of destitution grew wider, embracing not merely the usual recipients of private charity, but many who, givers in better times, now found themselves compelled to seek assistance. By the end of November the daily numbers on relief of all sorts had risen to 168,939 in 31 districts. At this stage nine districts had been formally recognised as famine-stricken, in 22 more test works were open or other precautionary measures of relief adopted. The workers now formed 66 per cent. of the total number relieved. Gratuitous relief had begun to assume larger proportions and was divided between dependants on works, poorhouse inmates, and home relief in the proportion, roughly, of 40, 40, and 20 per cent.

As December drew to its close the conditions existing in the previous month became intensified and developed. Home resources became more exhausted, field work more circumscribed, the circle of distress grew wider, and the numbers seeking relief continued to steadily increase. The poorhouse population was, in pursuance of the policy of Government, kept down by drafting the inmates to relief works as they became fit for labour or transferring them to the village lists where this measure was found suitable.

In some districts where the villagers, unaccustomed to relief measures, held off till the pressure of want became extreme, the condition of the people showed some signs of the privations they endured. This was confined generally to the lower castes and poorer classes. The ordinary diseases of the country, aggravated by the unusual cold and insufficient or unsuitable diet, began to show in a slightly enhanced death-rate in the districts which were the first to feel the pinch. But the mortality nowhere assumed large proportions, and the

general health and condition continued surprisingly good. The Inspector-General of Civil Hospitals noticed the condition of the people on the works at this time as an indication that the opening of this form of relief had not been unduly postponed. It was observed that where the newly-admitted labourers showed signs of privation, they soon gained strength and condition. The appearance of the children had not at this stage commenced to cause anxiety. Cases of emaciation were to be found in the poorhouse infirmaries, and here and there a wanderer, often from a foreign State or distant district, would arrive at the relief camp in a starved condition or be brought in by the police patrols in a dying state. Such cases, however, were rare.

It has been stated that in the earlier months a certain unsettled state of mind had been observed. It showed itself in a spirit of turbulence, in restlessness, and that inclination to wander which has been the traditional resource of a famine-stricken population. This had ceased now. The dispositions made to provide relief had convinced the people that the Government had undertaken their protection, and this conviction had inspired them with confidence. The assistance they had received in the shape of advances, while helping to this end, had enabled very many to sow their crops, to make wells for irrigating them, and so bound the cultivators to their homes. Henceforth the wanderers were stray casuals of the vagrant type or immigrants from Native States who, for some time, came in considerable numbers on our works. The popular movements were confined to those villagers who left their homes to seek employment on the nearest relief works. Many mendicants, who would not endure the restraint of poorhouse life, began to drift towards the western and northern districts where the good harvests gave them hope of finding charity still effective, and where they swelled the beggarmdom of the bazárs and taxed the patience as well as the resources of the charitable; but soon even this movement came to an end, and these mendicants settled down in the poorhouses. As the applicants for employment increased in number, the large public works on which they were recruited expanded and multiplied. A description of the staff and organization for carrying out these works will be found explained in detail later on. At times it was severely taxed to meet large and sudden demands made upon it. Precise instructions had been issued to all districts to prepare programmes of work, to complete the necessary plans for the selected projects, and to make arrangements for requisite staff and tools and plant. (The early order issued to the Jail Department to supply one million baskets for earth-carriers is an illustration of the magnitude of the transactions.) Famine is full of surprises, and the

policy was to make so far as possible timely provision to meet all contingencies. These preparations were pushed on everywhere and, it may be claimed, were found equal to the emergencies which arose. As an illustration of the difficulties which the Administration had to encounter, reference may again be made to South Allahabad, where towards the beginning of November distress unexpectedly assumed a very acute form, and a sudden rush of many thousand people to the relief works ensued. In a few days the gangs were organized and the works expanded for their reception, and settling down at once the hungry crowds became an effective body of controlled and organized labour, with no worse mishap than a small inefficient expenditure while the arrangements were getting into working order. This was at the outset when all was new and novel; but later on in the same district the relief workers and their dependants rose in one week from 33,000 to 83,000, the new recruits being absorbed on the existing works or other prearranged projects as fast as they presented themselves without any confusion or delay.

At this stage, it was deemed expedient to diverge from the principle of the Famine Code, which recommends that in the early stage of relief operations recourse should be widely had to small or village works and not to large works under the Public Works Department. In the Lieutenant-Governor's opinion large works under the control of trained Public Works Department officials were both more effective as tests and more susceptible of ready expansion to meet large and unforeseen demands. Later on it will be seen that the smaller class of village works became a more important feature in the relief system. In those districts where distress was less acute, and it was possible to exact a heavier task and desirable to impose a severer test, the system known as "Intermediate," which has been already alluded to and which will be described in detail hereafter, was adopted in order to secure these ends, and to prevent the relief works from attracting those who could subsist without them or could find employment elsewhere.

Relief works are necessarily open to all who are willing to submit to the prescribed tests. Village relief was administered with a more cautious liberality and did not expand so rapidly, although early in December discretion was given to Commissioners to commence distribution of this home relief wherever the clear necessity arose, without waiting for a formal declaration of the existence of famine. During December this form of relief was extended to nine more districts, raising the number to twelve. From that time forward it grew steadily in extent as distress deepened and as the Circle and Sub-Divisional Officers charged with the preparation of the lists realized the full meaning of the order of Government that "in districts declared to be distressed every

village should be treated with the view of accounting for each individual resident therein, and that no case which ought to be relieved should escape notice."

In the large cities measures had early in the season been taken by the local authorities to meet such cases. Very many of the respectable poor had been reduced to want or destitution by the pressure of prices and the failure of the private or domestic charity from which they usually obtained assistance. In numerous instances impoverished *parda-nashin* women, who are debarred by the custom of the country from appearing in public, had been accustomed to support themselves or eke out their resources by needle-work, embroidery, and similar occupations. The general pressure on the community had deprived them of this source of income, while their social position, age or sex prevented them from seeking relief in poorhouses or on works. The employment of many artisans, especially those engaged in the production of articles of luxury, had diminished or ceased. It became necessary to devise means for the support of all these distressed classes who presented numerous cases of a nature to excite pity and compassion. To this end private charity was locally organized, subscriptions were raised of a considerable amount from private persons and local bodies, and these were largely supplemented by Government grants. In Lucknow, which contains an unusually large number of impoverished or destitute persons of good family, the Government subvention amounted to Rs. 15,000 a month. In Benares and Allahabad the Government contributed Rs. 5,000 per mensem: and in Agra Rs. 2,500. Committees were formed, chiefly of native gentlemen under the presidency of their District Officers, and Sub-Committees appointed for the different quarters, consisting of those persons who, from their local knowledge, position, and influence, were best able to ensure the economical and honest distribution of the funds, and who could find out and relieve in a private manner, and with due consideration for their feelings, the many distressing cases of destitute people whose rank or pride led them to endure slow starvation rather than openly accept charity. In the cities and large towns ladies and gentlemen connected with various Christian Missions gave willing assistance. To those Committees the grateful acknowledgments of this Government are due for excellent services rendered in the discharge of their charitable undertakings. Later on this benevolent work was much helped by the subsidies received from the Indian Famine Charitable Relief Fund.

Prices had now ordinarily ceased to rise, but remained at a phenomenally high level and showed no signs of relaxing. Rain fell generally throughout the provinces in the Christmas week, and though it left some of the worst districts untouched and nowhere made any substantial addition to the area sown,

yet it was of great benefit to the growing crops and gave fresh confidence to the people. Still it did not affect prices. Imports went on briskly and large quantities of grain continued to find their way into the bad districts. In those tracts where distress prevailed the people had all along fully utilized the various wild products which could be used as food, and to this end, later on, the Government forests were thrown open for the gratuitous collection of edible fruit for human beings as well as fodder for cattle. Various roots, fruits, and edible grass seeds which the very poorest are accustomed to search out in their season, were this year collected by the unemployed members of families accustomed to better diet. The bramble bushes known as "ber" or "jharber" (*Zizyphus jujuba*) yielded an unusually large crop of its little plums, and the village children had this year to share them with their adult rivals. The young shoots of the gram vetch, always a favourite vegetable, were pulled to such an extent as to cause complaint that the outturn of the crop was seriously impaired. Aided by these adventitious resources the food supply showed no signs of exhaustion. The larger centres continued sufficiently, though perhaps not fully stocked. Here and there, in little outlying marts or village bazars, there were apprehensions that supplies would run out. But private trade continued everywhere to meet all demands upon it, and the Government pursued steadily the policy of non-interference which gave that trade scope and confidence. In the one or two cases where the resources of private trade seemed overtaxed, the grant of assistance by Government to grain-dealers in the shape of recoverable advances met the difficulty. Wherever a relief work was opened, the petty trader at once appeared with his baskets of grain and condiments sufficient to supply all customers. This automatic provision of supplies relieved Government and its officials of much embarrassment and left them free to attend to the work of relief. The scale of wages on relief varied in direct ratio to the price of staple grains, and it was occasionally observed that the provision-dealers, taking advantage of this, combined to raise prices artificially, persuading the relief workers that their wages would be raised in proportion. Such combinations were met by encouraging larger dealers from the towns to establish branch shops on the works, and competition kept prices down to the market level.

Private trade, however, it may be said, was found to require little encouragement and less control. It wanted only security to be efficient. With famine prices prevailing grain-dealers in isolated positions are exposed to danger of plunder by mobs. Measures were adopted to check any such tendency among relief workers and protect the valuable agency which purveyed for them. The instructions to officers in charge of relief works provided that any case of plunder by workers

should be dealt with not as robberies or dakaities (which no doubt they technically were), requiring a lengthy procedure, but as theft, which admitted of being summarily tried and punished in the presence of the whole body of labourers. These instructions also provided for the immediate recoupment of his losses to the grain-dealer from fines imposed on all the gangs concerned. After a few cases of plunder of grain shops on relief works had been dealt with in this way, the trouble completely ceased: and so universally orderly were the relief workers that, as has already been stated, it was found unnecessary to increase the police force of the Provinces by a single constable to preserve order among them or to guard the treasure chest. Order was preserved through the people themselves.

Such were the conditions of distress and of relief which prevailed at the close of 1896. A very rapid expansion of numbers characterized the last fortnight of the year. The figures for the end of November have been given above; the opening of the new year saw 496,879 in receipt of relief. The great bulk of these were workers and their dependants, representing over four-fifths of the whole. Less than one-tenth were relieved in poorhouses and fewer still at their own homes. The area of distress now included 12 districts officially recognised as famine-stricken. Beyond them were 24 more, in which distress of a varying degree prevailed, and which were classed as still under observation. In all of these districts relief measures were in force in the shape of test works or poorhouses or village relief, or all three together.

The effects of the rainfall of November have already been fully stated. Though opportune and highly beneficial, it was not by itself sufficient to secure the crops then in the ground or being sown. The rainfall of the remaining cold weather months would have been sufficient to ensure crops which had been put out under favourable conditions. But it was inadequate for the wants of a harvest sown in a season of such deficient moisture that even the sowings were largely dependent on artificial irrigation, and all crops which were unirrigated suffered accordingly.

The Meerut, Benares, and Gorakhpur divisions came off best, and in most of the Oudh districts there was fair average rain. In all these tracts the winter rain of 1896-97 would have proved quite adequate under ordinary conditions. Elsewhere it may broadly speaking be said that the December and January rains were sufficient to secure the irrigated crops. But a general failure of rain in February and March combined with the effects of a high and continually west wind proved disastrous to unirrigated fields. The failure was most severe over the large waterless tracts south and west of the Jumna, and fell heavily on all the dry and poor soil in all parts.

The beginning of the year 1897 witnessed a steady development of the adverse influences already at work and of the measures taken to counteract them. The home resources of the people continued to grow more exhausted as each week passed, and as they failed, the numbers dependent on State relief continuously increased. On all sides there were signs that the pressure of scarcity and high prices was growing more intense and showing itself in the condition of the people. They poured upon the relief works in fresh crowds daily, they filled the poorhouses, and they swelled the lists of those gratuitously relieved at their own homes. A few figures will illustrate the rapid growth of the numbers who were thrown on Government for their support.

January opened with 410,238 people, workers and their dependants, on relief works, while 86,641 were in receipt of gratuitous relief in poorhouses or at their own homes. Week by week the numbers rose by 100,000 or 150,000 or even more. The average daily increment may be placed at 18,000. By the end of January the total on relief works had reached over a million. During February the recruitment went on at the rate of over 14,000 daily. When the accounts were made up on the 27th February, the total number on relief works was found to be 1,381,337, while 315,385 persons were in receipt of gratuitous relief in poorhouses or at their homes: the total was thus 1,696,722. That day was the flood mark of the famine.

The constant increase in the number of dependants showed that whole families were turning to the relief works for their support. In the worst tracts many villages began to present a half-deserted appearance in spite of the large expansion of village relief which tied many to their homes.

The poorhouse population rose steadily as the exhaustion of private charity drove the wandering beggars of the provinces, the waifs and strays of the bazárs and highways to, all unwillingly, fall back on this form of relief. By the end of January, when the provincial total had reached nearly 60,000, this field became exhausted and thenceforth the numbers began to slowly decline. In pursuance of the policy of Government those inmates who became capable of labour were constantly drafted off to the relief works, and those unfit for labour who had any fixed home were sent to their villages and placed on the free lists there. Death, too, helped to deplete their numbers. They included many suffering from chronic maladies and many who were picked up in the last stage of emaciation by the Relief Officers and police patrols. The reluctance of the vagrant classes to accept a settled residence and a subsistence diet led many to refrain from entering the poorhouse till starvation had induced

disease. Persons of this class would often, when they recovered a little strength, evade the mild compulsion exercised to retain them, leave the poorhouse, and wander aimlessly seeking in vain to beg a living till brought back again in a worse condition than before.

Village relief expanded during this period with great rapidity. The circle system already described had become fully elaborated. Village by village every individual was brought under observation, and as the famine grew in intensity new cases came constantly to light. As the able-bodied were forced to seek the relief works many of those dependant on them were left without support. Among the better classes who would not accept charity publicly many pitiable cases were sought out by the assistance of their neighbours and relieved in an unobtrusive way. The number supported gratuitously at their own homes, which at the beginning of January was little over 40,000, had risen to 233,000 by the end of that month; this total including persons to whom relief was temporarily given until they should become strong enough to earn their livelihood on the relief works. During February the careful scrutiny by European officers of the work done by their native subordinates had the effect of reducing the numbers on some of the village lists; but on the whole the work was found to be well done. In only one district were any serious defects discovered. By the end of February there were over 263,000 on the lists. Experience appeared to indicate that during the season when relief works are practicable on a large scale, when the numbers in receipt of all forms of gratuitous relief exceeded one-third of the number of labourers in works, and when the numbers on village relief exceeded 3 per cent. of the population of the distressed tract, suspicion is aroused and the need for closer scrutiny suggested. This rough working rule, the product of long experience of famine administration, was found useful as a danger-signal counselling special watchfulness.

Taking all forms of relief together, the numbers dependent on Government, which were 351,093 at the end of December, had risen to 1,305,217 by the end of January and by the end of February amounted to 1,696,722.

Besides the increase of numbers the signs of the times appeared in the character of the people who sought relief. In the worst districts men and women of the cultivating or tenant classes began to come on the works. They held out as long as their resources lasted, and in order to economize their means they and their families did a much larger share of the field work than usual, and so avoided the employment of hired labour (thereby limiting the employment available for day labourers, already restricted by the shortness of the cultivated

area). But at last many had to give in, and come on the relief works. Generally, however, it may be said that the labouring and artizan classes furnished the great bulk of the relief workers and that the cultivating classes only furnished a contingent from their poorest members.

The general rain which fell in the middle of January, while of immense benefit to the growing crops, put an end for the time to artificial irrigation and cut off this source of employment for the labouring classes, bringing them in larger numbers on the State relief. During January the districts of Agra, Etāwah, Mirzapur, and Bara Banki were officially recognised as distressed. In February Azamgarh and Fatehpur were added to the black list.

By the end of February the distress which prevailed was occasionally reflected in the condition not only of individuals, but even classes, of the community. Those who from motives of pride or indolence refrained from seeking the relief works or the poorhouse till no other resource was left, the wandering mendicants and the respectable poor on whom the dearness of provisions pressed heavily—such people showed in their appearance signs of the privations they had endured. It was noticed that the new applicants for employment or relief were often in an emaciated condition and compared unfavourably with those who had been prompter in seeking State support. In the earlier stages of the famine people were deterred from seeking or accepting relief from motives which lost force as time went on. Caste reasons were potent, and instances were brought to notice where money doles had been refused or actually returned by villagers because the recipient had been threatened with expulsion from the brotherhood. Grotesque reports were current among the people unaccustomed to such widespread bounty and ever anxious to discover some hidden motive for it. Rumour had it that everyone who accepted relief was to be subjected to demoniacal influences; or sent across the sea to labour islands or to people new countries which the *Sarkār* had conquered; or made to apostatize; or marked down for future sacrifices to the deities who are supposed to watch over the stability of great railway bridges. Instances, too, were not wanting of the struggle between natural affection and the love of life. A starving girl refused to take relief unless an undertaking were given that when she was sent away to the strange land, her old father should be cared for while alive and decently buried when dead. As time passed these absurd beliefs and restrictions wore themselves out. The people became familiarized with the system of State relief and ceased to look for any sinister motive. In the later stages of the famine persons who had refused proffered assistance came forward of themselves to claim it. The public faith was

again tried when very large sums from the Indian Famine Charitable Relief Fund were distributed for purchase of seed grain and plough-cattle, and again fresh rumours were spread assigning strange motives for the charity. The Amīr of Kabul was coming to conquer India and the British Government was anxious to arouse a popular feeling in its own favour. A rich Bombay merchant with all his kith and kin had died of plague, and Government, to whom his property had come, had decided to spend it in charity. But this time the stories gained little credence, and did not prevent the whole village populations from flocking to share the bounty of the English-speaking public.

An increase in crime, chiefly of a petty nature, indicated the pressure on classes not usually criminal. Here and there a gang robbery or an incendiary fire showed that bolder spirits were abroad, and force had to be suppressed by force. The reports from border districts of the south and west began to show that the inhabitants of adjacent Native States had felt the pinch, and, leaving their houses, were crowding on the relief works or into the poorhouses of British districts. Rewah, Gwalior, and other States started works within their borders and for a time kept down the number of immigrants. But later in the hot weather the influx became so great that special measures had to be taken to return these foreigners to their own territories before the rains broke.

Early in 1897 the wet and cold, which was unusually severe, aggravated the sufferings of the people less able than in a year of plenty to withstand such adverse influences. Measures were taken to provide shelter and warm clothing for the most necessitous on the relief works; but fever, pneumonia, and bowel-complaints became prevalent, and the result appeared in a death-rate which, though nowhere startling, was in many districts sufficiently above normal to indicate the strength of the forces against which the people and the Government were striving. Though grain continued dear, yet subsidiary products, such as potatoes and carrots, began to come on the markets everywhere in large quantities towards the end of the month and made a valuable and cheap addition to the diet of the people. The effect of the regular support afforded by relief measures began to tell on the public health, and as warmer weather came after February the condition of the people began to steadily improve. In April the death-rate had fallen in the famine districts, and in May it was below normal for the provinces as a whole, though some of the most distressed districts showed a slight excess.

Prices during this period remained uniformly high, but there was nowhere any failure of food supply. Imports continued brisk and a great deal of Burma rice was introduced

into the Provinces. The total net imports, however, large as they were, would have gone but a short way towards feeding the entire Provinces. The local stocks still supplied the great bulk of the consumption, and there was a steady movement of grain towards the districts where scarcity was greatest and prices most stringent. This movement of trade will be considered more fully in the sequel; but it may be said that the market showed itself very sensitive: a favourable fall of rain would slightly cheapen grain for the moment, while the high west wind which blew for some days at the end of February materially raised prices throughout the Provinces.

The relief system in all its branches was now in thorough working order. As the demand for employment increased, the arrangements for the reception of labourers everywhere expanded. Fresh projects were matured and added to the existing programmes of relief works. Tools and plant were provided to replenish the existing stock and additional measures taken to provide sufficient supplies of copper coin and small silver to secure the punctual payment of wages. Private trade continued sufficient to provide food supplies everywhere, and it can scarcely be said that Government interference was ever necessary. In the distressed tracts every individual was brought under observation, and the village and city lists expanded to include all deserving cases. Poor-house accommodation was where necessary increased, and the internal economy of these institutions placed on a uniform and orderly footing; the inmates themselves being employed to maintain order and perform the necessary domestic services. All Civil Officers absent on leave were recalled to duty, and when this resource was exhausted the superior staff was recruited by twenty Military officers who were employed both on the control of large relief works and in the civil relief administration, and rendered valuable services in both branches. Large additions were made to the subordinate district staff and that under the control of the Public Works Department. The village Circle Officers were doubled and trebled where occasion required. The medical staff was increased by the deputation of six European officers to special famine duty and a large staff of Assistant Surgeons, Hospital Assistants, and Compounders and Vaccinators appointed to take charge of the medical arrangements on relief works and in poorhouses.

Thus the object was secured which the Local Government had placed before itself, namely to establish a complete and expansive organization for the relief of distress which should be ready in advance of the demand and be capable of meeting at the shortest notice any contingencies which could be foreseen.

It was now clear that relief operations would be protracted through the hot weather and rains. Timely steps were therefore taken to erect shelter-houses for the staff at convenient centres where no accommodation at present existed. These temporary structures proved of great value later in the year, when camping in tents became all but intolerable.

CHAPTER VII.

The "rabi" or spring harvest of 1897 : its extent and quality.

The "Zaid" or Miscellaneous Crops.

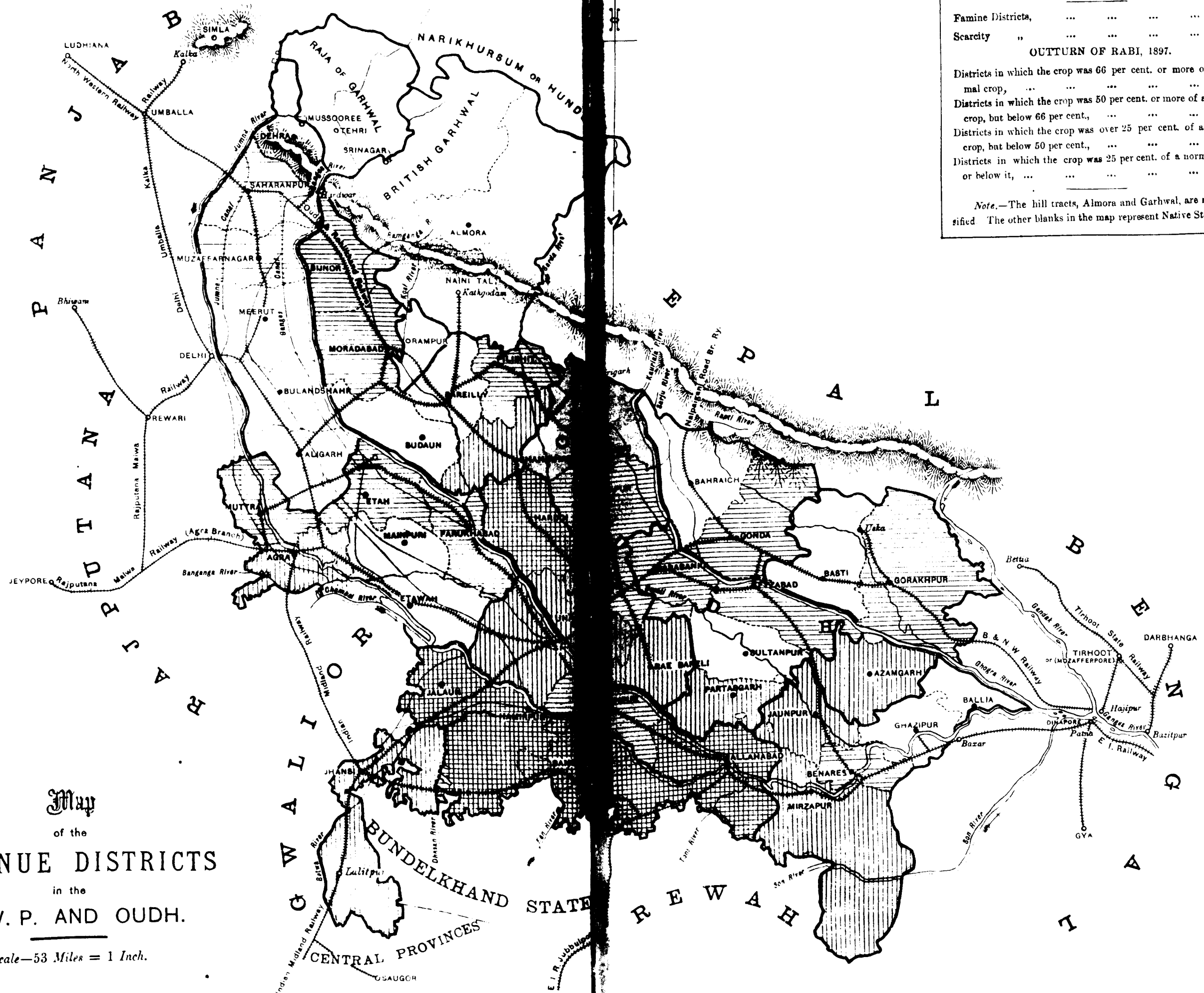
It is now time to notice the character of the spring harvest which was gathered in March and April last, and to glance at the subsidiary or intermediate crops which intervened before the rains set in last June.

The climatic conditions under which the spring crop was sown and matured have been already fully stated. The average area of spring crops in the United Provinces is 20,413,755 acres, of which 31·8 per cent. is irrigated and 69·2 per cent. unirrigated. This year the total area fell to 14,786,410, a loss of 27½ per cent. But almost 53 per cent. of this area was irrigated, and in fact the actual area under irrigation rose by 1,305,075 acres, or 20 per cent. The entire loss was on the unirrigated lands—a circumstance which materially affects the outturn. The normal area irrigated from canals for this harvest is 1,100,000 acres. It rose this year to 1,844,000, an increase of 67 per cent. In addition 661,075 acres were irrigated from temporary wells and tanks, and represent the extraordinary efforts made by the people themselves to secure their crops. It has already been shown that this large addition to the protected area is chiefly due to the encouragement and pecuniary assistance, afforded by the Government to the people in constructing temporary wells. Unfortunately, the protection afforded by this latter kind of irrigation was least in those districts which wanted it most, and where the failure in preceding harvests had been greatest. In these districts the water level is so low and the sub-soil so rocky that temporary wells could not be constructed. Ordinarily the food crops constitute 93·4 per cent. of the whole spring harvest. This year, though the sowings covered 72·4 per cent. of the normal area, the harvest yield did not exceed 60 per cent. of a normal outturn. The Meerut division came off best. Any slight decrease in the area sown was more than recovered in the enormous addition to its irrigation, which was nearly doubled. In the Agra division, as a whole, the crops were over 80 per cent. of the normal extent, the Agra district being the worst off, with only 62 per cent. In Rohilkhand the weak districts were Sháhjahánpur (61·18) and Pilibhít (64·20). The other districts were able to sow a fairly full area. In the Allahabad division the fluctuations are very great. The proportions per cent. to the normal area of each district stand thus :—

Cawnpore	... 85·62	Allahabad	... 44·36
Fatehpur	... 66·11	Jhánsi	... 45·70
Bánda	... 27·36	Jalaun	... 29·79
Hamirpur	... 49·07		

Map
of the
REVENUE DISTRICTS
in the
N.-W. P. AND OUDH.

Scale—53 Miles = 1 Inch.



REFERENCES.

Divisional Boundary, ...	...
District Boundary, ...	...
Head-quarters of Districts, ...	...
Rivers, ...	...
Canals, ...	...
Railway line, ...	...
Famine Districts, ...	...
Scarcity, ...	...

OUTTURN OF RABI, 1897.

Districts in which the crop was 66 per cent. or more of a normal crop, ...	...
Districts in which the crop was 50 per cent. or more of a normal crop, but below 66 per cent., ...	...
Districts in which the crop was over 25 per cent. of a normal crop, but below 50 per cent., ...	...
Districts in which the crop was 25 per cent. of a normal crop or below it, ...	...

Note.—The hill tracts, Almora and Garhwal, are not classified. The other blanks in the map represent Native States.

In this division, therefore, the sowings for the spring harvest were more defective than elsewhere, and the deficiency was most marked in the country lying south of the Jumna, where the distress was already most felt, and the need for a favourable season was sorest. In Jalaun the Betwa Canal added substantially to the small irrigated area. But in the other Bundelkhand districts and South Allahabad the natural difficulty of artificial irrigation, aggravated by the drought, prevented that expansion of wet cultivation which ordinarily characterizes the Doab districts. In the four Bundelkhand districts 78 per cent. of the total cultivation remained dependent on the natural rainfall for its crops. Later in the year this want of irrigation told sadly on the crops, which were sown in the hope that the favourable winter rain would bring them to maturity.

In the Benares Division a fairly good area was secured, Mirzapur being the worst district with 68·7 per cent. of the normal extent. In the Gorakhpur division the district of Gorakhpur failed to get more than 65·7 per cent. of its normal area sown. The other districts were better off.

In Oudh the spring crops were sown in rather less than three-fourths of the usual area. The Fyzabad division came off better than Lucknow, which only sowed an average of 68 per cent. The only serious deficiency was in the unfortunate district of Hardoi, which added to its previous troubles by getting little more than half the usual extent of its spring crops down: nor was the area sown even as well secured as usual, for the facilities for irrigation were impaired by the drought, and only 37 per cent. of the usual area was watered. Indeed, throughout Oudh generally, which is destitute of canals, the irrigated area fell off in marked contrast with the rise which occurred throughout the greater part of the North-Western Provinces. In the Fyzabad division the deficiency was only $7\frac{1}{2}$ per cent.; in Lucknow it exceeded 17 per cent. The Kheri and Partabgarh districts alone showed any substantial increase.

The relative capacity of the two provinces—the North-Western Provinces and Oudh—to stand a drought is well illustrated by the experience of the present year. Usually Oudh has by 6 per cent. a larger proportion than the North-Western Provinces of its spring crops under irrigation. This season the conditions were reversed. While in the North-Western Provinces 56 per cent. of the crops were artificially watered, in Oudh only 43 per cent. were thus protected. The explanation lies in the extraordinary effectiveness of the Government canals in the North-Western Provinces during this drought.

In both Provinces alike the distress has been concentrated in those tracts where irrigation is most deficient.

Having thus stated the extent of the sowings, we have now to consider the outturn of the spring harvest. With favourable autumn rains the spring crops are to a surprising extent independent of winter rains. But in this year the complete failure of the autumn rains made the further rainfall a matter of much importance. In particular the late sowings effected at the end of November and beginning of December required the most favourable climatic conditions to yield successful results. The actual conditions fell short of the requirements. The character of the winter rains and their effect on the harvest in different divisions and districts were generally satisfactory, and things went well until the middle of February. The widespread rain in the Christmas week, and again at the end of January, came in time to save the staple cereals, and the crops at that time promised an average outturn in nearly all classes. But towards the end of February a high west wind set in and blew through a part of March.

Where the crops had been sown in time or had been irrigated it did little or no harm. But over the large area of late sowings and unirrigated lands it caused great injury. The backward crops on unirrigated land were over considerable areas parched up altogether and produced nothing. Where conditions were more favourable the plants then in ear were dried and the grain shrunk and lightened. A copious fall in February and March would have averted or mitigated the consequences of this untimely wind; but the rainfall of both months was meagre and below normal, and the outturn in all unirrigated lands was seriously impaired. Gram, usually the first crop sown, had to wait too long for rain, and except where irrigated gave a very poor yield. The considerable area of miscellaneous crops sown after the November and Christmas rains was largely unproductive.

Yet notwithstanding these drawbacks and losses, the spring harvest yielded an outturn very considerable in quantity and of extreme value in replenishing the depleted food supply of the Provinces. Looking at the extremely unfavourable conditions which prevailed at the seed time, and when the grain was ripening, the results proved as good as could have been expected. In the extensive irrigated area the crops were decidedly good. Wheat, which was comparatively largely sown, surpassed the highest recorded yield per acre. Barley turned out well, exceptionally well where irrigated, and was long the cheapest staple in the market. The pulses were good, particularly the Cajan pea (*arhar*), which in some parts of the eastern districts is said to have flowered two or even three times and borne two or even three crops. Sugarcane was unequal. But though in some districts poor and below average, it was nowhere a decided failure, and in some parts it was distinctly good.

On the whole it may be said of the spring harvest that, notwithstanding the deficiency in area and the failure on unirrigated lands, the outturn for the Province generally was above one-half, and may be fairly placed at about 60 per cent. of a full average yield. In normal years the produce of the *rabi* or spring food grains in the North-Western Provinces and Oudh is estimated at 7,468,700 tons. In 1897 the outturn may be estimated at 4,431,700 tons. There was thus a deficiency of 3,037,000 tons, valued at normal prices at eighteen crores of rupees (equal to twelve millions sterling at current rates of exchange). Thus the failure in the autumn and spring harvests of food grains alone cost the Provinces no less than 34½ crores of rupees (equivalent to £23,000,000 sterling).

This calculation or quantification of loss is in substantial accordance with the estimates framed before the end of 1896. Unfortunately it is necessary to repeat that the area of greatest deficiency was the area of greatest need. In Bundelkhand and the south of Allahabad the unirrigated lands yielded little, in many cases nothing at all, and this loss was all the more severely felt from the scantiness of the protected area. In Hardoi a larger proportion of cultivation was irrigated than in Bundelkhand; but the failure of crops on the unprotected lands was almost as extensive. In the uplands of Mirzapur much the same conditions prevailed. Generally speaking, the spring harvest failed most where the autumn harvest had been worst, and chiefly for the same reason. Maps which accompany this narrative show at a glance the extent and distribution of the failure of both harvests.

Besides the ordinary field crops a certain area is always devoted to garden crops. In the present year this area was rather larger than usual. To some extent this was due to the action of Government in encouraging such cultivation and assisting it by collecting and distributing seed. As already stated the imported carrot seed generally arrived too late, and it is still doubtful whether it is suited to the conditions of village culture or to the climate of these Provinces. But the country carrot seed and much of the potato seed, which were distributed in considerable quantities, proved successful. The villagers were quick to take up the idea and sowed considerable quantities of these and other fast-growing vegetables, which made a valuable addition to the food supply in the later months of the cold weather, when the spring cereals had not yet matured. They were largely used, and they influenced the Famine Code rations on relief works, which are primarily framed on the basis of the more expensive cereals and pulses.

Besides garden cultivation there are certain extra products which contribute regularly to the food of the people at certain seasons. Water-nuts, (*singhara*) proved a short crop, as might be expected in a year of drought. But the *mahua* (*Bassia latifolia*) yielded an excellent outturn, and it

was particularly good in the Bundelkhand districts and Fatehpur, where it is an important accessory, and gave valuable and timely aid, besides affording some employment to the weaker classes of workers in collecting it. Mangoes, on the other hand, proved a general failure, except in some parts of the Meerut division.

The extra hot weather (*zaid*) crops were largely sown and generally turned out well. The various sorts of pumpkin and melon gave a large yield, which helped out the food supply very usefully while it lasted. In the Hardoi district advances were offered to cultivators to grow *sáwan* (or summer rice). But throughout the greater part of the district the people are unaccustomed to this cultivation, and could not be persuaded to undertake it. In other districts, such as Bara Banki, where the tenantry were less apathetic, an unusually large area was sown with the best results. Generally speaking, the people exerted themselves manfully to obtain as large an outturn as possible of these intermediate crops, which mature during the hot weather. Where necessary, they were assisted by Government advances. The acreage under these supplementary or intermediate crops turned out 29 per cent. in excess of the normal area, and the produce was uniformly good. Besides the addition to the food supply, these crops, which require constant irrigation and tending, were useful in affording employment to a considerable number of labourers during the slack season.

CHAPTER VIII.

The hot weather and rains. Termination of the famine.

So far this narrative has been confined to the continuous development of the causes and influences which brought about the scarcity and to the establishment and expansion of the relief measures which these influences necessitated. The month of March which ushers in the Spring marks a new phase in the progress of events. The spring harvest after many vicissitudes began to reach maturity. With it the demand for field labour reopened: the food supply was replenished; and prices began to relax. In the eastern districts, where the crops ripen earliest, these effects were first apparent. Throughout the Provinces, generally, custom fixes the *Holi* festival as the date which marks the coming of the Spring time and the commencement of the spring harvest. This Oriental May-day is celebrated by the whole Hindu community as the occasion for friendly visits and mutual rejoicings. It fell this year on the 18th March, a date which might therefore be expected to see a very marked decrease in the numbers on relief works. The expectation was not disappointed. Between the 27th February and the 20th March over half a million of persons had left the works. The exodus continued uninterruptedly as the demand for harvest labour increased till the 10th April, when nearly 700,000 relief labourers had sought employment elsewhere. Even the poorhouses felt the influence, and many inmates departed to glean or beg a share in the new harvest. It was found possible also to make some temporary reduction in the numbers in receipt of outdoor relief. Altogether the total of persons supported at the expense of the State fell between 27th February and 10th April from 1,696,722 to under one million. The reduction was not spread equally over all districts. Where distress was most acute the fall was slightest: people were slow to go and quick to return. For instance in the Cawnpore district, where the pinch was not very severe and the spring crops turned out well, the number fell from 139,000 to 13,000. In Allahabad, where opposite conditions prevailed, between the same dates the number fell only from 214,000 to 192,000. In those districts, of which Bara Banki in Oudh may be quoted as an example, where the harvest was ample in quantity and quality, the famine practically ceased when the spring crops were garnered, though scarcity continued owing to the sustained high level of prices.

This change of condition necessitated some change in the policy of the relief administration. In the tracts, already suffering most severely, where a scanty harvest brought little

real relief, there was nothing to be done but continue the measures already in force, keeping up works on the Famine Code system and regulating wages by the sliding scale. The entire destitution of the people forbade any contraction of State relief till material improvement might be manifest.

But elsewhere the opportunity was seized to diminish and modify relief measures as the resources of the people improved. It was a matter of the first importance that labour required to get in the harvest should not be diverted from that object, and that no one should be retained on relief works who could find subsistence or employment elsewhere. To secure this end, measures were adopted to lower wages and make the labour test more stringent and thus clear the works of all whom circumstances did not compel to work for even the subsistence wage which the Famine Code provides. The scale of wages hitherto in force displayed some signs of now becoming unnecessarily liberal. Prices of grain showed a tendency to fall as the spring crops became assured, while the large supply of vegetables and other subsidiary articles of diet lowered the cost of subsistence. Accordingly a uniform scale of wages based on a market rate of 12 seers (24lb) of grain per rupee was introduced, tentatively at first, and extended in March to all districts where distress was not acute. Besides this a change of system became necessary in order to enforce a full task by applying the principle of piecework with payment by results which had been found suitable by experiment in selected localities. This system was known as "Intermediate" because it stood halfway between the ordinary contract system of public works and the system of task work under direct management prescribed by the Famine Code. The circumstances under which the Intermediate system was introduced and the results of the measure have already been referred to, and will be more fully shown in the sequel.

As the warm weather approached another serious danger threatened in parts of the country south of the Jumna. The water-supply showed signs of failing. The smaller streams dried up and wells in rocky soil began to run low. Besides the obvious inconvenience and danger of this failure it brought about conditions favourable to outbreaks of cholera. And cholera was not long in making its appearance. It first broke out with considerable violence in South Allahabad, where about 96,000 labourers had been concentrated for some time. The limited area of country in which suitable work projects and water-supply were available rendered it necessary to modify the entire arrangements then in force. In fact these conditions came into operation which have been referred to in Chapter V above as calling for the establishment of small relief works. The whole of South Allahabad was accordingly mapped out into circles, each of about 6 to 7 miles square, and a large number of minor works, each affording

accommodation for about 500 labourers, were opened, 6 to 10 such projects being located in each circle. The workpeople on the large works were broken up into bodies of 5,000 and marched to their allotted circles. Over these a further subdivision into bodies of 500 men was effected: and each such body told off to the nearest minor work. When all had been in this way dispersed, the individual labourers were then shifted, so that each was brought to a work in the neighbourhood of his own village, and had the advantage of being able to return home every evening after his day's task. There were no large standing camps to serve as a nidus for disease and as the people were, first of all, set to work to clean out and deepen their village wells, a sufficient supply of good water—the only sure preventive of cholera—was secured. The whole of this reorganization, affecting 96,000 people, was completed for the infected section in a fortnight. It had been first resolved to effect it in a week; but an expected fall in the temperature checked the cholera: and so permitted of more leisurely action. This celerity was only practicable because the people were well in hand, and because the danger had been foreseen and a large number of village projects selected beforehand to admit of rapid dispersion when the occasion arose. The scheme proved effective and very popular. It had the drawback of attracting larger numbers than would have sought the works under less favourable conditions, but very liberal measures of relief were required in this tract, where distress was very acute and widespread and the resources of the people abnormally depleted. The virulent epidemic cholera disappeared with the dispersion of the large bodies, and after that time recurred only in a mild and sporadic form. The people improved rapidly in physical condition, and when the rains commenced were able to begin field work with full vigour.

Precautionary arrangements were made in the other districts to follow the South Allahabad plan should a similar necessity arise. But though cholera appeared at intervals in nearly all the distressed districts, it was found possible by careful attention to sanitary arrangements to suppress each outbreak by segregating and dividing the labourers on the infected work only. This constant warfare against cholera was an anxious and trying duty, and some of the staff, both European and native, died in discharging it.

Of the three causes which, as pointed out above, co-operated to reduce the numbers on relief works in March, two—the commencement of the spring harvest and the occurrence of the Holi festival—were temporary in their effect, and though of universal application, varied much in force according to the deficiency of the harvest and the pressure of distress. In Bundelkhand, South Allahabad, and a few other localities

the scanty crops afforded very little and very brief employment for day-labourers. They attracted away from the works little more than the poorer cultivators and their families who had attended them. The pressure of want left few in a position for merry-making. The rough popular songs which are improvised and sung at the Holi festival took colour from the conditions of the year. Some that have been preserved, instead of the usual ribald license of the season, tell of famine and of high prices and of the relief that was extended to all classes.

The third cause was the measures taken by Government in the way of lowering the scale of wages, stiffening the task, and extending the Intermediate system. These measures were not applied, or were applied in a modified form, to the acutely distressed tracts. It is natural, therefore, to find that in such parts the falling off in numbers was less marked and less sustained. In the Hamirpur district indeed the numbers never fell off at all, but continued to steadily expand through March and April.

By the 10th of April the 1,300,000 people who swarmed in the works at the close of February had fallen to under 700,000. Moreover, they were confined to the true famine districts. In the merely scarcity districts very few remained on the works. The total number in receipt of relief in all forms on the 10th April was almost exactly one million. As the harvest work became exhausted the people began steadily to flow back to the works. By the 1st May the 700,000 on works had become 935,000; the total had grown by close on a quarter of a million. The increase was confined to the famine tracts, though here and there in the region of scarcity the demand for employment on relief works began to reassert itself. The process continued steadily through May in spite of the inclemency of the weather. The hot season had now set in and pressed heavily both on the labourers and the staff who had to carry on work through the burning heat and the fierce hot winds that often blow till far into the night. The hours of labour were adapted to the season, and shelter from the sun and wind was provided along the works where the people could seek refuge in the hours of midday when work was suspended. The strain was severe on the staff, European and native, compelled to be out at all times through this trying weather. It was observed that Europeans stood it better than the natives, many of whom broke down. The labouring population, accustomed to such conditions of life, maintained a high standard of health. In spite of occasional outbreaks of sporadic cholera the death-rate for the Provinces in both May and June was below normal. Even in the famine districts the public health was exceptionally good.

At the end of April the Lieutenant-Governor visited the districts of the Meerut Division and satisfied himself that

no relief measures were required in any of them. The very limited operations which had been carried on for some months in a small hill tract of the Dehra Dún district were closed early in April, when the spring crop had matured.

In the commencement of May conferences with the local officers were held afresh by the Lieutenant-Governor at the chief centres of distress. The dispositions for the hot weather were examined, the necessary arrangements made to strengthen the staff for the trying period then before them, and a forecast was framed of the wants and claims of each district till the tension should relax with the advent of the rains. Instructions were given to avoid the commencement of projects that could not be finished in time and, as the rains approached, to concentrate labour on the works which it was desirable to complete before the season rendered earth-work impracticable. Large suspensions of the land revenue instalment, then due, were sanctioned according to the necessities of each locality after examining the proposals of the local officers and the Board of Revenue. Thus equipped and provided, the Provinces entered on the penultimate stage of the struggle.

During May the numbers steadily grew, and at the close of the month they again exceeded a million-and-a-half. Agricultural work was in abeyance, and the people dependent on daily labour for their support continued to return till the second high water mark on relief works was reached on the 29th May, when the daily attendance on work was returned at 1,157,000. Of these only 22,000 were employed in the scarcity districts where the spring harvest had brought a degree of relief denied to the hardly-pressed famine tracts.

Gratuitous relief had slightly expanded as some of the feeble people, unable to stand the strains of work in the hot season, broke down and were brought on the free lists of their villages.

The numbers on relief works during May were swollen by the advent of many immigrants from adjacent Native States. Earlier in the season the presence of such foreigners on the relief works of several districts had been noticed. The numbers were not inconsiderable; yet, so long as this accession was confined to casual applicants or wanderers in search of employment or relief, no question had been raised. Relief works organized on the principles adopted in British districts had been opened in most of the principal States concerned, and the Political Officers of those States associated with the Darbár officials in their control. There was a natural tendency for persons near the border to seek the relief centres nearest to their homes, and in this way a certain number of British subjects may have also drifted into Native States. Following the principles laid down by the Famine

Commission in its report (paragraph 189), no effort at that time was made by this Government to discriminate these people or return them to the States to which they belonged. But about May it was observed that large bodies of villagers with their families were flocking to British relief works from States adjoining the Allahabad and Agra Divisions, and the numbers in some instances were so great as to seriously burden the organization on those works and to entail a heavy expense on the provincial finances. A census showed about 15,000 immigrants from Rewah on the works in South Allahabad and over 8,000 (chiefly from Gwalior) in the Jalaun district. Considerable numbers were also reported in Jhānsi, Mirzapur and Etāwah. It was ascertained that relief works under the general control of British officers were still maintained in their own territories for the reception of the inhabitants of these States concerned. The reasons assigned for the immigration were that more continuous employment, better arrangements for work, for payment of wages to labourers and their dependants and for food supply, rendered the British relief works more attractive. In one instance a large body of relief labourers marched *en masse* from a Native State into the Jhānsi district because they had ascertained that payments there were made in standard (British) coin and not in the depreciated currency employed in their own territory.

Communications were opened with the Political Officers of the States concerned, who at once organized measures to recall the immigrants; and as a preliminary measure it was decided in concert with them to stop the recruitment of all bodies of well-nourished workpeople from across the border while providing for the relief of stray wanderers and all persons in immediate need of assistance. By June all the organized parties of foreign labourers and their families had been received over by agents deputed for the purpose and returned to their own territories where suitable arrangements had been made for their employment. Shortly after this the advent of the rains and the measures adopted to meet the change of season led those who had remained to return to their homes.

The total number on relief of all forms on the 29th May was 1,543,888. From the beginning of June the attendance on works began to decrease. For the first fortnight the fall was slight. Here and there one or two members of a family would return home to look after the repairs of their houses as customary at this season and make their other little arrangements to prepare for the burst of the monsoon. But the bulk of the labourers awaited the opening of the rains. The 12th June found 1,096,000 still on the works.

Some local thunderstorms had brought showers in May; but the first twelve days of June were practically rainless. With the 13th June, however, commenced a series of

showers in nearly every district, light at first, but persisting and increasing in a way which soon left no doubt that the welcome monsoon had stolen in. The long-suffering districts of Bundelkhand and Allahabad were the first to receive a substantial fall on the 18th and 19th, which in Banda displayed a true monsoon character.

The results on the relief workers were quick to appear and it was evident that a great exodus from the relief works to the fields was about to set in. The crisis synchronized with the Jubilee of Her Majesty the Queen-Empress; and advantage was taken of the coincidence to send the people to their homes with a memento of that auspicious event. Accordingly the 21st and 22nd June were declared holidays, and on Saturday, the 19th June, each individual of the 963,000 people on the relief works was paid three days wages in advance, in honour of the Jubilee of the great Mahārāni under whose gracious auspices the abundant relief and charity of the preceding months had been dispensed to them. It would be too much to say that every one of those myriads who on the 19th June went to their long-deserted homes, rejoicing, realized what it all meant; but many understood it: while the rest in their ignorant minds did in some vague way associate this, to them, incomprehensible generosity of the *Sarkār* with the Queen's name. As at the same time the amnesty for prisoners, especially for female prisoners and for those who offended under pressure of want, restored to their homes some 9,000 people, it may truly be said that a bright ray of comfort was shed on many a home.

The effects of the break of the monsoon, assisted by the measures now described, were immediate and significant. Within one week the numbers on relief works fell by over half a million: on the 19th June the numbers stood at 963,000; on the 26th June they had fallen to 449,000 and on the 3rd of July to 415,000. Here, as in March, the natural results of the reopening of field work were assisted by the measures of Government. The paramount importance of securing a large area of well-tilled crops made it necessary to clear the relief works of every one who could find employment in the fields. To this end it was resolved to extend to all districts the Intermediate system which in the less distressed or "scarcity districts" had proved so useful in emptying the works at an earlier stage; to harden the scale of wages; and to introduce the less attractive forms of labour, such as quarrying and breaking road metal which had been held in reserve for the rains.

The relief measures which had been carried on patiently and steadily for the past eight months, and in Bundelkhand for over a year, since famine had first declared itself, now bore golden fruit. The peasantry had been maintained in

health and strength, and were ready, with almost unimpaired vigour and in undiminished numbers, to commence the tillage of the new crops whereon their fate depended. The resources of the Charitable Fund had been largely reserved to meet this crisis. By the splendid liberality of the English-speaking public over thirty lakhs of rupees were now distributed among the villagers to purchase seed grain and replace the plough-cattle which they had lost. This munificent charity was liberally supplemented by advances of State funds to small proprietors and cultivators of the better class. There were some apprehensions that seed grain might not be forthcoming in the parts where famine had been most prolonged. But seeing the people generally possessed of the means to pay for it, the traders quickly solved the problem of supply. Assisted and encouraged in these ways, the agricultural community turned with cheerfulness and resolution to the congenial task before them.

Had the monsoon progressed favourably, there can be little doubt that the great body of relief labourers would have melted away, and that by the middle of July only an insignificant number of the homeless and landless classes would have been found clinging to the works which had supported them so long. But the vicissitudes of the famine were not yet at an end. In the third week of June light but general showers fell for a few days in all districts. Up to this the rain had generally been sufficient for ploughing; but except in a few favoured localities not enough to generally admit sowing those staples like rice, which require abundant moisture.

But in the last week of June the rains ceased abruptly over the entire Provinces except in a few of the eastern districts, which continued for a few days to receive a fairly adequate supply. With the exception of a few scattered showers of no importance, this break continued up to the 12th July. The period was one of extreme anxiety, a dry west wind set in, and it appeared for a time that the hot weather conditions were about to reassert themselves. As the days passed without rain or even clouds, reports began to come in from nearly all districts that agricultural operations were suspended, that the seedling crops were drying up, or that seed had failed to germinate. Artificial irrigation became necessary in upland places. At this crisis many of the tanks which had been excavated as relief works during the past seasons and had partly filled with the first showers yielded their first fruits by affording water for the thirsty fields around them. Prices, which showed a tendency to fall when the June rains appeared favourable, began to rise again. A feeling of apprehension and disquietude commenced to spread among the people, who feared lest the failure of the previous year might be repeated in this monsoon. They began to return to the abandoned relief works and re-enter the poor-houses. By the 10th July the number on works had risen to

536,000, and the total number of persons in receipt of relief of all forms was over 1,000,000. It became necessary to arrest the new dispositions that had been ordered to meet the change of season and to revert to the Code system of works in districts where the more stringent Intermediate system had recently been introduced. The Meerut Division, protected by its canals, and the Benares Division, which received the remnants of a current that brought copious rain to the neighbouring province of Bengal, alone maintained their position of safety. Elsewhere the tension had become extreme, and there were even gloomy estimates of mischief done which could not be retrieved. The situation had become so critical that the Lieutenant-Governor undertook another tour of the Provinces, to concert measures to meet this fresh emergency. He had scarcely started when, on the 12th July, the long-expected rain descended over practically the entire country.

Ploughing and sowing were resumed with great activity, and it was soon ascertained that but little substantial harm had been done. A few more days of drought would have proved ruinous; but the rain revived the crops, and in the few fields where seeds or seedlings had perished they were soon replaced by fresh sowings. It may in anticipation be here said that the area sown was 3·8 per cent. above the normal; and that practically the crops have been uniformly excellent.

Prices began to fall, and the 31st July saw a distinct drop in the rates for coarser grains, though the finer staples remained as dear as before.

During the tour which the Lieutenant-Governor made in July the whole relief arrangements were again reconsidered, at the chief centres of distress, in conference with the local officers. Such readjustments as the circumstances of time and place called for were sanctioned: and a plan laid down for winding up the relief system when the early autumn crops should have ripened. To this plan, further reference will be presently made: here it may be conveniently mentioned that the rearrangement of relief works which had been arrested in some localities when the break of the rains set in was again undertaken, and before the end of July the Code system of works had ceased in all districts. Some difficulty was experienced in devising works suitable for unskilled labour which could be carried on during the rainy season. Tank excavation and indeed earthwork generally became impossible, and consequently all the great relief works had to be closed. In the country south of the Jumna, where stone abounds, quarries were opened and numbers of labourers were employed in quarrying and breaking road metal. In other districts where the nodules of impure limestone known as "kankar" are largely used for road metal the work of digging, cleaning, and stacking them was started. Gangs were also employed in finishing

off unmetalled road embankments which had been constructed during the previous months and in repairing embankments which had settled when soaked with rain. In a few localities relief labour was utilized in levelling and clearing the sites of old forts or habitations either for sanitary purposes or to render them culturable and to obtain the bricks which have a marketable value. In these ways sufficient employment was found for those who still required it. But the demand for employment soon ceased. The labouring population flocked back to the fields where they found more congenial and profitable employment than that which the relief works offered. By the end of July the number of persons supported on relief works had fallen to under 100,000, and the bulk of them were confined to five or six districts. This number sank steadily through August as field work expanded; early in September it was only about 15,000, and on the 15th September the last of the relief works was closed.

The further progress of the rains may be briefly told. They continued in an unusually favourable manner. There was sufficient open weather in late July and early August to admit the sowing of all crops and sufficient showers to bring them on. Later on the heavy rain was favourable to the transplataion and growth of the late rice—a very important crop. In some of the Bundelkhand tracts this heavy and continuous rain checked weeding, and thereby curtailed the employment of agricultural labour—a difficulty which involved the extension of gratuitous relief for the time: there were some complaints, as might be expected, of injury to crops in lowlying lands, and floods did some mischief in river valleys. But taken as a whole the Provinces could not have wished for more favourable conditions than prevailed. At the end of August and beginning of September, when fine weather was needed for the ripening and harvesting of the early staples, the continuous rain was succeeded by sunny and showery weather which brought into the threshing-floors a harvest that left little to be desired.

The penultimate stage of the Famine had been reached by the closure of the great relief works. But the measure deprived of their support a large number of persons who had been maintained on the works as dependants. Besides these a certain proportion of inefficient labourers who, driven from the works by the rain, returned home with their families were unable for a time to get work in the fields, and the high prices which still prevailed left the earners little margin for the support of others. For these people a period of severe pressure ensued until the expansion of agricultural employment and the maturity of the early crops brought relaxation. An increase of the gratuitous village relief at this period was therefore necessary: it had been anticipated, and measures to meet the temporary strain were in readiness.

This strain on the gratuitous relief system, which began in June with the advent of the monsoon, continued to increase till, on the 24th July, it reached its maximum with 424,000 persons on outdoor relief and 45,000 inmates in poorhouses. After that date the numbers began to fall off in the less distressed districts as prospects of a good harvest became brighter: and employment in weeding and other agricultural occupations became available. But in the true famine regions, where the largest numbers were in receipt of relief, the pressure was slower to relax and the fall in numbers was more gradual. The end of August still saw 400,000 people on outdoor relief and 34,000 people in poorhouses.

The time had now come to put in force the plan for gradually winding up relief measures, which, as stated above, had been predetermined at the conferences of July. This plan will be best understood by quoting in this place the Government orders in which it was prescribed for general adoption. The orders, which bear date 4th of August, are as follow:—

“The Lieutenant-Governor and Chief Commissioner has now visited the chief centres of distress in the Provinces, and has concerted with the Divisional and District Officers the measures which have been rendered necessary by the advent of the rains, and the policy which should be pursued, and the further measures which should be adopted, to finally wind up relief operations, provided the rains continue favourable for the remainder of the season. The results of these deliberations are embodied in the notes of conferences which accompany this letter.

“In many districts relief works have been already closed, and in all they have been substantially reduced. The remaining works have been concentrated at as small a number of centres as possible, and works, such as stone and *kankar* quarrying which can be carried on during the rains, have been, so far as possible, substituted for the various forms of earthwork hitherto in operation. The Famine Code system of works has been everywhere abandoned, and the Intermediate system with full tasks introduced and the rates fixed at either the 12-seer or the 14-seer scale. Field work of various sorts has opened up with the progress of the rains, and in nearly every locality affords occupation for all the labour seeking employment. It is anticipated that all the works will be gradually deserted, and that few will remain open by the end of August. The early *kharif* crops may be expected to be ripe and coming into consumption by the 15th September, and the last of these Department of Public Works relief works must be finally closed on that date, and the labourers, if any remain, left to find employment in the usual pursuits which will then be open to them.

“Poorhouses will remain open for the present for the reception of wanderers and of persons unable to labour. As already directed, poorhouse inmates who are able to work should be required to execute a suitable task, and work should be devised and provided for this purpose.

“From the end of August or beginning of September steps should be taken to draft back from the poorhouses to their homes, and bring on the have bedists, all persons unable to support themselves who have any fix with thence or whose village of origin can be discovered, excepting only, hospital patients who from illness are unable to travel. This

operation should be completed by the 15th or 20th September, and after that further admissions to the poorhouses should be refused, except in cases of obvious necessity. When the village relief is finally closed in any district, any remaining inmates of poorhouses must be paid off with a fortnight's subsistence dole, and be warned that they must thenceforth provide for themselves as they have been accustomed to do. Infirmary patients must be removed to the permanent district hospital or permanent poorhouse where such institution exists. The poorhouse will then be finally closed and the establishment dismissed.

"It remains to deal with persons in receipt of gratuitous relief in villages and cities (Chapters V and X, Famine Code). Commencing from the end of August, the lists should be carefully revised and superfluous names weeded out. These operations should be supervised, where possible, by European agency: at the same time, if prices have fallen, the rates may be reduced under orders of the Commissioner of the division.

"The next step will be to strike off whole villages from the relief lists. This process will begin when the early *kharif* is ripe and the new grain in the market. In some places this will take place early in September; in some places by the middle of that month; in some places perhaps later. In a few localities where the early *kharif* is inconsiderable and the harvest consists almost exclusively of the later staples, it may be necessary in special cases to retain villages on the lists as late as the middle of October. The decision of such cases is left to the discretion of Commissioners.

"Those tracts will be selected for reduction first where the *kharif* is earliest, but it should be complete for every village with an early *kharif* crop by the end of September. If in any village, owing to backwardness of crops or great preponderance of the later *kharif*, it is necessary to postpone final closure, the list can be maintained till the middle of October. But if the rains progress favourably, such cases should be exceptional. As each village is struck off, the recipients then on the list should receive a week's or a fortnight's dole at the Collector's discretion, and be warned that they must thenceforth provide for themselves. In this way the relief will carry on the recipients in some cases to the beginning of October, in most cases to the middle of that month, and in exceptional instances to the commencement of November. As the villages are struck off, relief measures will be finally wound up and the special establishments reduced.

"In cities relief, as a rule, will be closed at the end of September, the recipients then on the lists being paid off with a week's or a fortnight's dole. City relief committees should be given timely information.

"The arrangements above described will, His Honor believes, provide for the gradual reduction, and the final closure of relief in the manner calculated to cause the least suffering or inconvenience to those now dependent on State support, and I am to request that they may everywhere be followed, unless sanction is sought for any modification in any special case.

"It is impossible to expect that where people have for a considerable period been accustomed to receive gratuitous support at their own homes or in poorhouses, the discontinuance of such support can be effected without inconvenience and a certain degree of hardship to those who are again thrown on their own resources. The longer the relief is continued the greater this difficulty will become, and the Lieutenant-Governor and Chief Commissioner believes that in the end the most humane and the wisest course is to terminate at the earliest possible moment, as the ripening of the *kharif* harvest, of which the promise is now
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arrangements which cannot possibly be maintained in permanence. There is much danger that the continuance of State relief, after the imperative necessity for it had ceased, would tend to weaken the custom and the immemorial duty of private and domestic charity which has been up to the present the resource of the destitute and helpless. It is of the first importance that no impediment should be placed in the way of the return of the community to its old customs and habits of life. Any unnecessary postponement would in the end prove an injury to the classes it aimed at assisting.

"In this way the Lieutenant-Governor trusts that relief operations of every kind may be brought to a close on the 15th October at latest."

It will be perceived that the plan of operations is based on the fact that in the various portions of these Provinces the harvest is not simultaneous, that it is earlier in some regions than in others, and that some food grains ripen sooner than others do. The earliest *kharif* grains ripen in the end of August or beginning of September, and it was therefore agreed upon that from the beginning of September the village gratuitous relief lists should be subjected to a scrutiny, and all those who obviously could be left to their own resources or the care of their friends should be then struck off. But it was recognised that the work would be indefinitely prolonged if this procedure were alone to be relied on and individuals always dealt with. It was essential that this kind of relief, which is demoralizing where not absolutely necessary, should be terminated at the earliest safe moment.

The ripening of the crops in the village gave an assurance that the safe moment had arrived and that no evil would result from dealing with the village as a whole. It was therefore decided to operate on the whole village and to strike off the lists all recipients of gratuitous relief in a village in which the crops had matured. This procedure was adopted from the middle of September progressively in all these villages where the early crops were extensive and successful. In these villages where there was a preponderance of the *kharif* food grains, which ripen later, relief was prolonged. But in no case was it found necessary to retain the system of gratuitous village relief beyond the 15th of October.

And a further precaution was taken by way of additional assurance that the transition from the State relief to the ordinary habits of village life should not cause distress. This consisted, as stated in the orders, in giving to all recipients of gratuitous outdoor relief a dole sufficient for a week or oftener a fortnight's subsistence. In this way the dependence of the past gradually merged in the freedom of the future.

In regard to poorhouse relief, the object was, as will have been noticed, to assimilate the method of winding it up with the method of winding up village relief. In this way complications were avoided, while every poorhouse inmate was

placed in his or her village of origin and, as far as possible, in the position he or she occupied 12 months before.

The favourable progress of the harvest rendered it possible to adhere to this scheme with reasonable closeness. By the middle of September the numbers on the Government outdoor relief lists had fallen to about 231,000, while the poor-house population had fallen to under 11,000, and many of these institutions had been closed. By the 1st October the corresponding numbers were 115,587 and 5,017. On the 20th October the Lieutenant-Governor was able to inform His Excellency the Viceroy that the relief operations had been practically closed on the 15th idem, by the distribution of the authorized parting dole, and that there remained as a charge on the Government only a few hundred infirm patients and about 2,000 orphans. The very paucity of the number of orphans and waifs and strays in comparison with the magnitude of the year's operations, is in itself testimony to the success of the relief arrangements.

From the beginning it was expected that orphans would come on the hands of Government, and accordingly in December 1896 the following orders were issued prescribing the method of dealing with them:—

“ In the poorhouse at the headquarters of each district a section should be reserved for orphans, male children being kept separate from female children if over 10 years of age. A respectable matron should be appointed to the charge of the orphanage on suitable pay, and should live in the orphanage. Inquiries for the parents or friends of the children should be instituted immediately the children are found to be deserted and if the parents or friends are discovered, the children should be made over to them, the parents or friends being helped, if indigent, under the general system of the Famine Code. If the friends or parents are not discovered, and especially if there is reason to think that the parents are dead, the children may be disposed of in accordance with the provisions of article 130 of the Famine Code. Special care should be taken that in no instance is a Hindu child made over to a Muhammadan, or a Muhammadan child to a Hindu. Special care should also be taken with regard to female children, so that the danger of their getting into the hands of prostitutes may be avoided. The person to whom a child is thus made over should be placed under obligation to account for the child at any time until the child attains the age of 18 years. Before the children are thus given over for adoption, a sufficiently long period should be allowed to elapse, within which search will be made for the children's parents or friends. The search should include a careful local inquiry in the village which the children may name as their home, and every obtainable clue must be followed up. In each case a written proceeding, stating the steps taken to trace the parents or friends, should be drawn up and recorded before a child is given over for adoption.

“ A certain number of children will probably remain over in the orphanages after efforts to find the parents or relatives have been exhausted and after the option of adoption has been allowed to their co-religionists. The balance thus remaining over may be treated under article 131 of the Famine Code, the orphanages being chosen by reason of their known reputation as homes for deserted children.”

The number of children now remaining in the district orphanages is 1,668. No doubt most of these are true orphans, but some have probably been merely deserted by their parents. Efforts have been, and are still being, made to trace out their parents or friends. These efforts have in some cases been rewarded with success, and the children have been restored to their homes. In other cases there has not been success. If further efforts are unsuccessful, and if it is found impossible to induce respectable people of the same caste and religion, over whom the Local Government can exercise supervision, to adopt the children, they will be placed in orphanages controlled by the Bishops of the various Christian communities or in respectable orphanages controlled by substantial native Societies and Committees. It is understood that the Provincial Branch of the Indian Charitable Relief Fund intends to endow the various orphanages for the maintenance and education of these children. In any case this Government intends to exercise a control and supervision over the orphanages, in the interests of the children, until they attain an age when they may be trusted to take care of themselves.

CHAPTER IX.

Operations of the Department of Public Works.

ARTICLE 17 of the Provincial Famine Code declares it to be "the duty of the Chief Engineer in charge of the Public Works Department, Buildings and Roads Branch, in communication with Commissioners and District authorities, to maintain for each division and district, under the sanction of Government, a programme of all relief works, and to see that for each work there is a project in such detail as is suitable to the class of the work." The occurrence of famine in Bundelkhand in 1896 had drawn the attention of Government to the necessity of bringing this programme up to date; and measures to this end had already been taken when the imminence of a second and much greater famine accentuated the necessity for special despatch in completing them. Accordingly, on the 21st September, the attention of the officers concerned was drawn to the urgent necessity for completing the revision of the programme of works, and expanding it for all threatened districts. On the 2nd October minute and detailed instructions were issued to secure complete preparation upon all points necessary for the efficient management of relief works. The probable scale of establishment required for each district and charge was indicated, and sanction given to the recruitment of additional overseers, work agents, and cashiers. A beginning was made in providing tools and plant, and arrangements for expanding the establishment of administrative officers and providing an adequate medical staff were matured. With a view to assisting officers unaccustomed to famine work, the system of relief management followed in Bundelkhand in the previous months was summarized for general information in a Resolution recorded by the Lieutenant-Governor on the 20th October, the points which the experience of that period had shown to be of the greatest importance being brought to prominent notice. The most important and permanently interesting of these were—

- I.—The paramount importance of the principle that preparations should be well in advance of pressure. Preparations were not to be confined merely to the selection of projects, but should include all arrangements for beginning active work at a moment's notice when the time for action should have arrived.
- II.—The necessity of enforcing task work in tracts most acutely distressed.

III.—The desirability of selecting works with a long *lead*, as it was anticipated that the number of carriers would be much in excess of the proportionate number of able-bodied diggers.

IV.—The enforcement of precautions against fraud.

V.—The necessity of special sanitary arrangements, and, in particular, of a pure supply of drinking water.

VI.—The provision of a large supply of copper coin for payment of wages.

The revision of the programmes of relief works was completed by the end of October 1896, and these programmes were subsequently considered and approved at the conferences which the Lieutenant-Governor held during his first tour in November. They provided employment for 277,650,000 persons for one day or for a daily average of about one million persons for nine months in all districts of the North-Western Provinces and Oudh, except the Meerut and Kumaun Divisions. In those districts in which it transpired at the conferences that the impending famine promised to be exceptionally severe, steps were taken to prepare additional projects as a precautionary measure. In some localities it was difficult to arrange for sufficiently large works, and in other localities there sometimes was a serious deficiency of drinking water-supply, which, besides adding substantially to the cost of the work, rendered it undesirable to assemble large bodies of people there. Otherwise there was no difficulty in finding suitable projects of work.

Subject to the control of the Commissioner of the division in all non-professional matters within his jurisdiction and of the District Collector within his lesser sphere of authority, the burden of carrying on the relief works fell on the ordinary staff of the Buildings and Roads Branch of the Provincial Public Works Department. It is desirable, therefore, to state here very briefly how this Branch is organized. The organization being local rather than provincial, the territorial unit of administration is the district. Each district has its District Engineer, who may belong either to the superior Departmental or to the Upper Subordinate establishment. But whatever his Departmental status may be, his functions are the same: he renders his accounts, not to the Examiner of Public Works Accounts, but to the Divisional Engineer, and he is, within the limits of the budget estimates and according to his experience, allowed considerable freedom of action, though always under the control in all non-professional matters of the Collector-Magistrate of the District and the District Board. On the 1st of October there were, excluding the Kumaun and Meerut divisions, in which the scarcity was not severe enough to call for relief works, 20 District Engineers

and 20 District Surveyors employed in the North-Western Provinces and Oudh; and of these 40 officers, one-half were Europeans and one-half Natives of India.

For purposes of fiscal and general administration the districts are, it has already been said, grouped into divisions: the Public Works system follows this grouping. Each fiscal division forms also a Public Works divisional charge under an Executive Engineer, with the exception of the Allahabad division, which, being very extensive, is divided into two charges, designated respectively the 1st and the 2nd Allahabad divisions. The 2nd Allahabad division comprises Bundelkhand, in which the famine both in 1896 and 1897 was most severe. The Divisional Engineer, who is subordinate to, and maintains direct communication with, the Superintending Engineer on professional points and the Commissioner of the Division on general administrative and financial business, is the responsible executive officer by whom the District Engineers are controlled; and all accounts are compiled and submitted to the Examiner of accounts. Finally, the various Commissionerships are grouped into three Public Works Circles as follows:—

Agra	Division	...	...	} 1st Circle.
Meerut	ditto	...	...	
Rohilkhand	ditto	...	...	
Lucknow	ditto	...	...	} 2nd Circle.
Fyzabad	ditto	...	...	
Kumaun	ditto	...	...	
Allahabad	ditto	...	...	} 3rd Circle.
Benares	ditto	...	...	
Gorakhpur	ditto	...	...	

Over each of these circles there is a Superintending Engineer, to whom the Divisional Engineers are subordinate. These Superintending Engineers have no concern with the preparation or submission of accounts, but are solely directing and inspecting officers. It may, the Lieutenant-Governor thinks, be questioned whether, for ordinary administrative purposes, this chain of authority and subordination is not too expensive; but for the purpose of famine administration, which imposes an intense strain, the organization proved by no means too strong.

Indeed, it was found necessary to divide the 3rd Circle into two, the famine relief works in the Allahabad fiscal division being placed under Mr. C. G. Palmer as Superintendent of Relief Works, while the relief works in the Benares and Gorakhpur fiscal divisions, together with all ordinary works in the circle, remained under the Superintending Engineer.

It may here be remarked that ordinary works, so far as not deferred owing to financial pressure, were carried on as usual during the famine.

In addition to the Divisional and District Officers, there were in the famine districts when preparation for relief works began 26 Upper and 77 Lower Subordinates; but many of these—the former especially—were required for ordinary works. As this staff, which was not more than sufficient for ordinary times, was altogether inadequate to meet the pressure which threatened, the necessary steps to strengthen it were taken early in October, by the recruitment on special conditions from outside the Government establishments, of 33 Visiting Inspectors and 652 work agents (who answered to Upper and Lower Subordinates). There was at the time of the greatest pressure considerable difficulty in obtaining efficient men of these classes in sufficient numbers; but, owing to the energy and good-will with which the controlling officers worked, the difficulties were overcome.

The non-commissioned grades, so to speak, of the Public Works Department were sufficiently strengthened and recruited in the way now mentioned; but the highly important work remained of strengthening the Commissioned and controlling ranks, whereby the interests of the State on the one hand and of the recipients of relief on the other could alone be adequately safeguarded. The Irrigation Branch could spare only two officers, and the Lieutenant-Governor in this emergency resolved to ask the Government of India for the services of military officers to assist the departmental officers in the control and management of relief works. Eventually, through the good offices of His Excellency the Commander-in-Chief of the Forces, the services of 8 officers of Royal Engineers and 12 Staff Corps officers were obtained. Instructions were issued for the guidance of these officers, their chief duty being to ascertain and note all deviations from rules and orders, to correct all such deviations on the spot and at once, and to assure themselves, at each inspection of the relief works under their supervision, that no more money was being spent than was necessary, that the expenditure was being properly accounted for, that relief was being adequately administered, and works conducted in a proper, orderly, and methodical manner. Latterly, they were placed in actual charge of a portion of the district. When so employed all reports and returns, except those in regard to purely account matters, were submitted to them by "officers in charge," and so far as regards the management and organization of the relief works, they to a large extent took the place of the District Engineer, who was thus relieved of much correspondence. Of the value of the services of the military officers the Lieutenant-Governor cannot speak too highly. The efficient management of these relief charges, through all difficulties of season and sickness, was greatly due to them. They soon grasped the situation, which must have been entirely novel to most of them, adapted themselves to the circumstances.

and in activity, zeal, watchfulness of the interests of the Government, and humanity towards the people left nothing to be desired. The Lieutenant-Governor desires to acknowledge the great obligation under which they have placed this Government.

At an early date special provision was made for the punctual preparation of the accounts. The Government of India, responding to an appeal from this Government, deputed some senior officers for the purpose, and aid was also procured from the Irrigation Branch of the Public Works Department. Extra clerks were engaged, and the divisional accounts were gradually brought up to a fair standard of punctuality. To illustrate the extraordinary pressure thrown on the accounting staff, it may be mentioned that the ordinary yearly expenditure in the Buildings and Roads Branch of the Public Works Department in the North-Western Provinces and Oudh on works and repairs is about 39 lakhs of rupees, whilst between October 1896 and September 1897 over 134 lakhs were expended on famine works, exclusive of tools and plant and establishment.

From the beginning and subject to the paramount duty of saving life the chief objects aimed at by the Executive officers were, *first*, the exaction of a fair task; and *secondly*, the securing of the punctual payment of the wages earned. A suitable return for the wages paid was invariably insisted on unless the recipient was altogether unfit to labour. A task, light at first in the case of weak persons, was prescribed and, after warnings, enforced by a system of fines first on the digger and, if that did not prove to be effectual, on the carriers also. Recourse might also be had to a penal ration of cooked food or, in extreme cases of recusancy or malingering, to removal to a workhouse. In regard to payments of wages it was found, during the Bundelkhand famine of 1896, that payments twice or three times a week to the labourers were more convenient for all concerned than daily payments. But in 1897 daily payments were preferred. The reason is that in 1896 the numbers on relief were comparatively few: they worked nearer their homes; the grain-dealers knew them better; and their credit was not altogether exhausted. Moreover in 1896 a large staff of trained Public Works subordinates was available for employment within a limited area: and upon the honesty of this staff reliance could be placed. In 1897 the permanent departmental staff went but a small way to supply the necessary control: temporary men were engaged regarding whose probity there was not the same assurance: the vastly increased numbers on relief prevented the grain-dealers from giving credit to individuals whom they did not know. All these circumstances combined to render daily payments necessary, and daily payments therefore were generally made from an early stage of the operations.

This system of daily payment to individuals involved an elaborate organization, which is provided for in the rules prescribed by this Government and known as the rules of the 5th December. The general principle was to divide the workers into charges containing about 5,000 persons exclusive of dependants. At the head of each charge was a charge officer of the standing of "náib tahsildár." The "officer in charge" was responsible for the general management of the charge, including admission and classification of relief workers, payment of wages, supply of food, care of dependants, hospital arrangements, and submission of accounts and returns. Under him were at least two clerks, one of whom was capable of keeping accounts in English. There were also two work agents (sub-overseers), employed on professional matters, such as laying out and measuring work. In organizing the "charge" individuals were grouped into a "gang." When the pressure of distress increased, and whole families came on the works, the families were kept together and ten or more families made a "gang." This gang was the unit with which the Department dealt, and it consisted (exclusive of dependants) of from 50 to 60 persons, 15 of whom were ordinarily diggers and the remainder carriers. At the head of each gang was a "mate," when possible chosen from the gang. The character of the mates procurable varied in different parts of the Provinces. In the 1st and 2nd Circles and in the Gorakhpur division they were usually men able to read and write, and the presence of "literate" mates lay at the bottom of the slight variation which prevailed between the system of charge control there elaborated, and the system which was maintained in the Allahabad division, where the literate mates were few and hard to find. When literate "mates" were not procurable reliance was placed on gang clerks or *muharrirs* (called also *jamadárs*), of whom there were from five to ten for a charge.

Various improvements in the system of control and payment were devised from time to time and as experience was gained by actual practice: among these may be here noticed an improvement in the muster-rolls introduced by Colonel R. R. Pulford, C.I.E., R.E., Superintending Engineer of the 2nd or Oudh Circle, whereby the names and residence of each individual worker, the quantity of work done by him or by the gang to which he belonged, and the daily payments made to him can be ascertained at a glance, and fraud at once detected and exposed. This system leaves but little to be desired, if, indeed, it can be improved upon.

In organizing and conducting large relief works particular attention was paid to the provision of medical comforts, sanitation, and a pure water-supply. A field hospital was attached to every large work or charge, under the control of a

medical subordinate, whose duty it was to attend to all urgent cases of illness, supervise the sanitary arrangements, and submit periodic reports on the health of the workpeople. The provision of a supply of pure drinking water was everywhere put in the fore-front of the organization, as a matter of supreme importance. It is now a well-established fact that nothing is so productive of disease on works—especially of cholera—as impure drinking water. The first step, therefore, taken in opening a relief work was to take possession of the wells in the neighbourhood (or to make wells if none existed), to disinfect and purify them, and thenceforward to control the drawing and distribution of the water. To this end a special staff organized with reference to the caste and religious susceptibilities of the people was employed, and a plentiful supply of water-carts or water-vessels was procured. Water for drinking purposes was distributed at fixed places selected with the view to the convenience of the workers, the supply being furnished by these water-carts or vessels.

In this connexion the following remarks by Mr. Palmer, Superintending Engineer, Allahabad Circle, are of much interest:—

“The experience of the present famine and latter part of the preceding one affords the highest presumptive evidence of the value of permanganate of potassium as a disinfectant in cholera. During April 1896 we were attacked by cholera, and could not in any way get rid of it except by marching the people from place to place till it died out. We felt all the time that we were not combating it, but simply running away till it was tired out. Under this difficulty I consulted Professor Hankin of Agra on the subject, and he immediately furnished me with instructions on the use of permanganate of potassium, which were issued to all on the 18th April 1896; but the permanganate did not come to hand till May. In the succeeding epidemic of May 1896 the permanganate was used somewhat perfunctorily and without any understanding of its importance, or much belief in its efficacy, on the part of the Officers-in-charge and the Visiting Inspectors: its use, however, extended. The disinfection of wells is strongly insisted on in the Public Works Department Rules issued in December 1896, and enforced general attention to the point. The first March epidemic in Allahabad was earlier than expected and caught us in the midst of a struggle with other difficulties, and without a large enough supply of the drug at hand. A supply of 1,700 lbs. of permanganate was at once ordered (ready made up in 5 lb. boxes of two-ounce packets) and obtained with difficulty: meanwhile the epidemic raged in just the same ungovernable way as last year. In April we got the drug well distributed at all points and the disinfection of wells going on everywhere, apparently contaminated or not. After this there was no more mere blind running away from cholera, but we were able to fight it, and we did so with early success in every case excepting the attack in Hamirpur. All officers on the relief works got to thoroughly believe in the efficacy of the drug, and much attention was given to its use. Many zamindars asked for packets of it for use in wells which were not near our works, and many others asked us to disinfect their wells for them. Under the name of *lal dawai* this drug is now familiar in

every hamlet of the Bundelkhand districts and is largely believed in. It has been often shown how impossible it is to ensure disinfection, very picturesquely shown by Professor Hankin in many cases; but there is no reasonable doubt that in permanganate of potassium we have a most valuable ally in combating these baneful choleraic epidemics. Altogether we used up about 1,950 lbs. of the drug; and the small practical point of having it ready made up in two-ounce packets, packed 40 in a tin box, was found to be of the greatest assistance in facilitating its use. The simple directions now are, to go on putting in half a packet at a time till the water retains a faint pink colour for four hours; and to repeat the dose every week, preferably on a Sunday.”

As the Intermediate system of relief works to which already reference has been made more than once forms a new and important feature of famine relief administration, it is desirable at this point to describe the circumstances under which it was devised and the causes which led to its early adoption in districts not suffering from very acute distress and on the commencement of the rains in all the remaining districts.

In the shape originally adopted, work under the Intermediate system was distributed among piece-workers or gangers, who were, in effect, petty contractors paying the labourers fixed wages and themselves remunerated by rates which allowed sufficient margin for their own labour and expenses. The works were, in fact, conducted on the ordinary system of Public Works with the small substituted for the large contractors, and provision made for securing the employment and fair remuneration for labourers requiring relief. Though possessing certain advantages, this early system was found to fail in one particular. The ganger, or middleman, had a direct object in employing only the most efficient labour, and in practice it was found impossible to always prevent the exclusion of weakly or inefficient workers who could not render a reasonably full task. The persons excluded were generally those who stood most in need of relief. Those who least needed assistance were able to earn much more than a subsistence wage, while those who most required it were sometimes unable to earn anything.

A modification was therefore introduced at first in a tentative form, in certain localities, by which the middleman was excluded and the work given out direct to the labourers by the official staff, who also measured up the work done and distributed the payment. This arrangement put an end to the complaints which existed against the system in its first form.

The objects aimed at in the modified form of Intermediate works were—

- (1) to exclude from relief works those who could find employment elsewhere or were not dependent on such works for their subsistence;

- (2) to get rid of so many of the dependants and useless workers as were a source of danger and demoralization, and whose friends, included in the preceding category, were able to support them ;
- (3) to secure a better outturn of work for the money expended.

The first object was gained by the imposition of a more stringent labour test and by the principle of payment by results, subject to a maximum wage. Special attention is invited to this matter of a maximum wage. At page 130, Volume III, of the Report of the Indian Famine Commission, a doubt is expressed whether it was possible to obviate the objection raised to the system of piece-work labour in that it permitted a practised or professional workman to earn more than need be allowed him as relief. The experience now gained shows that the objection can be obviated by the imposition of a maximum wage combined with careful maintenance and check of muster-rolls. The maximum wage may be regulated with reference to the individual labourer or to the family.

The limitation on possible earnings, while securing this first object, tended also to prevent competition with private employment or ordinary Public Works.

It may be added that the Intermediate system, as worked by this Government, though imposing a maximum wage limit, does not include any provision for the payment of a minimum wage irrespective of task. This minimum wage is prejudicial to economy and discipline; it cannot, indeed, be dispensed with when famine is acute. But it should never be permitted except in connexion with the task and gang system prescribed by the Code : and even then should be qualified by the enforcement of the penal ration or removal to the poorhouse in case of malingerers.

The second object was furthered by permitting the able-bodied members of a family to earn enough to support their dependants as well as themselves. And here it may be noted that work was so regulated on week days, as to permit the labourers to earn so much extra during those days, as would support them and their dependants, without work, on Sundays.

On the third object noted above no explanatory remarks are called for; it is self-explanatory.

Further experience of the working of this Intermediate system led to two modifications of the scheme as first defined. Families coming on the works brought young children who were unfit for labour, but could not be separated from their relatives. It was observed in some localities that the condition of such children was bad, owing to neglect or indifference on the part of their parents. This phenomenon was not

confined to Intermediate works or due to any defect of system. It was first observed on the Famine Code works, where the children received a money dole sufficient for their support. It was even noticed in the case of children for whose maintenance the parents had gratuitously received similar money doles at their own homes. One of the unhappy effects of this protracted scarcity has been to weaken the ties of domestic duty and parental affection, and to lead parents to consume themselves the relief provided for their children who were not required to work. Where this state of affairs existed, the plan was adopted first on Code works of supplying young children with cooked food instead of a money dole. On Intermediate works, where the necessity arose, discretion was given (and often acted on) to Divisional Officers to authorize distribution of cooked food to young children and to add one pice to supplement the diet of nursing mothers. This was no doubt a departure from the original principle; but as these children could not be removed from their parents and placed in poorhouses or on village lists, there was no alternative but to either acquiesce in their maltreatment or to provide them with a daily meal.

It was further discovered that the standard task originally laid down, though suited for persons of ordinary physique, pressed hardly on persons who were infirm or in reduced condition. When such persons were employed to any substantial extent with effective workers, the outturn of work and the earnings of the whole party were reduced—a result which pressed unfairly on those who had themselves rendered a full task. Permission was consequently given to form these weaklings into separate gangs and prescribe a reduced task for them. No other change in the system was found necessary, though occasionally the proportion of carriers to diggers was exceeded where it became necessary to find employment for a disproportionate number of applicants of the former class.

Though the Intermediate system was undoubtedly effectual in keeping down the numbers on relief works, yet it is not possible to quantify the exact reduction attributable to that cause alone. The reopening of field labour had caused many to leave the works before the Intermediate system was introduced, and the same cause continued to operate after its introduction. At the same time there are instances of works being abandoned and not resumed as soon as the system of payment by results was enforced. The information before Government showed that numbers left to seek other employment who would have remained under the Code system, and that many more were deterred by the same consideration from returning after the completion of the *rabi* harvest. Persons, for instance, who were content to resort to works in the neighbourhood of their homes and earn a subsistence wage by a

few hours' labour would not undertake piecework, which required a fair day's work for a fair wage.

It may be observed that districts under the Intermediate system have kept wonderfully free from cholera during the summer. The outbreaks have been few and mild. Among the large numbers on Code works in the very distressed districts the cases of epidemic cholera have been more numerous, persistent, and fatal. The cause is to be found in the better physique of the people in the districts in which the Intermediate system prevailed, in the absence of the weak and sickly "dependants," and consequently in the less crowded state of the works, which rendered easier the preservation of the water-supply from pollution.

Generally it may be said that this Intermediate system was not suitable for districts where the distress was most acute. In such tracts it was necessary to arrange works which would provide a moderate fixed task and a bare subsistence wage for each applicant. The piecework system was unsuited for such conditions. The Intermediate system was accordingly restricted to those districts where distress was less severe and less extended. These comprised all districts, except the four Bundelkhand districts, South Allahabad, and Hardoi. Only in the case of a small portion of Unao, bordering on Hardoi, was it found desirable to revert again to the Code system in those districts in which it was abandoned.

It is necessary now to revert to the sequence of events. Early in December the general orders already mentioned as the outcome of experience gained in the Bundelkhand famine were supplemented by the issue of more detailed instructions, which, though based generally on the Famine Code, differed from it in the method of computing wages, in simplifying the classification of workers, and in the methods of enforcing task work. These instructions (for the basis of which the Lieut-

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| I.—Establishment. | IX.—Organization of relief labour. |
| II.—Tools and baskets. | X.—The task; setting out work, and getting it done. |
| III.—Fund and supply of coin. | XI.—Wages. |
| IV.—Drinking water. | XII.—Reports and accounts in the field. |
| V.—Food. | XIII.—Checking work, numbers, and payments. |
| VI.—Field hospitals. | |
| VII.—Hutting. | |
| VIII.—Conservancy. | |

tenant-Governor was indebted to Mr. Palmer, Superintending Engineer, Allahabad Division) took the shape of rules, divided into sections, which, as the headings noted in the margin will show, dealt with the management of relief works in detail. These rules include instructions drawn up by the Government Bacteriologist and Chemical Examiner, for the purification and disinfection of wells as a means of checking epidemics of cholera. They include also a ready reckoner for the calculation of wages. These rules as issued have, it is believed, been adopted in some other Provinces as the basis of the Public Works relief organization there.

It was from the first recognised that these rules, based as they were chiefly on experience acquired in part of one

Province, would be liable to modification in order to suit the diverse conditions of other parts of the North-Western Provinces and Oudh. It was accordingly laid down that while certain general principles of universal application which the rules embodied should not be altered without the express sanction of Government, yet that a reasonable discretion was allowed to executive officers on the spot in adapting the rules on other matters to particular or local requirements. Although through the famine there was no hesitation in adapting the rules to circumstances as they changed, owing to the advent of the spring harvest, the change in the season, outbreaks of cholera or other circumstances, still the only substantial deviations of importance introduced, consisted in the method of payment and in an improved form of gang register to which reference has already been made.

But while the Government thus gave a very large measure of discretion to the officers on the spot, it insisted on the submission of immediate information as to what had been and was being done. The District Engineer, so soon as he had compiled the return (Form III, Famine Code) which he is required to forward to the Collector weekly, submitted a note directly to the Chief Engineer detailing the number of persons employed, the expenditure incurred, the work done, the rate of wages paid, the number of works open, and other particulars. An abstract of this information for the whole province, together with the notes themselves, was submitted weekly to the Lieutenant-Governor by the Chief Engineer personally, and instructions taken in regard to any matters which appeared to require attention. Where a doubtful point required explanation, the District Engineer was addressed direct, usually by telegram, and in other cases the Superintending or Divisional Engineer was addressed. This procedure saved much time; because as the Superintending or Divisional Engineers were constantly moving, any periodical returns requiring their intervention would probably, in the ordinary course, have reached Government many days after the District Engineer's notes were actually received. A further, and a very great, advantage was the diminution in office work, no periodical returns of this nature being necessary from Divisional or Superintending Engineers. The tendency as the famine increased in intensity was to insist on these notes being more and more full and complete, thus enabling the Government to judge whether the pressure at the time was being adequately met, whether one district or division could spare assistance for another, whether sufficient provision was being made for the future, and above all whether the expenditure was being kept within reasonable limits.

The preparatory measures already described were completed by the 5th of December, well in advance of

the pressure which followed. They were devised to meet the exigencies of a famine which it was foreseen would be severe, but the extent and duration of which was necessarily uncertain. The Government in its famine policy had three aims. The first aim was to ensure that all destitute persons should be relieved: the second that they should be compelled to do all the work of which they were capable, partly as a test of their requiring relief, and partly to obtain value for expenditure incurred: the third aim was the strict limitation of the relief administered or the expenditure incurred to the amount necessary to save life. There were two main tests of distress—a high task, and a low subsistence wage combined with a distance test. In the districts which had not suffered in the preceding year high tasks were enforced. In those acutely distressed districts which had passed through a famine in the preceding spring and summer the condition of the people was so low that a high task could not be performed, and here, at first, reliance was placed on the subsistence wage combined with the distance test. In other words, people had not only to complete the task entitling them to the subsistence wage, but they had to show that they were really in need of relief by seeking it at some distance from their homes. Later on, after the *rabi* or spring harvest had replenished grain stocks to some extent, the "Intermediate system" of works, which has been explained, was introduced and had the effect of a fairly high task very rigidly enforced. But at all times and under both systems the task exacted was all that could be obtained in the conditions under which it was necessary to grant relief. The high proportion which carriers (women and children) would bear to diggers was foreseen in the rules; but in judging the Public Works system of famine relief during 1897 on the basis of the quantity of earthwork executed per unit and its cost, it must not be forgotten that a substantial part of the Provinces had passed through a severe famine in 1896: that the condition of the population then was very enfeebled: that during the *rabi* harvest, and to a lesser extent from that time up to the close of the relief works, the people, especially the diggers employed on relief works, consisted largely of the old and infirm, those capable of doing a full or more than a full day's work having found employment elsewhere in harvesting, where they could earn more than a subsistence wage. While food grain was selling for less than 10 seers (20lbs.) per rupee, the maximum wage was seven pice for a digger or $1\frac{1}{4}$ anna. When the price of food grain fell to 12 seers (24lbs.) per rupee, the maximum wage was lowered to $1\frac{1}{4}$ anna per day, while adult carriers got $1\frac{1}{4}$ anna and children proportionately less. No wage in excess of that admissible under the rules was ever permitted. So that persons in good physical condition, who could earn

more than a bare subsistence wage elsewhere, found in the relief works no attraction. It was only when a whole family came and worked together that a fraction over the bare subsistence wage could be earned by the group.

Whilst every endeavour was made to select for execution only works of a permanent character and of distinct public utility, those works or portions of works which could not be carried out by relief labour were deliberately left undone. For instance, where unmetalled roads were made—and they were the class of work which were most generally carried out—no bridges were built. In order to render these roads completely useful, bridges will, no doubt, be necessary; but the Lieutenant-Governor declined to permit funds provided by the Imperial Government for famine relief to be expended on work for skilled labourers, who were not distressed and who could find their ordinary employment elsewhere. The works carried out are therefore less complete than they would have been had the principle restricting employment to persons really distressed been less scrupulously followed. But so well has the work been done that in response to inquiries made recently as to the sum necessary to repair the damages caused by the late heavy rains to these famine roads, estimates for no more than Rs. 130,488 have been sanctioned. This gives an average of something more than Rs. 39 a mile. In order that the famine roads may be permanently useful, they must be bridged, and estimates for bridges are now being prepared. The bridges will be constructed from provincial or district funds.

The works carried out, with the exception of some canal works, were mostly roads, tanks, and wells with a few miscellaneous works. The great Sarda Canal project, which was first suggested as the backbone of relief work in Oudh, was after careful inquiry both in the office and in the field not undertaken. It was found that this great project called for more mature consideration than could, in the throes of the present emergency, be given to it. It seemed to involve engineering difficulties as well as a danger of waterlogging the country, in which the water level was found by extensive experiments to be much nearer the surface than had been supposed. Moreover, the opposition of the landholders and the vast expenditure the work would necessitate rendered it impossible to undertake it as a famine measure without delay or further consideration.

The only railways on which work was executed were the extension of the Oudh and Rohilkhand and the Bengal and North-Western Railways, which had been in progress before the famine set in. The reasons why no fresh railway projects were undertaken were these. As stated in Article 18 of the

North-Western Provinces Famine Code, railways are, as a rule, unsuitable as famine relief works, owing to the very small percentage of the cost which is spent on unskilled labour. The most suitable works for relief purposes are unmetalled roads, tank, canal, and drainage works; it is only after these are exhausted or when it is clear they will not suffice to afford all the employment necessary that railways, in which about four-fifths of the expenditure does not serve relief purposes, should be undertaken. The Government of India, having regard to these considerations, enumerated four railways, marginally noted, on which work might perhaps be commenced, and authorized this Government to make arrangements with the Bengal and North-Western Railway Company to commence one or more of the several extensions or branches of that system which had been previously proposed. But with one exception no progress could be made with these projects. The alignment of the Agra-Delhi chord line was so doubtful that work on it could not be undertaken during the famine, while the Government of India eventually found themselves unable to sanction the commencement of the Ghaziabad-Moradabad or Shikohabad-Mainpuri-Farukhabad line. The Hardwar-Dehra line was begun; but this railway does not pass through famine districts.

In regard to the extensions of the Bengal and North-Western Railway, the construction of the Azamgarh-Shahganj connection was sanctioned; but work could not be begun before the rains had set in. It was intended to carry out the Gorakhpur-Captainganj-Gandak Railway by famine relief agency, the Directors of the Bengal and North-Western Railway Company agreeing to eventually take over the line. But the surveys were not ready, while in the Gorakhpur district the other works in the programme were found more than adequate for the emergency.

Certain projects for light railways or tramways were also considered; but as the proposed alignments passed through regions which required no relief works, the projects were not pressed.

In Chapter II of this narrative it is stated that except in Banda, where a few quarry works remained open in August 1896, all Department of Public Works relief works in Bundelkhand had been closed by the middle of the preceding month of July. These quarry works continued during August to attract a few labourers, but it will be convenient to regard these insignificant relief operations as falling within the period of the local famine of 1896; and to date the commencement of the general famine relief operations from October 1st. If this be done, the progress of relief operations controlled

- (1) Ghaziabad-Moradabad.
- (2) Shikohabad-Farukhabad.
- (3) Agra-Delhi chord.
- (4) Hardwar-Dehra branch.

by the Department of Public Works during the general famine may conveniently be divided into four periods:—

- I.—From the 1st October to the 30th November 1896, which was largely a time of preparation, though by the end of November nine districts had been declared to be distressed and regular relief or test works under Public Works control were in progress in 11 districts.
- II.—From the 1st December 1896 to the end of February 1897, when works were expanding in all districts, the culminating point being the last week in February.
- III.—From the 1st March to 15th April, during which famine works were in active progress, though the numbers on relief works were, compared to the second period, much diminished, owing to the harvest operations in progress and to the general introduction of the modified Intermediate system in districts where distress was not most acute.
- IV.—From the 15th April to the 30th June, when relief operations again expanded, owing to the completion of the harvesting, and to the continued pressure of prices which, owing to causes already noticed, had not fallen to any marked extent.
- V.—From the 1st July till the 15th September, when operations became gradually contracted and when only selected works, such as *kankar* collection and stone quarrying, could, owing to the rains, be carried on. All famine relief works under the Public Works Department were closed on the 15th September.

The numbers of persons on relief works under the control of the Public Works Department were as follows on the last Saturday in each month:—

MONTH.	Famine Districts.			Scarcity Districts.			GRAND TOTAL.
	Workers.	Depend- ants.	Total.	Workers.	Depend- ants.	Total.	
October 1896...	25,545	4,719	30,264	44	...	44	30,308
November "...	89,453	20,867	110,320	468	2	470	110,790
December "...	195,085	52,114	247,199	12,223	1,642	13,865	261,064
January 1897...	727,134	180,345	907,479	41,035	3,404	44,439	951,918
February "...	1,005,303	253,954	1,259,257	58,821	7,872	66,693	1,325,950
March "...	607,840	144,322	752,162	4,465	...	4,465	756,627
April "...	671,676	115,563	787,239	1,841	...	1,841	789,080
May "...	869,243	180,790	1,050,033	11,636	1,023	12,659	1,062,692
June "...	339,388	71,235	410,623	6,166	986	7,152	417,775
July "...	76,509	14,778	91,287	1,224	...	1,224	92,511
August "...	19,737	4,058	23,795	Nil.	Nil.	Nil.	23,795
15th September 1897.	6,266	1,002	7,268	Nil.	Nil.	Nil.	7,268

The largest number employed on the same day was 1,064,124 workers and 261,826 dependants, or a total of 1,325,950, more than nine-tenths of the dependants being children under seven years of age. The largest number employed on any one day not being necessarily the same day was as shown below. The figures are given with the object of indicating the greatest pressure in each circle:—

1st Circle	...	...	94,154
2nd Circle	...	...	451,000
3rd Circle	...	...	143,471
3rd Additional Circle	...	...	777,016

The first period of the famine was mainly preparatory; but at the end of November the following nine districts had become distressed: Allahabad, Hamirpur, Banda, Jhansi, Jalaun, Jaunpur, Rae Bareilly, Sitapur, and Hardoi, while several other districts were under observation. In the 3rd Additional Circle, in which over one-half of the persons on relief works in the Province were employed, the Public Works permanent staff was familiar with the system to be followed, having learnt the lesson in Bundelkhand in the previous spring and summer: and there was no difficulty there in commencing works wherever and whenever required. The tools and plant which had been procured for the famine in the earlier part of the year were more than ample for the present requirements. In other districts the staff generally had not had the advantage of previous experience; but they were, so far as possible, leavened with experienced men, they soon settled down to the work, and no difficulty was found in providing work as required, especially as in the beginning the influx of distressed people was gradual. Afterwards the advent of people to the works was more difficult to deal with, being marked by rushes, numbering many thousands, at one time and place. To provide a sufficient staff for such conditions the plan was adopted of appointing subordinates as supernumeraries to charges in operation, in order to enable them to acquire the requisite experience. Having been taught, they were drafted for employment at all points of pressure.

The second period of the famine, 1st of December 1896 to the end of February 1897, was that in which the greatest strain was felt by the Public Works Department. The number of distressed districts rose to 19 and the number of persons on relief works increased daily, corresponding additions being from time to time made to the subordinate staff. The greatest difficulty was experienced in connection with the sudden rushes of large number of distressed persons to works in particular districts and parts of districts, to which allusion has already been made. For example, in the Allahabad district there was a rush of nearly 60,000 people in a few days. This caused an intense strain, the nature of which may be judged from

the following passage from the report of Mr. Palmer, Superintending Engineer of the Allahabad Circle:—

"The organization had to register these vast numbers of people; form them into gangs and parties; find and keep them in work; keep them going with tools and baskets; measure their work; pay them daily; draw and distribute their drinking water, and disinfect every well they approached; continuously force them to observe the simplest rules of sanitation; provide a number of them with shelter; run up field hospitals; attend to their wants and shift them to new ground in epidemics; and, finally, to bury or burn the dead. They were in such vast numbers, and so large a proportion had temporarily broken with their village life, that it was necessary to look after them in every detail. In addition to these duties a large proportion of the children had to be fed; and at one time over 40,000 children were receiving two cooked meals a day, prepared and distributed at 283 different places scattered over an area of over 15,000 square miles."

Still the system proved stronger than the strain upon it.

To control the vast multitude (which, as already stated, reached 1,325,950 people in the end of February), to direct the professional and general management of the works, to regulate payments, and to supervise the administration of gratuitous relief to dependants and the maintenance of sanitary precautions, the staff, including officers of the rank of Upper Subordinates, consisted of 136 officers, departmental and military, classed as follows:—

Chief Engineer	...	...	...	1
Superintending Engineers	...	...	...	4
Divisional Engineers	...	...	...	8
District and Assistant Engineers	...	...	...	44
Military Officers lent by the Commander-in-Chief	...	...	...	20
Upper Subordinates	...	...	...	26
Visiting Inspectors	...	...	...	33
Total	...	...	...	136

The subordinate agency when at its greatest strength consisted of the following officers who worked under the controlling staff mentioned above:—

77 Lower subordinates.
652 Work agents (answering to Lower subordinates).
274 Naib tahsildars (Officers-in-charge).
104 Ditto (not Officers-in-charge).
142 Hospital assistants or compounders.

The smallness of this controlling staff is noteworthy. It will appear later on that the cost of establishment was only Rs. 3,77,844, or less than 3 per cent. on the amount of wages paid.

The period, 1st March to 15th April 1897, marking the continuance of the spring harvest, exhibited a diminution in the numbers of persons on the works in all districts except in some of the Allahabad division; and in most districts the decrease was permanent. The chief incidents of this period were the dispersal of the relief workers in the Allahabad

district into small charges of 500 to 700 persons, owing to the cholera epidemic, which has already been referred to, and the introduction of the "Intermediate system" of works into all districts except Bundelkhand, Allahabad, and Hardoi.

The period between the 15th April and the advent of the rains in June was marked by a vast increase in the numbers on relief works. The employment afforded by the spring harvest ceased towards the end of April: and people who were dependent on labour for their subsistence, and who had saved but little from employment in gathering a very short harvest, flocked back to the works. The pressure on the establishment was renewed, and in the end of May nearly reached the pitch it had attained in the end of February. But this period produced no new developments calling for adaptations or adjustments of system or rules: the events were repetitions of previous experience, although reproduced under infinitely more trying circumstances of climate and general health.

Towards the end of May it became necessary to provide for the advent of the rains, and on the 27th May general orders were issued by Government touching the principles which were to be observed when the rains commenced. With the object of reducing all inducements to persons to remain on relief works after the rains had commenced, instructions were issued to stiffen rates and increase tasks when labour in the fields once more became practicable.

The rains began in the third week of June and produced an immediate effect on the number of labourers, which, in anticipation of the advent of the monsoon, had previously shown a tendency to fall. On the 19th June the number of labourers and dependants was 942,000 in round numbers; on the 26th June the number had fallen to 417,775. Owing to the unfortunate suspension of the monsoon rains during the first fortnight of July, to which reference has already been made, the numbers rose again, and on the 10th July stood at 465,161; but on the re-establishment of the monsoon about 12th July the numbers again rapidly fell: so that by the end of July they stood at 92,511, and it was possible to close the departmental relief works in 19 out of the 36 districts which were distressed or under observation. About the same time it was found possible to calculate the wage rate in the most distressed districts on the basis of a price current of 12 seers of food grain per rupee instead of 10 seers as previously, and to reduce the staff materially.

During the period from the 1st of August to the 15th September works remained open in 17 districts, and consisted mainly of *kankar* collection and stone quarrying, the number on the last Saturday of August being 23,795 and on the 15th of September 7,268 persons. After the Lieutenant-Governor had visited the distressed divisions in July, orders were issued

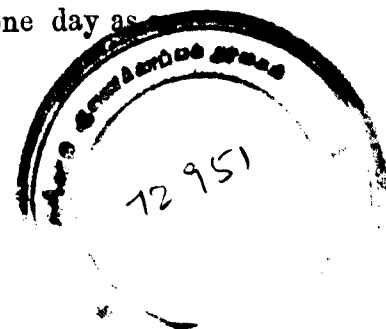
to close all works on the 15th of September, which were duly carried out.

It was at one time stated, though not originally in connection with these Provinces, that relief works attracted labourers from railway works. In the North-Western Provinces and Oudh railway works

were during the prevalence of the famine in progress in the districts marginally noted. In the

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|---------------|----------------|
| (1) Bahraich. | (4) Ghazipur. |
| (2) Ballia. | (5) Gonda. |
| (3) Benares. | (6) Gorakhpur. |
| | (7) Azamgarh. |

first four districts named no relief works of any description were undertaken during the famine. In the three remaining districts the maximum number of persons—men, women, and children—employed at any time on relief works never exceeded 46,000 out of a population of 5½ millions, and were usually very much below this figure. Obviously these figures could in no case lend much support to a charge of competition with private or other enterprise: and a minute examination of the facts shows that they lend no support whatever. The Gorakhpur district, of the three, furnished the greatest number (33,000) of relief labourers; while none of these were employed in the vicinity of the railway works. In Azamgarh, so long as railway works were in progress, special care was taken not to open relief works in their vicinity, and the Railway Resident Engineer, at the height of the pressure (in May) admitted that, as a matter of fact, no labourers had been attracted from railway to relief works. In Gonda the numbers on relief works were always insignificant. If private employers failed to obtain all the labour they wanted, the reason was that the rate of wages they offered failed to follow the great rise in the prices of food. If any railway in these Provinces experienced a similar difficulty, the difficulty was due to the competition of other railways. Ordinary labourers could not get a subsistence on the works at the normal rates paid by the Railway employers operating in the North-Western Provinces and Oudh; though, as a prominent Railway Manager said, the Luniah (professional labourer) could earn a subsistence "at extra good lift and lead rates." The result was that the ordinary labourer was not attracted to the railway works, while there was an unusually large emigration of the professional class in October and November, long before relief works were started, to the Assam-Bengal Railway. The contract rates in famine districts for earthwork on railways should have been increased if the railway desired to command the labour market; but this increase was not made. The rate paid on relief works in Gorakhpur from the end of March was Re. 1-14-0 per thousand cubic feet, or three annas per one hundred cubic feet only. As in that district 100 cubic feet was the ordinary daily task of a working party of three individuals who were not allowed to execute more than 125 cubic feet in one day as



maximum, it is obvious that the party could earn no more than three annas and nine pies between them. As gratuitous relief to dependants on the works was not then allowed, it is obvious that with grain at 10 to 12 seers the rupee no more than a bare subsistence could be earned on relief works, and that there could be no competition for labourers between relief and railway works.

The fact is that the numbers of persons employed on relief works in districts where railway works were in progress were comparatively insignificant. Of those so employed, only a small proportion (less than one-sixth) could in any case have earned on railway works a living wage; while the proportion of the sixth who might have conceivably been employed on railways had, whilst working on relief works, to be content with a wage of three annas and nine pies per day per family, usually consisting of five people. It is repeated that in such circumstances there could have been no competition with private employers.

The expenditure on the works carried out under the circumstances and on the system described in the preceding paragraphs in connexion with the general famine from 1st October 1896 up to the close of the Departmental relief operations on 15th September 1897 was as follows:—

	Rs.
Works, including wages of relief labourers, cost of work establishment and expenditure on contingencies	1,16,77,295
Gratuitous relief—	
I.—To dependants	8,27,038
II.—To relief labourers for allowances on Sundays and other days when labour was suspended	9,62,968
Establishment	3,77,844
Tools and Plant	6,04,230
Total	1,44,49,375

The following figures show the expenditure in each circle, and permit an opinion to be formed of the relative pressure of the distress in each:—

	Rs.
First Circle	7,32,949
Second Circle	31,80,213
Third Circle	12,18,503
Third Additional Circle	93,17,710

The total number of persons relieved, reduced to units supported for one day, was 179,744,948 or a daily average of nearly one million for six months. The gross cost per person relieved was therefore 1 anna 3·4 pies per head, no credit being taken for the value of

the work done or the value of tools and plant, a large part of which will be gradually sold, and some recoveries thereby effected.

In calculating out the average daily wage paid, a deduction must be made from the total sum paid under the head of *works* on account of expenditure on contingencies, and the cost of work establishment. The average daily wage resulting falls at 13·3 pies per head or Rs. 2-1-3 per mensem.

The average cost of the gratuitous relief to dependants emerges at 4·5 pies per head per day, or 11 annas 3 pies per mensem.

Attention has already been called to the exceptionally low proportion which the cost of establishment bears to the total expenditure. This is due to the policy which this Government steadily pursued of working almost entirely with Native agency, and trusting to precise rules, constant supervision, and exact procedure controlled by European officers for the maintenance of fair dealing and strict discipline.

The works, which may all be classed as "Major," comprise 3,274 miles of road constructed or remodelled—a mileage which is more than three times the distance of Calcutta from Bombay. In addition 1,463 reservoirs (some very large) and tanks were constructed or excavated, and these also may be regarded as major works, the tanks having been constructed in groups. Moreover many useful miscellaneous works were completed which are enumerated in the Superintending Engineers' Reports printed in the appendices to this narrative. The roads constructed or raised were, as a rule, either feeder roads to railways or roads which it had been some years previously determined to construct or improve as part of a general scheme for developing the inter-district communications of the North-Western Provinces and Oudh. They should be all regarded as of a permanent nature and of distinct public utility. The reservoirs constructed, and the tanks deepened or otherwise improved will in all cases be of use, and in some cases of great value, to the community. They must also be regarded as permanent improvements of their kind, in some cases of general and in all others of local utility. In Bundelkhand and Allahabad, where this class of work has been most extensively carried out, tanks are especially valuable, being there extensively used for purposes of irrigation. In all cases the reservoirs and tanks are an important addition to the district resources, not only as being useful for irrigation and watering cattle, but also as tending to keep up the water-level in the village wells, which are usually not far from the tank. In both Allahabad and the Bundelkhand districts there is in the hot weather a greater or less deficiency in the water-supply, so that works tending to its improvement were very desirable.

The quantity of work carried out is shown in the following figured statement:—

	1st Circle.	2nd Circle.	3rd Circle.	Additional 3rd Circle.	Total.
	Cubic feet.	Cubic feet.	Cubic feet.	Cubic feet.	Cubic feet.
1. Earthwork in roads,	177,351,471	410,283,143	125,367,894	340,561,599	1,053,564,107
2. Ditto in reservoirs, tanks and canals.	525,220	57,043,612	81,056,569	440,863,046	579,488,447
3. Stone, broken, in some cases also carried.	Nil.	Nil.	164,213	1,550,000	1,714,213
4. Gravel excavated ...	Nil.	Nil.	18,152	1,875,000	1,893,152
5. Limestone nodules collected.	409,999	209,956	912,780	Nil.	1,632,735
6. Bricks excavated from old Forts, &c.	Nil.	729,307	Nil.	Nil.	729,307

The total quantity of work done is therefore, reducing the heavy stone and gravel work to the denomination of earthwork, about 1,680 millions of cubic feet. Having regard to the number of labourers exhibited in the penultimate page, the outturn of work done by each group of one digger and three carriers (Sundays and non-working days being excluded) would be 52 cubic feet daily. If it be borne in mind that this average includes persons engaged on sanitary, conservancy, and miscellaneous duties, that 28 per cent. of the workers were children, and that the diggers as well as the carriers were generally of poor physique, this outturn will not appear inadequate.

In reviewing famine expenditure estimates are usually given of the cost which would probably have been incurred in executing, by ordinary labour in an ordinary or non-scarcity year, the work actually done during the famine year. Into all such estimates considerable uncertainty must enter because much of the work done in relief of famine is never undertaken or done in ordinary years by the same classes of people, or in the same quantities, or at the same season of the year, or under similar conditions of exposure to inclemencies of climate or the attacks of disease. As the Superintending Engineer of the 3rd Additional Circle says in his report—

“The work ordinarily done by the Public Works Department is comparatively small in quantity and is done by the temporarily surplus labour population during the season suitable for most effective digging or else when labour is otherwise unemployed: and the ordinary Public Works Department's rates are based on these conditions. If earthwork were required in large quantities—in quantities even remotely approaching those we are dealing with—to be carried out throughout the hot weather, it would be impossible to get it done for the usual Public Works rates. I doubt whether any reasonable addition to the ordinary rates would enable us to get this quantity of work done in an ordinary year in these districts. But putting that aside it is certain that a rate of not less than Rs. 4 per 1,000 cubic feet would have to be given for the work; and probably that rate would not get any large proportion of the work completed.”

Having regard to these considerations the Chief Engineer (with whom this Government agrees) is of opinion that the following statement exhibits with reasonable fairness the

cost at which the work actually done during the famine might be done in an ordinary or non-famine year:—

	1st Circle.	2nd Circle.	3rd Circle.	Additional 3rd Circle.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.
Estimated cost of work if carried out by ordinary labour in an ordinary or non-famine year.	5,30,000	15,20,000	7,50,000	40,00,000	68,20,000

The extra cost of the work done which should be charged to famine as expenditure on relief proper and on sanitary precautions is, therefore, about 48 lakhs of rupees. The value of the work done has therefore been 59 per cent. of the total expenditure incurred, while if the cost of the special sanitary precautions taken on the works be deducted, the percentage will exceed 62 per cent.

The circumstances of the various parts of the North-Western Provinces and Oudh vary so much that figures giving for the Provinces as a whole a general average of the quantity of work done per head or the cost per 1,000 cubic feet must be of little value. But the averages for each Public Works circle are more instructive. They are exhibited in the following statement which gives the cost per 1,000 cubic feet of earthwork calculated on the total expenditure of 116½ lakhs under the head “Works”:—

	1st Circle.	2nd Circle.	3rd Circle.	Additional 3rd Circle.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Rate per 1,000 cubic feet of earthwork, dressing included, Famine Code system.	8 9 5	6 2 7	5 12 5	9 2 5
Rate per 1,000 cubic feet of earthwork, dressing included, Intermediate system.	3 5 5	3 13 11	4 0 2	5 14 8

The comparatively high scale of rates in the additional 3rd Circle is accounted for by the very reduced condition of the Bundelkhand peasantry who had passed through a serious famine in 1896, and by the circumstance that the black cotton soil of that region when baked with the sun resists the pick or shovel almost as stone does.

In conclusion, it may be mentioned here that neither the accounts prescribed in the Famine Code nor the ordinary Public Works accounts give the information which is necessary for statistical purposes, and that one important administrative lesson clearly taught by the late famine is the necessity of determining, in the first instance, what information is necessary for statistical or other purposes, and so arranging the initial accounts that the heads of expenditure and details of numbers of persons employed shall be separated in such a manner as to permit the information wanted being readily obtained. This will be provided for in the new edition of the Famine Code which is now being prepared in the light of the experience of the last two years.

CHAPTER X.

Relief measures carried out by District Officers and Private Agencies. The Indian Charitable Relief Fund.

SECTION I.—*Minor Relief Works.*

THE foregoing chapter describes in necessary detail the system of large relief works carried out under the control of the Public Works Department. But in addition, and subsidiary to these large projects under purely professional management, many small works of various classes controlled by the District Officer and his staff were also undertaken for the relief of distress. These latter works were generally known as village works, being specially intended for the relief of certain classes of the agricultural population in the vicinity of their villages. Such projects are chiefly, if not exclusively, useful to the people of the neighbourhood where they are undertaken, and they serve local rather than general public interests. The excavation of minor village tanks, the construction of small embankments, the improvements of village communications, and the removal of insanitary defects in the village site, are their chief purposes.

The Famine Code contemplates that these smaller works should be utilized in the early days of scarcity. But during the late famine, for reasons already stated, it was not found expedient to adhere to this principle. Large works under the control of trained officers of the Public Works Department were found both more effective as tests and more capable of ready expansion to meet the large and unforeseen demands which characterized the early stages of the famine. Village works, on the other hand, were found more suitable in the advanced season of the year, when the water-supply runs short, when the collection of great numbers of workers in one place is attended with danger of epidemic disease, and when it is desirable to find employment close to their homes for persons who, for one reason or another, are unable to join the large relief camps. It was for these reasons, for example, that the Public Works Department abandoned the great relief works in the Allahabad district in favour of groups of smaller undertakings.

But it is not with village works managed by the Department of Public Works that we are concerned in this chapter; but with village works controlled by District Officers without Departmental intervention. A programme of such projects was held in readiness in every district from the beginning, and a few works of the class were begun at an early stage here and there, in the affected districts, either to meet special or local urgency, or—an important reason—to test the sufficiency of the arrangements which would be required

later; but as a rule the works were carried out after the famine had fully declared itself.

For reasons both of administration and economy, it was the policy of Government to associate, as far as possible, the local landholders in the management of these village projects. The experience gained in the Bundelkhand Famine, described in Chapter II of this narrative, showed this policy to be advantageous. Accordingly in 1897 landed proprietors were encouraged and invited to contribute towards the expenditure, as well as to participate in the management, of works by which they themselves and their tenantry would be benefited. To secure such co-operation grants of money free of interest, but partly recoverable within two years, were made to landlords for carrying out village relief works calculated to improve the agricultural condition, the water-supply, and the general sanitation of their villages. Rules were drawn up (which will be found in the Appendix volume) to regulate these partly recoverable advances and the works to be constructed from them.

The dominant principle guiding the selection of these works was that they should be suitable for the employment of relief labour, while being of utility to the village community. They were permitted only in localities where relief was required; and due provision was included in the rules regulating them, for the employment and the remuneration at fair wages of the classes in the village who required relief. The works were estimated for and laid out by a civil works Inspector and were kept under inspection while in progress. The landholder undertaking the work was bound to furnish accounts and pay the labourers daily.

Under these restrictions, and subject to the control of the District Officer, the selection and management of these works was left to the landholder. He received two-fifths of the estimated cost on the commencement of work; two-fifths when it was half finished, and the remaining fifth when the final measurements showed that the project had been completed in accordance with the estimates. The landholder entered into an engagement to repay within two years a proportion of the advance, which varied from three-fourths in the case of the least distressed villages or individuals, to one-fourth in the case of the most distressed.

The sums disbursed in the shape of these partly recoverable advances aggregated Rs. 4,88,109, a substantial portion of which will ultimately be repaid by the local proprietors to whom the money was advanced. From this expenditure were constructed 1,147 tanks and 271 embankments designed like the tanks to collect and store water for irrigation purposes, besides supplementing the supply of dripk-ing-water for the villagers and their cattle. Advances under

this system were not made for the construction of masonry wells, as such works were not suitable for the employment of unskilled labour. For the construction of masonry wells, advances under the Statutory rules were given. Besides the tanks and embankments, village roads were repaired and some works of sanitary improvement carried out, such as clearing and draining village sites or filling up insanitary excavations. The works afforded employment to 8,629,788 persons stated in units for one day.

The total amount of earthwork done in works of this class is returned at 147,034,550 cubic feet; the rate falls at Rs. 3-5-1 per 1,000 cubic feet, which is cheaper than the cheapest Intermediate rate of the Public Works Department. The daily cost of each person relieved was 10-9 pies, which is about two-thirds of the average cost per head on the great relief works managed by the Public Works Department. The greater economy is doubtless due to the unwillingness of the managers to employ inefficient labour, to which reference will presently be made.

Works of this class had considerable attractions because they gave employment to labourers who could live in their own homes instead of migrating with their families to relief camps. Such conditions would naturally attract persons who would not submit to the severer test and who only needed a little help whereby to eke out an otherwise insufficient livelihood without throwing themselves altogether on State assistance. These were persons of a rather better class than the ordinary day labourer, who, however hardly pressed, would be deterred by pride or by household duties from seeking the more distant and more public relief works. The managers of village works were found to give preference to the better castes and to look more to securing economy of working than to making provision for relief. It thus came to pass that weakly and inefficient labourers were found to seek distant State relief works though village works were in progress in the immediate vicinity of their homes. From one point of view this indicates a defect in the system as a method of general relief: from another point of view it signalizes an advantage and a self-acting principle, which restricts the relief to a particular class for whom large relief works are unsuitable. The facts, however, serve to justify the preference shown by this Government for the large projects conducted by trained officials under strict rules, while they indicate that the system of village works controlled by local unofficial agency serve a very useful purpose as adjuncts to the large relief works. They afforded assistance in an economical and suitable way and under special conditions to classes of persons for which these latter works would have been inappropriate.

Closely akin to the class of works just described are small projects carried out by District Officers entirely at State

expense, in the most severely stricken districts, when the landlords were too impoverished to take advances on the terms stated above, or on any terms involving repayment. In the character of the projects, their utility and their objects, no distinction can be drawn between them and the village works constructed out of partly recoverable advances. In the selection, too, of these projects, and in their control and supervision, the District Officers sought and obtained the assistance of the local landholders and other leading residents of the localities where these works were undertaken, and as in Bundelkhand in 1886 this agency proved a useful auxiliary to the limited official staff available for the purpose.

The works constructed in this way include 324 tanks, 24 embankments, and other minor irrigation works. They afforded employment to 2,825,281 persons stated in units for one day, at a daily cost of one anna six pies per head, and represent 57,864,639 cubic feet earthwork at a total expenditure of Rs. 2,69,061: being a rate of Rs. 4-10-5 per 1,000 cubic feet.

Though less economical than the works in which the local landholders were personally interested because sharing the cost, the results do not compare unfavourably with those already reported for the large projects under professional management in the Allahabad division, where these works were nearly all situated. It will be remembered that in this division the rate for earthwork under the Intermediate system, excluding establishment and contingencies, rose to Rs. 5-14-8 per 1,000 cubic feet.

Under this head also may appropriately be treated the extensive works carried out by His Highness the Mahārāja of Benares in that portion of his Family Domains situated in the Mirzapur district in which famine prevailed. When the Local Rates Act (III of 1878) became law, the Mahārāja was (at his own request) relieved from the payment of the rates on landed property imposed by that law, on the understanding that he should on his part accept the liability for all famine relief operations which might at any time become necessary in his Family Domains. This undertaking has now been loyally discharged by the Mahārāja, who placed the control of all relief operations for the Family Domains in the hands of the Government, and furnished the funds necessary for the purpose. The system of relief in the Family Domains, which, though carried out by the Mahārāja's own officers, was controlled by the Deputy Superintendent with the co-operation of the Mahārāja's son, the Honorable Kuar Aditya Narayan Singh, followed the principles prescribed for the adjacent districts, and involved the expenditure of Rs. 1,24,559 on relief works. (There has also been expenditure on gratuitous relief to which reference will be made later on.) These works consisted exclusively of small

embankments to intercept and retain surface water for irrigation purposes—the form of work which is found most practicable and useful in the hilly part of the Domains where famine prevailed, and where the rocky soil is unsuitable for the construction of wells. The work afforded relief to 1,286,010 persons, stated in units of one day, at a daily cost of about one anna seven pies each.

Closely associated with the various relief measures organized by the State or at its expense are the operations carried out by the Court of Wards for the relief of tenants of estates under Government management and paid for out of the revenue of those estates. The functions of the Court of Wards in these Provinces are exercised by the Board of Revenue, and the obligation which rests on a landholder to assist his tenantry in times of distress naturally received full recognition on the State-managed properties. Unfortunately a large proportion of these estates are too heavily encumbered to meet any special call upon their finances.

The relief works carried out by the Court of Wards took the shape of improvements to the estates concerned, either in adding to the facilities for irrigation, repairing village roads or paths, removing insanitary defects, extending drainage, improving estate buildings or increasing the agricultural resources of the various properties. An abstract of the projects shows that they included tanks, wells, embankments, roads or pathways, drainage or irrigation channels, works promoting sanitation or conservancy, and other miscellaneous projects.

The varied character of the improvements renders it impossible to formulate by measurement the outturn of the work, or to state with strict accuracy the number of persons employed. But the returns which are forthcoming show that 1,120,356 persons were relieved on these works at an outlay of Rs. 1,12,902.

The large and flourishing estate belonging to the minor Rāja of Balrampur in the Gonda district was conspicuous for the assistance extended to its tenantry, of which, stated in units of one day, it employed 626,918, at a cost of Rs. 43,573, or one anna one pie per head daily. Some of the encumbered estates which had no surplus funds available took advances from Government to defray the cost of relief works, and others assisted their tenants by standing security for them. These works were carried out by the different Estate Managers and their staff under the control and supervision of the District Officers.

To sum up the results of the relief afforded by these minor works which have now been described, it may be said that 13,861,435, or nearly 14 millions of people were relieved for one day, at a cost of Rs. 9,92,186. The average cost per head was one anna and two pies.

Before parting from this branch of relief measures, it is right and appropriate that the Government should acknowledge the assistance furnished in the shape of numerous works which were carried out entirely at their own expense in various parts of the Provinces by private gentlemen, chiefly of the landowning classes, in order to supply employment for destitute labourers. This ancient and characteristic form of charity calls for recognition here. Though a useful auxiliary to the State or State-assisted relief works, yet it is naturally not possible to formulate with any precision the cost of works so executed, or the extent to which they afforded relief. The best estimates available go to show that they cost their promoters Rs. 3,27,758 and that they relieved about four million people for one day.

SECTION II.—*Gratuitous village relief, poorhouses, and State kitchens.*

Next after the operations of the Public Works Department by far the largest volume of relief was administered through the outdoor or village relief system, poorhouses, and State kitchens. The organization of the system of village relief has already been described in detail, and the place which poorhouses and State kitchens occupied in the general scheme has also been stated in Chapter V above. It is needless, therefore, to repeat the description here; or to do much more than exhibit the statistical and financial results of these great departments of the relief system. The following tabular statement displays the numbers who were in receipt of outdoor relief or were inmates of poorhouses on the last Saturday in every month from the commencement of relief operations in October 1896 to their close:—

MONTH AND YEAR.				Number on outdoor or village relief.	Number in poorhouses or in State kitchens.
October	1896	...	...	7,340	13,532
November	"	...	...	8,787	21,251
December	"	...	...	59,435	39,951
January	1897	...	...	232,662	67,286
February	"	...	...	263,950	51,435
March	"	...	...	252,982	80,974
April	"	...	...	262,479	31,107
May	"	...	...	284,339	38,947
June	"	...	...	330,256	42,637
July	"	...	...	357,578	48,770
August	"	...	...	334,248	34,180
September	"	...	...	197,395	10,230
October	"	...	...	605	

The number of units or persons gratuitously relieved for one day by Government under the outdoor relief system was 76,601,544; while the number of persons similarly relieved for one day in poorhouses and State kitchens was 12,272,416. The total thus gratuitously relieved for one day by Civil (as distinguished from Public Works) Officers was 88,873,960.

The cost incurred in connexion with poorhouses and State kitchens, all charges included, amounted to Rs. 10,48,922, the average cost per head of the inmates thus falling at 16.41 pies.

The total cost of outdoor relief amounted to Rs. 35,54,555, the average expenditure per head being 8.90 pies.

Besides the gratuitous relief administered at the cost of the State, similar relief was distributed under the control of officers of Government in the Family Domains of the Mahārāja of Benares and in estates managed by the Court of Wards. The expenditure in the form of gratuitous relief in the Family Domains amounted to Rs. 41,055; while in the Court of Wards' estates Rs. 59,612 were similarly spent (the Balrampur Estate contributing Rs. 41,929 out of this total). An accurate tally of the number of indigent people relieved has not been kept; but it may be reasonably put at 1½ million units for one day.

This exhausts the various channels of purely State activity: and it is now possible to present a summary of the statistical results for both the smaller famine of 1896 and the great famine of 1897.

The statistics of expenditure and relief during the Bundelkhand famine of 1896 have been already given in Chapter II. They brought, it will be remembered, the account down to the end of August 1896. September 1896 was a transition period. Famine, though imminent, had not been declared, and the small measures of relief still carried on in a few districts, which had suffered severely in the preceding summer, were more in the nature of test than organized relief. Throughout the whole Provinces the number of persons (units for one day) assisted by Government in that month was but 381,840, and the expenditure Rs. 28,869. The total cost of the smaller famine of 1896 may therefore be stated as Rs. 12,09,022, and the number of people thereby relieved as 19,881,840 (units for one day).

Taking the 1st October 1896 as the date on which the general famine began and systematic relief was again fairly launched, the numbers* relieved by the State from that date till the end of the famine were as follows:—

* Including persons relieved in the Family Domains and in Court of Wards' estates.

By the Department of Public Works	...	179,744,948
By Civil Officers—		
(a) On works	...	13,861,435
(b) In poorhouses and by outdoor relief	...	90,373,960
Total units for one day	...	283,980,343

The expenditure, according to the Department of Accounts, under the head of famine, including Rs. 3,38,127

of outlay incurred in the Family Domains of the Mahārāja of Benares and in estates under the Court of Waras, amounts to Rs. 2,03,04,817, giving an average daily cost of 13.7 pies for every person relieved. But to this should be added various charges due solely to famine, but which under the rules of the Financial Department were to be entered under other departmental heads. It is uncertain how far this method of accounts may have obscured the actual cost of the famine; but the defect, if any, will be small as the items so far traced amount only to Rs. 1,74,401 from the 1st October 1896 to the end of operations. The addition of this sum brings the total outlay for all forms of relief from 1st October 1896 to Rs. 2,04,79,218 and the daily cost of each person relieved to 13.8 pies.

If to these figures of cost and numbers relieved during the famine of 1897 be added the corresponding figures for the relief operations of 1896, it will appear that 303,862,183 or in round numbers 304 millions persons have been relieved for one day at a gross cost of Rs. 2,16,88,240, or 1.14 annas per head. Converted into sterling at current exchange, the cost falls at £1,400,000 or one and one-tenth of a penny per head.

SECTION III.—Operations of the Indian Charitable Relief Fund.

In the course of the previous narrative various references have been made to the operations of the Indian Famine Charitable Relief Fund, and to the advantages which this Fund has conferred on these Provinces during the continuance of distress. Some reports of the working of this colossal charity have already been presented to the public by the Chairman and Vice-Chairman of the Central Executive Committee of the Fund, and it is understood that when the operations are brought to a close the Committee of the Fund in these Provinces will give an account of its stewardship. But without anticipating the full details which will probably be contained in that account, it is desirable in this place to state very briefly the general outline of the history of this most beneficent bounty.

In accordance with the initiative taken by His Excellency the Viceroy at the public meeting held in Calcutta on January 14th, 1897, a public meeting, at which the Lieutenant-Governor presided, was held in Lucknow on the 25th of the same month, to form a provincial organization to co-operate with the Committee already formed in Calcutta. A General Committee of the Fund in these Provinces was elected and an Executive Committee appointed to administer the Fund under the Presidency of the Chief Justice, Sir John Edge. This Executive Committee was subsequently subdivided into two branches, one for the North-Western Provinces, with Sir John Edge as Chairman, and one for Oudh, under the Chairmanship of the Judicial Commissioner, Mr. Deas.

The Executive Committee at once took steps to bring about the formation of District Committees of the Fund for the purpose of raising subscriptions locally and, in the districts where this was necessary, of instituting and controlling measures of relief. In many districts, particularly those in which the larger cities lie, there were already in existence Relief or Charity Committees, whose objects coincided with those of the Indian Famine Relief Fund. These were utilized as District or Local Committees of the Fund.

A question which at once presented itself for solution was through what agency should the various forms of relief intended to be given from the Fund be distributed. Two alternatives presented themselves: the first was the creation of an agency independent of the Government organization already employed on the administration of relief at the expense of the State; the second was the utilization for the purposes of the Fund of the Government organization already in existence. It was decided to adopt the latter course more especially for the distribution of relief in rural tracts, but at the same time to make the fullest use of the various Missionary agencies and other charitable bodies, which had their centres of work in the great cities and to a less degree in the smaller towns, but were rarely at work outside such areas.

It is unnecessary here to give details of moneys received by the Provincial Committee of the Fund and its District Committees. Briefly it may be stated that from the beginning of operations up to the 31st October 1897, the total receipts of the Committees of the Fund in these Provinces amounted to Rs. 51,43,453. Out of this the sum of Rs. 46,68,763 was the contribution remitted by the Central Committee and Rs. 4,71,945 was the amount of the subscriptions raised in the Provinces; the remaining items of receipt were chiefly the proceeds of the sale of articles made by artizans and others whose relief took the shape of wages for work done.

The objects of the Relief Fund were thus defined by the Government of India at the time when subscriptions were first invited:—

“Government fully accepts general responsibility for saving the lives of the people in tracts in which famine prevails; and it is essential that private charity, while working side by side with, should not interfere with or overlap the operations which are organized for this purpose. There is, however, ample scope for its exercise in supplementing these operations, in mitigating suffering, and in relieving distress which falls just short of absolute destitution. Especially, private contributions might usefully be expended on the following objects:—

Firstly, *in supplementing the subsistence ration which alone is provided from public funds, by the addition of small comforts, whether of food or of clothing, for the aged or infirm, for the patients in hospitals, for children, and the like*

As guardian of the public purse, and in view of the magnitude of the calamity, Government is obliged to limit its assistance to what is absolutely necessary for the preservation of life.

Secondly, *in providing for the maintenance of orphans.*

Every famine leaves behind it a number of waifs who have lost or become separated from those who should be responsible for their maintenance. It is necessary to provide for these till they are of an age to support themselves.

Thirdly, *in relieving the numerous poor, but respectable, persons who will endure almost any privation rather than apply for Government relief, accompanied as it must be by official inquiry into, and by some kind of test of the reality of the destitution which is to be relieved.*

The feeling of the sacredness of the *parda* or domestic privacy is intensely strong in India; and it is most difficult for any official organization to reach, or even to ascertain with certainty the existence of distress of this nature.

Fourthly, *in restoring to their original position, when acute distress is subsiding, those who have lost their all in the struggle, and in giving them a fresh start in life.*

The peasant cultivator may often thus be saved from losing his holding through sheer inability to cultivate it, and from sinking to the position of a day labourer.

The efforts of the Provincial Executive Committees were carefully directed towards the accomplishment of these four objects. On the first three of these objects the total sums expended out of the Fund up to the 31st October 1897 amounted to Rs. 12,29,916, of which Rs. 9,07,157 was paid out in the North-Western Provinces and Rs. 3,22,759 in Oudh. On the fourth object—which in the opinion of the Lieutenant-Governor was from the beginning the most important, seeing that the Government had from the outset charged itself with the prevention of starvation—the sum spent was Rs. 35,38,403, of which Rs. 24,93,792 pertained to the North-Western Provinces and Rs. 10,44,511 to Oudh. Including a charge of Rs. 11,664 for the working expenses of the 46 Committees existing in the Provinces, the total sum expended by this great and bountiful organization up to 31st October 1897 therefore amounted to Rs. 48,28,486. On that date these numerous Committees had in hand a balance of Rs. 3,14,966 which was in a large part in process of distribution for the purchase of seed for the spring sowings.

Out of the remaining balance, and with the assistance of a further special contribution expected from the Central Committee, provision has still to be made for the maintenance for some years to come of the orphans and waifs whom the famine has sent adrift: this being one of the declared objects of the Fund.

It is not possible at present to state the exact number of persons who were relieved through the agency of the Fund. Detailed reports and statistics from every district are now

being received and examined by the Provincial Committee, and a complete statement of relief is being compiled. But from the periodical returns, which furnish the only information at present available, an approximately accurate calculation may be made of the total number relieved for one day. For the first three objects of the Fund the numbers reduced to units for one day are these—

I.—Number of persons in receipt of Government relief who obtained "additional comforts" for one day ...	7,289,217
II.—Number of orphans relieved for one day, towards whose maintenance the Fund contributed ...	215,063
III.—Number of respectable poor gratuitously relieved for one day ...	21,801,764
Total ...	29,306,044

Besides these, 416,031 different families shared in the distribution of Rs. 35,38,203 for the purchase of plough-cattle and seed grain and other necessities of their calling. The average donation to each family thus appears to be about Rs. 8-8-0. But a certain number of the payments under this head were to labourers for tools, to weavers for yarn, and so on; and as these payments were all of small amounts, the average payment for plough-cattle and seed grain only would be considerably higher, probably over Rs. 10 per family. If the average family be taken at five persons, the number of persons who benefited by this form of distribution will exceed two millions.

The statement of the objects of the Indian Famine Charitable Relief Fund, which has been set out above, shows that the Fund was not established with the idea of displacing or dispensing with the Government relief. The relief given at the cost of the State had never been confined within definite limits. As has already been mentioned in the course of this narrative, the necessity of the sufferers had been accepted by the Government as alone setting metes and bounds to the assistance to be given; this principle had inspired the design of the relief measures and had guided their execution. The action of the Fund came, therefore, as supplementing and not as superseding the operations of the Government; but in that sphere it had an enormous effect in alleviating the lesser hardships which existed, while the worst effects of the famine were being removed by the Government relief. Undoubtedly, however, the greatest result of the Fund has been the widespread efficacy of the gifts made for the purpose of "restoring to their original position those who had lost their all in the struggle and giving them a fresh start in life." Overwhelming testimony has been received to the excellent effects which the Fund working through this channel has produced. The tale of this great bounty

will remain with the people as an abiding memory of the large-hearted charity of the English-speaking public.

Besides the bounty offered by the Indian Famine Charitable Relief Fund there have been other manifestations of charity from outside India, such as the distribution of grain by charitable America; the distribution of clothes sent by the Marchioness of Dufferin and Ava; the distribution of money by Lord Radstock's Fund, called "Christian succour to India." And besides all these there has been a free and generous distribution of charity by the well-to-do landed proprietors and merchants throughout the country. It is not possible to quantify or gauge the extent of this last mentioned charity; but it cannot be doubted that it has had a great effect in mitigating the effects of the famine: and it therefore merits grateful recognition in this place.

CHAPTER XI.

Food supply, Prices, and the effect of high prices on Crime.

In the earlier part of this narrative it has been shown that from the outset it was the policy of the Government to leave the food supply entirely to private trade and to rigidly abstain from all interference with its operations. It would be superfluous in this place to array the overpowering arguments in favour of this policy, which strictly follows the principles laid down by the Indian Famine Commission. Its best justification will be found in the practical success which has attended it.

When prices rose to the extreme level which they attained in the autumn of 1896, representations were made to the Lieutenant-Governor by public bodies, associations, and even by Government officials, who considered that the State could usefully and effectively undertake to regulate prices by engaging in the import business or by controlling the public sale of grain at beneficial rates. An instance of such representations has been already quoted. This Government, however, from first to last adhered to the principle of non-interference. In one or two instances in isolated tracts where there was some doubt whether the resources of the petty village traders would be equal to the task of importing the grain required for consumption on relief works and in remote villages, discretion was given to local officers to assist such traders if necessary with money advances; but this discretion was little used. Private trade everywhere and always proved equal to maintaining and distributing an adequate supply of food grain even in the most distressed and most isolated tracts. There can be no doubt that this would have been impossible but for the extensive railway communications which now exist in all parts of these Provinces, whereby the wheeled traffic and pack-cattle were set free to spread the grain among the villages from the nearest railway stations. A generation ago (in 1867) Mr. Girdlestone, summarizing the lessons of previous famines, insisted upon the futility of attempting to supply the deficiency of the harvests by importation. He quoted figures to prove that the cost of moving as much as 400,000 tons into the distressed tracts would be absolutely prohibitive, while Mr. (now Sir John) Strachey gave reasons for holding that the total carriage of the Provinces would not suffice to convey one-tenth of the 800,000 tons required to feed the Rohilkhand division alone. Since those distinguished gentlemen wrote a revolution has taken place in the condition of internal trade. People no longer in famine times migrate or move to food; food is now moved to them. The railway traffic returns now show

that for nine months alone, from October 1896 to June 1897, the rail-borne imports of food grain were 645,628 tons and the exports 306,377, while this vast and beneficent trade movement was effected not only without difficulty or apparent effort, but with great pecuniary advantage to the State.

Of these imports nearly 325,000 tons came from Bengal, the greater part being Burma rice carried from Calcutta.

Besides the usual traffic returns furnished by the Director of Land Records and Agriculture a special record has been maintained since the 30th January 1897, showing week by week the imports and exports of food grain by rail for each district of the United Provinces. Both of these sets of returns are printed as an Appendix to this narrative. They display certain discrepancies, due to the difference in the time which they cover, to the different systems on which they are prepared, and possibly to some difference in classification. The Director's returns are quarterly and prepared by large territorial blocks, and do not show transfers from one district to another within the same block. The Railway return is weekly, and shows the imports and exports of each district irrespective of the place of despatch or distribution. Both are confined to rail-borne traffic.

During the Bundelkhand famine in the summer of 1896 the net imports of food grain into the affected districts amounted to 27,500 tons. The balance required for consumption during the period was supplied by local stocks, which were thus much depleted. In the last quarter of 1896 the net Provincial imports came to about 168,500 tons, of which more than half was received by the Allahabad division and over a quarter by Agra. The Benares block, including the Benares and Gorakhpur revenue divisions, was the only other large importer. At this particular time the Meerut division, in spite of its prosperous condition and its good harvest, gave little assistance to the distressed parts of the Provinces and on the whole showed a net balance of imports. The only exporting division was Rohilkhand, which sent a substantial amount of grain to Meerut and to the Panjáb. It may be inferred that the greater prosperity of Meerut enabled its people to retain their produce either as a precaution against threatened distress or in hope of higher prices later on; while the more necessitous peasantry of Rohilkhand were compelled to part with a portion of theirs. The vast bulk of the net provincial imports came from Calcutta and other places in Bengal. The Panjáb supplied practically nothing; but the Central Provinces, in spite of their own distress, sent 16,600 tons; and the Bombay Presidency and Port nearly 8,000.

In the first quarter of 1897 the Provinces received a net import of about 1,92,000 tons, of which over 70,000 tons went to the Allahabad division. Rohilkhand in this period was obliged to import about seven times the amount it had parted

with in the previous quarter, drawing its supplies from Bengal, the Panjáb, Oudh and Meerut. The Meerut division again appears as an importer to the substantial amount of about 25,000 tons. The Bulandshahr district alone in this division was up to this an exporter of grain, and that in comparatively small quantities. It might have been expected that these districts, which had enjoyed good harvests, would, under the attraction of very high prices, have exported some of the surplus stocks which they undoubtedly held. It does not appear that any considerable quantity left the division by road. The only movement of this description ascertained to have taken place was some export from marts in Aligarh to Gwalior, stimulated by State advances made to Gwalior cartmen, who found profitable employment in carrying grain by road from Háthras and other marts outside Gwalior territory. The explanation seems to be that the peasantry of the Meerut division, who had suffered much in previous famines, held up their produce till the prospects of the future should be assured. This was in fact done everywhere; but the Meerut people could afford to do it on a larger scale than others. There was a general apprehension abroad that the cycle of bad seasons had not ended and that it would be prudent to hold all surplus grain from one harvest till the next had been gathered. Even the usual supply did not therefore come into the local markets, and imports were required to provide for the townspeople and for that section of the population which has to purchase its food. Certain staples also, such as gram, of which the local production is inadequate, could only be supplied by importation. This explanation, which has been tested by local observation, gains further support from the large export from Meerut which set in during the second quarter of the year. As soon as the magnificent spring harvest of the division had been secured, every district in the Meerut division commenced to send away grain in large and increasing quantities. During the second quarter of 1897 the returns for the division showed a net export of nearly 73,000 tons, of which about two-thirds had gone to the needy districts of these provinces and a large amount to Calcutta, Rájputána, and Panjáb.

During the remaining months of the famine the Meerut division continued steadily to dispose of its surplus, and was able out of its plenty to contribute to the wants of those less fortunate tracts which were obliged to seek their food and seed grain outside their own borders.

During this second quarter of 1897 the Provinces, reinforced by the spring harvest, had become more than self-supporting. The outside supply fell off and the export rapidly increased till the quarter ended with a net export of 21,245 tons. The Allahabad division continued to absorb food, but it now obtained its supplies largely from the more favoured parts of the

North-Western Provinces and Oudh. A considerable amount of Burma rice continued to pass in through Calcutta; but, on the other hand, a large movement of grain set in towards Bengal and the seaboard, and the Central Provinces began to take back the supplies they had sent during the two previous quarters. The Gorakhpur division was now exporting largely; and many of the Oudh districts, where the spring wheat had proved unusually good, were disposing rapidly of their surplus. The movement of grain continued to be considerable during the next three months, when the Provinces sent away a net balance of about 14,000 tons. The great bulk of the supplies available in the well-stocked districts found their way to the more destitute parts of the province where the highest prices prevailed. During the whole period the Meerut division continued to export largely; while the canal-irrigated districts of the Agra division began to part with their stocks in July when the prospects of the autumn crops became favourable, and this movement increased as those crops were reaped. The Gorakhpur division maintained a brisk export through July; but the business slackened towards the middle of August as the local stocks became depleted and the new harvest had replenished other markets. By the beginning of September the Gorakhpur district had begun to import grain. Rohilkhand wavered between exports and imports; only the district of Bijnor continued to draw its supplies steadily from outside till the early autumn staples were ready. The districts of the Lucknow division during these three months imported steadily, except Sitapur and Kheri, whose superior harvests enabled them to dispose of a large amount of produce. The Fyzabad division also showed its return towards prosperity by the steady, though moderate, balance of its exports during these months.

The Benares division continued a steady importer even after an excellent autumn harvest would have enabled it to sell largely. This circumstance cannot be attributed to any deficiency of its stocks or produce, and unless its grain was removed by river traffic and so escaped registration (which is probable), it must have accumulated large stores.

The Allahabad district continued all through to import large quantities of food, much of which was re-exported from Cawnpore to the distressed districts of Bundelkhand. This movement began perceptibly to slacken in September, when the early crops had ripened and food became available locally. The Provinces as a whole recovered rapidly during this period.

In reporting to the Governor-General in Council on the general condition and prospects of the Provinces in the end of November 1896, the Lieutenant-Governor made the following observations:—

“In regard to the question of food supplies and private trade, the only measure which the Lieutenant-Governor and Chief Commissioner has been able to suggest was the reduction of railway freights on food stuffs

consigned to these provinces. All that could be done in this way has been done by the Government of India, and no further measure seems practicable, unless a departure be made from the principle of non-intervention with private trade. But the Lieutenant-Governor is strongly averse from such a departure and has publicly expressed his aversion. It is true that the prices of food grains throughout these Provinces at the present time are phenomenally high and that the list of prices current present many of the features, notably that of approaching equality between the prices of the coarsest and the best food grains, which characterize famine times. But trade at the present time is active. Without pretending to accuracy on the question of food stocks available in the Province—a matter on which, indeed, accuracy is unattainable—the Lieutenant-Governor believes that there is an ample supply for three or four months; and even should this supply not receive the full accretion from the *rabi* crops which is to be reasonably expected, still he thinks that private trade may be fairly trusted to make good the deficiency. At all events, there is nothing in the present condition of things which induces Sir Antony MacDonnell to recommend any interference with the free play of private trade."

These anticipations were fully realized.

The figures already given and those printed in the Appendices to this narrative deal exclusively with rail-borne traffic. The only road or river traffic at present systematically recorded is that inconsiderable traffic which enters from Nepal and Thibet. The railway traffic shows with sufficient accuracy the trade between the entire Provinces and other parts of India; but the present returns take no account of the extensive road traffic which is the largest distributing agency between district and district. It has been ascertained, for instance, that a large and steady movement of grain went on by road from Cawnpore and Allahabad into Bundelkhand, and no doubt drained off a large portion of the net rail-borne imports shown against the former districts. Observations made at Kálpi, where the road from Cawnpore to Jalaun crosses the Jumna, showed that the road imports at that point were not far short of twice the amount brought into the whole Jalaun district by rail; while at a crossing higher up the river the imports are reported to have much exceeded those which entered by the Kálpi route. The road imports into Banda and Hamirpur were also very extensive and probably very much in excess of the rail-borne supplies. It is impossible, therefore, in the absence of any record of road traffic, to say how far each of the distressed districts was fed by imported grain.

During the spring and summer of 1896, prices throughout the Provinces generally reached a level which had been attained in the past only during times of famine. But still, even in the Bundelkhand districts where distress prevailed, the price of food grain did not rise above 21lbs. or 22lbs. for the rupee for the better staples, while coarse grain was procurable at 30lbs. or 32lbs. In the middle of September, when the apprehension of a general failure of the crops began to spread



Notes—(1). The black lines represent the average price of wheat, and the red ones that of the cheapest grain for the time being in eight marts of N.-W. Provinces and Oudh, viz., Jhansi, Cawnpore, Benares, Lucknow, Meerut, Bareilly, Gorakhpur and Agra.

(2). The fine lines denote the prices for the years 1896-97, and the bold ones those of the normal year 1891-92.

the average rates throughout the Provinces as a whole were 20½lbs. of wheat and 27½lbs. of coarser grain per rupee. As the weeks passed without rain prices rose rapidly. In the middle of November, when the loss of the autumn harvest had been established beyond hope of retrieval and the prospects of the spring sowings were at their worst, the average prices had risen to 15lbs. of wheat and 20½lbs. of the cheapest grain per rupee. Nor was this the rate in famine districts only, but the average deduced from prices current in the leading markets throughout the Provinces. The normal prices, ascertained for the purposes of the Famine Code, were 29½lbs. per rupee for wheat and 40 or 41 for the cheapest of the coarser grains. The price lists printed in the Appendix volume will show how little prices varied between the worst and the best districts. The difference cannot even be measured by the cost of carriage. Sometimes the rate of a particular grain will be found quoted higher in a well-stocked Meerut district than in a market of afflicted Bundelkhand. Prices were in fact artificial and highly sensitive, and were influenced by considerations which it was often impossible to ascertain or gauge.

The 15th November 1896 marks the highest level reached by prices. The favourable rain which fell at the end of that month entirely altered the prospects of the spring crops, and the demand for seed grain being satisfied, prices began to fall. The relief was slight, but it served to restore confidence, which the steady rise of the previous two months had shaken.

December, with many variations, saw on the whole little or no improvement. In January 1897 the prospects were better, and by the end of the month prices had slightly relaxed. Wheat had in many places exceeded 18lbs. to the rupee, and on an average of the leading markets stood at 17½lbs. The coarser grains, however, showed little tendency to a relaxation of price, with perhaps the exception of common rice, which was influenced by the large importations which had set in from Burma. But the improvement was not generally maintained. The high winds which blew during February caused a good deal of apprehension and anxiety concerning their effect on the outturn, which reflected itself at once in prices, and February ended no better than it had begun. By the middle of March, however, this panic had worn out; it had become evident that the crops on all the better lands were turning out well, and by the end of March a decided fall in prices was manifested, which naturally showed itself chiefly in the main staples of the spring harvest. Some of the autumn grains on the other hand began to show signs of exhaustion. Wheat now averaged 20lbs., and in many places sold for 22lbs. per rupee. Barley, now the cheapest of the coarse grains, reached 25½lbs. per rupee, and in a few of the better-stocked markets went up to 29lbs. and 30lbs. April brought slightly easier prices; but after that month the tendency became

retrogressive. Wheat rose slightly till the middle of June, and made another small slight advance in August, and thenceforth showed little tendency to relax till after the demand for seed grain in October had been satisfied.

The coarse grains wavered in price through June and July as the prospects of the harvest rose and fell. In August they began to decline as the new grain approached maturity, and by the end of September were decidedly easier. There was no longer any scarcity of food in the country, although the market quotation showed the quantity procurable for one rupee to be no more than 30lbs. But the market was no longer a gauge of the quantity of food available. Throughout the villages the early millets and maize could now be obtained at a reasonable rate and in sufficient quantities for local consumption, though they had not found their way in bulk to the central markets.

The leading features in the history of prices during the famine period may be briefly stated. The first was the high level to which prices attained and the persistence with which they remained at that level. The second was the extreme sensitiveness of the market to every passing influence, the oscillations however being within narrow limits, and the close and very persistent approximation in price between wheat and the cheapest of the coarser staple food grains. This characteristic has been observed in previous famines, but was never so marked as on the present occasion. The outturn of the autumn harvest in 1896 brought no relaxation, and the extensive imports left prices unaffected. The large addition made to the food-supply by the spring harvest of 1897 effected a much smaller improvement than there was reason to anticipate. It was confidently expected that when the prospect of a good autumn harvest in 1897 was assured a sharp fall in prices would at once set in. But this expectation was not realized. Though crops of perhaps unrivalled excellence have been now assured, and though food has now become abundant in the rural tracts, yet the rates in the larger markets, by which the prices current are ruled, gave way slowly and up to the end of October had not reached a point which taken by themselves would indicate the return of plenty. Making every allowance for the casualties of preceding seasons, for the extensive failure of the autumn crops in 1896 and the short spring harvest of 1897, and for the scarcity prevailing in other parts of India, it would still be unsafe to ascribe the phenomenally high prices of 1896-97 altogether to depletion of stocks and exhaustion of supplies. In the very distressed districts where the crop failure has been continuous and severe the phenomenon is intelligible. But it can be scarcely said that throughout the country generally the character of the late harvests has been such as to explain the extraordinary and persistent enhancement of prices which occurred.

It may be that the slow-acting influences of currency and trade have contributed at this epoch a certain stringency to prices that might have been expected at an earlier stage in financial history, and it may be that such stringency has come to stay. But passing over this speculative aspect of the question there is something in the relation of prices to stocks during the famine period which remains unexplained.

The estimate already given of imports and exports and the movement of prices make it reasonable to believe that, taking the Provinces as a whole, the food supply in existence never fell below the requirements of the people. Though in some tracts the local resources were undoubtedly deficient, yet in other parts there were surplus stocks which the very high prices that prevailed would, under ordinary conditions of trade, have drawn towards the depleted districts. As soon as such trade movement set in, the Provinces ceased to import, and commenced even to send away grain to other Provinces. It may be inferred that prices were kept up at least as much by an anticipation of still worse scarcity to come as by the pressure on stocks which existed at the time. Popular opinion imputed this to the action of the large holders in central markets, anxious to hold out for still higher prices. As in Judæa of old, this led to vehement feeling:—"He that hideth up corn shall be cursed among men; but a blessing on the heads of them that sell." But all the facts and probabilities point the other way. They go to show that the stocks in the hands of traders were abnormally low, and that such grain supplies as existed were largely retained in the possession of the cultivators and those petty dealers whose transactions do not extend beyond their own villages. When the deficiency of previous seasons was followed by the failure of the rains in 1896, a belief gained general prevalence that the country was on the eve of a famine of great intensity and duration. Every cultivator retained all he could from the produce of his fields to meet the wants of his own family and relations in the coming time of trial. Prices are regulated by the stocks in the hands of traders, and they kept up because the markets were starved by the retention of produce in the hands of the non-trading classes.

This explains why, with each successive harvest adding to the supplies, prices failed to show any adequate relaxation.

It explains why village prices after a successful harvest were much cheaper than the prices in central marts.

It explains why the canal-irrigated districts, in spite of excellent crops, continued to import grain till the bountiful yield of the spring crops found the cultivators' granaries still stocked with the produce of a previous harvest.

It accords with the circumstance, already noticed, that the prosperous peasantry of Meerut were able to hold up their grain while the more necessitous people of Rohilkhand, Oudh and Gorakhpur were compelled to part with much of theirs.

Some further confirmation of these suggestions may be found in the character of the people who resorted to relief works. The vast bulk of them were drawn from the landless classes, day-labourers, and workmen who were not themselves holders of land. The cultivating classes formed a small proportion of the relief workers. Doubtless the high prices they had previously got for their produce increased their power of resisting the pressure of hard times.

If this explanation is correct, if the rural population were both able and willing to husband their resources through such a period of deficient harvest, and if they have begun to lay by in times of prosperity and high prices (the latter largely the result of improved communications with great markets), then it must be recognised that they have shown a spirit of providence, as they have certainly this year exhibited a power of resistance to pressure of scarcity, hitherto unknown in these Provinces.

Reference has more than once been made in the course of this narrative to the law-abiding and patient spirit displayed by the body of the people at a time when the temptations and the opportunities for crime were great. This spirit is reflected in the crime returns of the period.

Crime in its bearing on famine and famine relief may be divided into two heads: *first*, the crime which is associated with turbulence, violence, public disorder, or concerted outrages in which whole classes of the community are associated; *second*, that simple or ordinary crime which is the natural outcome of privation and distress. The prevalence of crime of the first category would indicate a failure of relief organization and of administrative measures to secure the protection of property. The prevalence of crime of the second kind is an indication, and can be used as a gauge, of the extent of distress. Crime of the first class was conspicuously moderate in its character and dimensions during the famine period in these Provinces. Cases of rioting and unlawful assembly were less frequent than in ordinary years. Arson is a crime which experience shows to be attendant on famine and indicative of public disorder. In the earlier months of the famine, when relief measures were in the initial stage, the attention of Government was aroused, as already stated, by a suspicious excess of such cases in some districts. This excess diminished with the growth of public confidence in the relief measures.

Another class of crime indicative of disorder is *dakāiti* and robbery. Crimes of this class were much more numerous than usual during the famine period; but very many of them were merely "technical *dakāities*," free, to a greater extent than usual, from the aggravated features which would have indicated a general spirit of turbulence. They consisted commonly of isolated cases of plunder of grain carts or stores by knots of hungry and unarmed villagers. Robberies and *dakāities* by armed, organized or professional gangs were unusually rare.

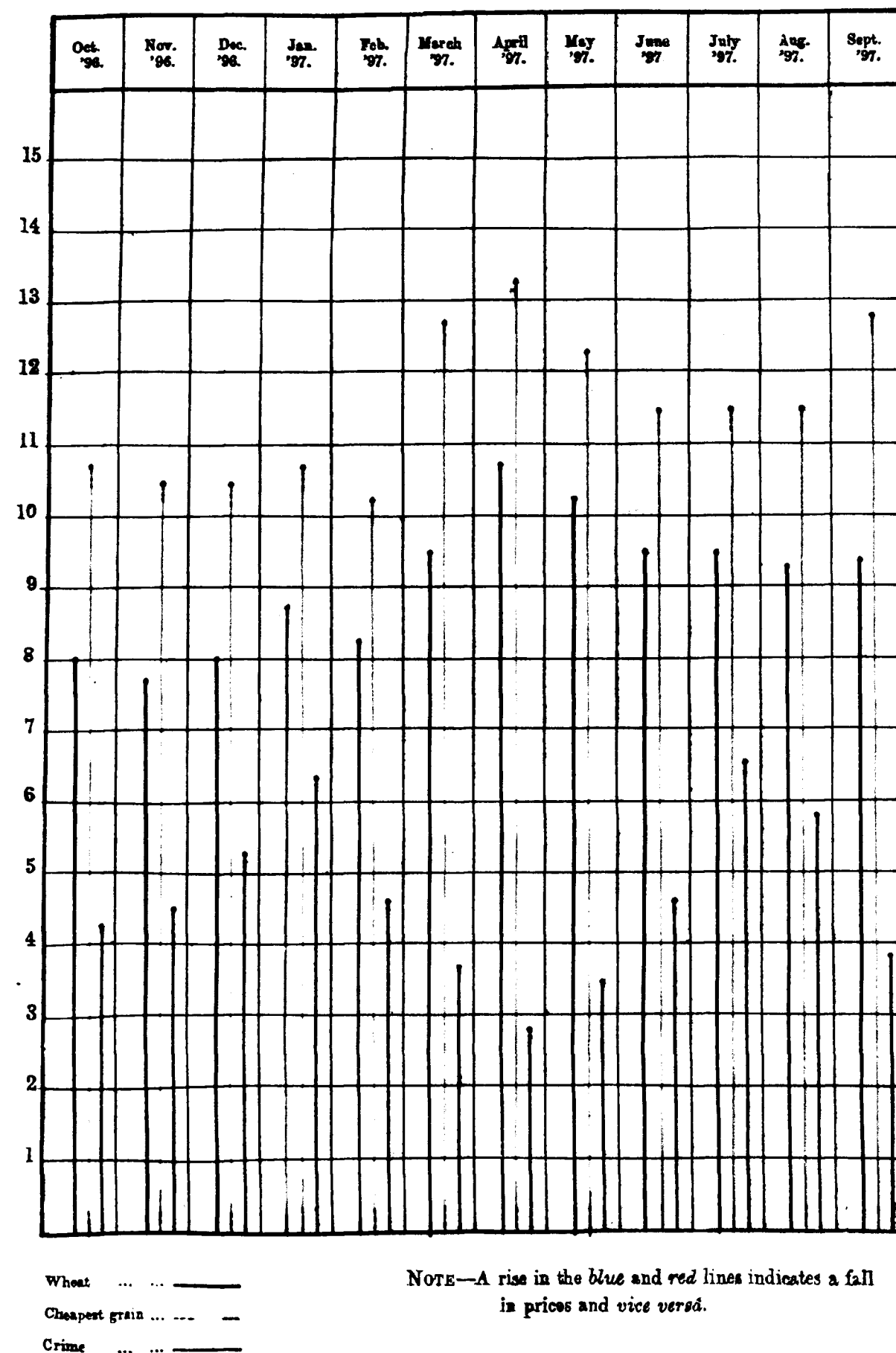
The chief increase of crime occurred under the head of those offences which are classed as theft or house-breaking according as they are committed outside or inside a dwelling. The reported cases of theft and house-breaking during the twelve months exceeded by 38 per cent. the previous year's return. But even this high total will not perhaps be thought excessive as the record of this sort of crime among a population of nearly 46 millions suffering from famine or famine prices. A large proportion of these crimes were of a very trivial description, such as pilfering or snatching of grain or other food, or field thefts when the standing crops were ripe. Petty offences of this class, committed under the pressure of hunger, were naturally and properly treated by Magistrates with exceptional lenience and generally punished by merely nominal sentences; while organized and violent crime was sternly repressed. A return of reported offences during the famine months (printed in the Appendix) shows that general crime, though of increased volume, moved on the ordinary lines. It rose as usual in the winter months, when field labour is slack, reaching a maximum in January, which was followed by a very sharp fall. The movement was accentuated by the special conditions of the year. The great extension of outdoor relief in January 1897 had its response in the extraordinarily rapid decline in crime, the fall being most marked in the crime classed as theft and burglary. The decrease continued through March and April, when the spring harvest brought both food and employment. During May crime remained stationary in some districts, but showed in others a tendency to rise which was accentuated in June and July. This movement is usual; but here, again, it was exaggerated by the desertion by the people in those months of the relief works which had afforded so much support to the labouring classes. By August the early crops were reaching maturity, and crime tended to resume its normal dimensions. By the close of the famine in September there was little to notice beyond the ordinary fluctuations and the natural results on the crime rate of continued high prices.

It may be observed that the increase of ordinary crime was not confined to the distressed districts, but was

shared by districts where there had been no general failure of crops and no distress among the rural population. No doubt the pressure of high prices, which fell heavily on all who had to purchase their food, stimulated crime even where there had been no crop failure or want of usual employment. The relief measures went far to equalize the conditions affecting crime in all districts.

There has been simultaneity, if not a closer connexion, between the movement of crime and the movement of prices throughout the year. The accompanying diagram shows that as prices rose in October and November the volume of crime increased with them and in the next two months remained large, while prices maintained a high level. As prices fell in March, crime decreased rapidly and reached its minimum in April, when prices also were at their lowest. Thereafter crime increased as prices again became more stringent and did not begin to sink till the early staples of the autumn harvest became available in the villages at the end of August. The correlation is not always exact, as other disturbing influences were at work. But the general identity of the movement is clear.

Diagram showing the average price of wheat and cheapest grain (seers per rupee), and incidence of crime per 10,000 of population, from October 1896 to September 1897.



CHAPTER XII.

Public health during the Famine period.

IN the foregoing chapters the condition of the people, the prevalence or absence of disease, and the variations of public health have been noticed at different points. But the matter has more importance than that which it possesses as part of the general narrative of the progress of events. The health and vitality of the people during the famine period form one of the most direct and conclusive indications of the sufficiency and success or the deficiency and failure of relief measures. The vital statistics have throughout been regarded and utilized in this way by this Government. They were carefully scrutinized not merely month by month, but in a special fortnightly return which all Civil Surgeons were required to submit, through the Sanitary Commissioner, dealing with the general health of the people as evidenced by the mortality, the attendance at hospitals and dispensaries, the condition of people on relief works or in poorhouses, and of those admitted to jails, and by the nature or the extent of epidemic disease. This fortnightly return was supplemented by a monthly report from the head of the Medical Department on the working of the various relief hospitals and the condition of their inmates and of the persons in poorhouses or on relief works. These returns formed a valuable guide to Government in gauging the degree of success which attended the working of relief operations and in determining the necessity for any change in its measures.

The death-rate is the best test of the sufficiency or insufficiency of a relief organization. It is now possible to apply this test generally to the operations which were carried out in the North-Western Provinces and Oudh during 1896-97.

The special arrangements for medical relief have been set forth in a memorandum by the Inspector-General of Civil Hospitals which is printed in the sequel to this report. Every considerable relief work or group of works was provided with an hospital and the necessary professional staff and appliances. Every poorhouse had also its hospital under professional control, and one or more medical subordinates were exclusively attached to the more important poorhouses. The services of five Military Surgeons and four Military Assistant Surgeons were enlisted, while the special civil medical staff amounted in the time of greatest pressure to 319 officers of all grades. The mortality among relief workers and their dependants is shown to have been extremely moderate.

In poorhouses the deaths were more numerous; but, as already explained, these institutions were really in the nature

of infirmaries. They were the receptacle of all the waifs and strays, the broken-down vagrants, the cripples and diseased, and those who lived by the exhibition of their infirmities. Here were to be found all those cases of emaciation, deformity, and wasting disease which have come to be popularly regarded as types of a famine-stricken population. In the poorhouses, too, might be found those persons who persistently neglected or refused the means of relief till they were picked up in a prostrate condition and carried to the nearest relief centre. When restored to strength and drafted to works, they would usually abscond and again wander aimlessly till strength failed. The famine produced many instances of persons who had to be saved more than once in spite of themselves. Naturally the mortality in poorhouses in severely distressed tracts was high.

The comparative freedom from illness, especially of an epidemic character, in the relief centres, and the low death-rate must be ascribed to the measures taken to secure sanitation and a good supply of pure water and to check epidemic disease on its first appearance. This matter has already been briefly treated in connexion with the operations of the Public Works Department; but as it is believed that the sanitary organization on this occasion is an entirely novel feature of relief administration it may be well to state in more detail the shape which this organization took. The rules under this head and the manner in which they were carried out are thus summarized by the Sanitary Commissioner in a valuable memorandum which accompanies this narrative:—

“Wells likely to be used for drinking water by labourers on relief works should be examined and, if found pure, should be guarded from contamination for a week before required, and the water-supply arrangements perfected before the labourers arrive. Foul wells should be absolutely closed. Should cholera break out, the wells should be disinfected at intervals of two or three days with permanganate of potash until the labourers are split up and drafted off to other works.

“From the labourers, Bráhmans should be selected to draw water from the wells for Hindus, and Kahárs to distribute it. The vessels employed in drawing and distributing the water should be ordinarily of metal, and scrupulously clean. Kerosine tins have been found to be most useful and acceptable.

“A superior medical officer should inspect periodically (1) the relief labourers on relief works not of the Article 65(a) class; (2) the sanitary and medical arrangements in connection with such works; and (3) poorhouses and hospitals.

“The Famine Code (section 85) provides for the erection of latrines. These should usually be on the trench system, and provided with grass screens.

“A line of flags and posts should be placed all round each relief work, and 300 yards from the same, and great care should be taken that no nuisances are committed within the area enclosed by such flags and posts.

“Medical officers in charge of hospitals and relief works should very carefully watch for the occurrence of any cases of relapsing or famine fever, and immediately isolate any such cases.

“Provision for the immediate isolation of cases of cholera, small-pox or other epidemic disease should be made at each work. Grass huts, which can be subsequently burnt, will usually be the best form of isolation hospital.

“These orders were carefully carried out. As a rule latrines at the headquarters camp on a relief work were on the trench system, and posts and flags were placed round the constantly-shifting bodies of men on road works. Where works were of a more permanent character, as for instance the digging of a tank, trenches were used. The areas were usually kept very fairly clean. Probably, however, the most efficient measure was the careful custody of the drinking supply. Particular pains were taken that people did not dip their own *lotas* or vessels into the wells, but received the water from the hands of specially-appointed water-carriers, both Hindu and Muhammadan. Along the relief works water was conveyed in water-carts for the use of the labourers. In some localities the drinking water was thus carried from a considerable distance. All doubtful wells or sources of supply were kept closed under a guard. When disease broke out, or a move was contemplated, search parties went in advance to select the sources of supply and protect them. Such search parties had also to ascertain that epidemic disease did not exist in villages in the locality to which the workers were moving. Sometimes irrigation wells in the fields were cleaned out, disinfected, and used in preference to the masonry wells, as being less likely to have been polluted. Disinfection of wells with permanganate of potash was not practised only when disease was present; it was commonly adopted if any doubt whatever existed as to the character of the supply. There is no doubt as to the utility of such a proceeding; only experience showed that to be efficacious it must be practised every three or four days.

“Where works were vacated on account of cholera, the small huts of infected gangs were burnt and not allowed to be carried on to the next camp. Disposal of bodies was carried out by specially-appointed men.

“The character and condition of the food was watched. Where necessary, local officers increased the appointed ration in particular cases. Hurtful grains, such as “khesári” dāl, were excluded from the works, and vegetables and antiscorbutics were regularly supplied.

"The same principles were carried out in poorhouses and hospitals. As regards the former, rules are laid down for their conduct in the Famine Code; but as the result of observation it was considered desirable to supplement them by suggestions which were accordingly prepared and issued by Government.

"These arrangements, which were settled and agreed upon before the institution of relief works, worked without difficulty, and the people soon fell in with the scheme. The Sanitary Commissioner, the Special Famine Medical Officers, the Civil Surgeons of districts, and the Deputy Sanitary Commissioners visited and inspected the works and camps at intervals, and the Public Works officers in charge of the gangs selected and appointed the subordinates from among the workers. Weekly reports were submitted to the Sanitary Commissioner's office by the Special Famine Medical officers, and Civil Surgeons and Deputy Sanitary Commissioners also reported as occasion required. Upon these reports instructions—telegraphic or otherwise—were issued where necessary. On the occurrence of serious disease or other emergent matter, copies of reports were sent by the Secretary to Government in the Public Works Department, to the Sanitary Commissioner, who was authorized to issue instructions direct to members of that Department to avoid dangerous delay. Throughout the whole course of famine relief measures no friction whatever occurred between the Public Works and Sanitary officers on the works; and it is largely to the assistance and co-operation of the former Department that the success of the sanitary arrangements was due.

"To ensure early recognition of distress in any locality, special arrangements were made. The health and condition of the general population was reported on fortnightly to this office by all Civil Surgeons, and from these reports a general statement was compiled and submitted to Government. District Officers also telegraphed the death-rates of their districts month by month.

"A circular letter was issued to all District Officers early in the year, requesting that measures might be taken so that all births and deaths in poorhouses and on relief works should be carefully recorded."

The great benefits derived from the use of permanganate of potash have already been mentioned in connexion with the operations of the Public Works Department. Its use rarely if ever excited any apprehension or opposition, on caste grounds. Its efficacy was so popularly recognised, that in some cases village proprietors applied for a supply to use in their own wells. It undoubtedly proved a most useful agent in checking disease.

Outside the relief works and poorhouses the condition of the people generally can best be judged by the recorded death-rate which will presently be given for each month. The mortality is usually in almost direct relation to the severity of distress otherwise known to prevail. It was not to be expected in tracts of country where the failure of crops had been so great and continuous as to force one-third, one-half, or even a larger proportion of the population to seek State relief, and where the grain markets had only been kept stocked by imports, that no abnormal mortality would occur. Where considerable numbers of the people had been reduced to short rations and forced to subsist largely on the less nutritious articles of diet, eking out their supplies by the use of herbs, fruit, and wild produce, it was inevitable that the diseases always attendant on famine should be manifested.

The accompanying diagrams compare in a graphic manner the rise and fall of the death-rate month by month during the famine period for the Provinces generally, and also for the famine and scarcity districts. Starting in September 1896 with a death-rate slightly below the decennial mean, the advantage was maintained in that month and increased throughout October both for the whole Provinces and for the famine districts. The mortality usually falls in November, and the year 1896 was no exception. In fact the fall in the provincial rate was rather greater than usual, and in the famine districts it was almost normal. In December, however, the conditions were reversed. Instead of the usual decrease the death-rate rose slightly throughout the Provinces though still remaining below the decennial mean. The enhancement, though not considerable, was most marked in the famine tracts. The figures for the scarcity districts remained stationary. In January the death-rate, which ordinarily would have fallen sharply, remained almost steady for the Provinces as a whole, while in the scarcity districts there was a fall; but the famine group of districts displayed a further rise; these abnormal movements brought the provincial incidence a little above the average. These months were cold and wet—conditions which must inevitably tell on the large crowds encamped on relief works. Pneumonia and allied diseases were responsible for many deaths. In February more favourable climatic conditions were established. This is the month in which the provincial mortality ordinarily sinks to its lowest point. The usual fall took place in the famine and scarcity tracts as elsewhere, and in about the normal proportion. Still following the normal movement the death-rate in March rose everywhere, but more sharply than usual. For the Provinces generally it stood in this month at 3.11 per mille against a decennial mean of 2.13. In the famine districts the proportion was 3.60 to 2.13 and in the scarcity districts 3.07 to 2.14. In April there was

some improvement. Much the same districts were affected; but there was some recovery in the worst areas, and the death-rates began to fall back towards the normal level. The provincial death-rate rose as usual in this month; but the rise was much less than normal, while in the famine tracts there was an actual decrease. In the scarcity tracts there was a slight rise. The provincial rate was now 3.19 against a mean of 2.62: for the famine districts the corresponding figures were 3.52 and 2.57, and for the scarcity districts they were 3.33 and 2.77.

During May these conditions were repeated in a more marked form. Instead of the increase which usually characterizes this month, the provincial mortality fell appreciably: the fall being most decisive in the famine and scarcity tracts. The spring crops had replenished the food supply in the hands of the rural population, while the return of the warm and dry weather rendered the conditions of life more favourable to those affected before by cold and wet. The provincial death-rate was now below normal, and even in the famine districts rose but a shade above it. The same conditions were maintained in June.

There was no excessive mortality anywhere in July, but fever began to reassert itself with the development of a strong monsoon, and there was cholera among the villages where it could not be treated as effectively as it had been treated in the relief camps, which the people had largely abandoned and were now being broken up. The death-rate (2.78) rose a little above the mean (2.45), and was heaviest in the most distressed tracts. August and September are always less healthy months than July, and this year saw the usual upward movement of the death-rate, but in a pronounced form. The very continuous and prolonged rains of these months in 1897, though extremely favourable to agriculture, were fruitful in malaria. Fever became extremely prevalent and naturally swelled the death-rate among a population weakened by long privations. In August the normal mortality is 2.73 per mille: it rose this year to 3.34 and in the famine tracts, where fever was very acute, it reached 3.96. In the scarcity districts the rise was not so marked. By September the early autumn crops were ready, food supplies had become abundant, and relief operations were being rapidly wound up. In spite of the general prevalence of a bad type of malarial fever the provincial death-rate rose only to 3.86 against a decennial mean of 3.01. In the famine districts, where the conditions were most adverse, the mortality reached 4.42 per mille. In the scarcity districts the figures rose from 3.02 in August to 3.64 per mille in September.

This autumnal fever is of almost yearly appearance; its severity varies with the rainfall: being more severe when the rainfall of August and September is heavy than when it

is light; and past experience has shown that it assumes an unusually fatal form when it comes in the train of a famine. The outbreak was therefore expected, and as soon as it appeared steps were taken to meet it by the distribution of medicines on an extensive scale. Large quantities of quinine were supplied in convenient doses to all the affected districts and distributed among the people by every available agency—free to the poorest classes and at cost price to those who could afford to purchase. Enquiry showed that the fever was not of the “famine” or “relapsing” but of the ordinary malarial type; it was not confined to the poor, but fell on all classes alike, and on all with equal effect. There are obvious limitations on the extent to which medical relief can be brought to everyone, and on the efficacy of such relief. But within those limitations the same efforts were made to avert disease which had been made to avert famine, and the mortality, though high in the most malarial districts, fell short of rates recorded during unhealthy seasons when there was no famine to aggravate the conditions unfavourable to life.

In all districts fever is assigned as the principal cause of death. This heading is very general, and probably includes most cases of pneumonic and lung diseases, so fatal to people of reduced stamina (especially the very young and very old) employed on relief works and elsewhere.

The general result was that, whereas the normal mortality in the Provinces for the decennial period previous to 1896 was 33.04, during the 12 months of famine prevalence in 1896-97 it was 36.30, giving an excess mortality of only 3.26 per mille.

An abstract of the monthly returns will show at a glance how far the mortality of the famine period rose above the ordinary death-rate in any month:—

	Entire Province.		Famine districts only.		Scarcity districts only.	
	Actual death-rate.	Normal death-rate.	Actual death-rate.	Normal death-rate.	Actual death-rate.	Normal death-rate.
October 1896	3.09	3.56	2.74	3.49	3.81	3.69
November "	2.70	3.34	2.52	3.23	3.12	3.49
December "	3.01	3.10	3.06	2.86	3.12	3.31
January 1897	3.07	2.37	3.49	2.25	2.93	2.44
February "	2.68	1.97	3.14	1.91	2.62	1.97
March "	3.11	2.13	3.60	2.13	3.07	2.14
April "	3.19	2.62	3.52	2.57	3.33	2.77
May "	2.89	3.04	3.05	3.01	2.97	3.10
June "	2.58	2.72	2.84	2.79	2.38	2.56
July "	2.78	2.45	3.20	2.61	2.52	2.23
August "	3.34	2.73	3.96	2.92	3.02	2.55
September "	3.86	3.01	4.42	3.03	3.64	3.01
Total	36.30	33.04	39.54	32.80	36.53	33.26

The death-rate, it will be seen, rose on the whole but little above the normal average in the famine months up to July, that is for 10 months it was only 29.10 per mille in the Provinces, or 1.80 per mille above the normal. But the death-rate increased in August and September, the

malarious season. Taking the whole period of 12 months of famine prevalence, the death-rate of 36.30 per mille may be compared with the mortality during the same period in 1893-94, when the provincial death-rate was 38.05 per mille.

The Government attaches much weight to these figures, because it can claim that in them will be found the proof that the relief organization of this famine has accomplished the object for which it was called into existence and the justification of the large expenditure which that organization has involved. That in the 12 months during which general famine and scarcity prevailed, along with the diseases which follow in their train, the death-rate should only have risen above the mean rate by 3.26 in every thousand of the population is a testimony to the success of the measures taken to secure that no section of the community should be without the means of subsistence. There can unfortunately be no doubt that some part of the abnormal mortality, however small it may have been, was due to disease induced by insufficient or unsuitable diet, and it would be rash to assert that no one during this year of trial perished from absolute want. Even this mortality would have been lessened, if not averted, had the victims roused themselves to seek or accept in time the relief which was accessible to all. The Sanitary Commissioner has thus described some of the causes which helped to swell the death-rate. Elsewhere in this narrative will be found some account of the difficulties experienced by relief officers in saving people in spite of themselves.

"Of deaths from real starvation I believe there were very few. Two factors, both very difficult to deal with, frequently operated in bringing about what might be termed an avoidable mortality. The first was the pertinacity with which the people clung to their homes even when relief works were established comparatively near. This was especially the case as regards the hill people in the south of Bundelkhand and the Allahabad district. Such people usually came on the works so reduced by chronic privation that they were unable to digest and assimilate food; and an ordinary meal often brought on dangerous, and even fatal diarrhoea. A second factor was the characteristic tendency to try and save a little money out of whatever they received. The Famine Code rations being based on what was required for fair subsistence, left little margin for such economies; and it was frequently found necessary to issue rations in lieu of wages to children and others, where the parents persisted in endeavouring to hoard up their trifling gains."

The number of deaths ascertained to be due to starvation have been recorded month by month. They amount in all to 25 deaths between September 1896 and October 1897. Each of these cases was investigated. In each the victim proved to be a wanderer, usually unknown, sometimes a migrant from some

Foreign State, who preferred a life of vagrant mendicancy and perished within reach of relief.

But though the relief measures, it may be claimed, succeeded in maintaining life, yet the reduced vitality of the people appears in the diminished birth-rate in the period which commenced nine months after the famine had set in. The statistics, set forth in full by the Sanitary Commissioner, show how the birth-rates in the distressed tracts fell off in 1897, reaching the portentously low level of .75 per mille in Banda in June—a sure indication of low physical condition in the previous October.

It is to be confidently anticipated that this low birth-rate will be continued throughout 1898, if not still later—a result for which some compensation is to be found in the increased provision which will thereby become available for fewer mouths. Thus the coming years should witness some improvement in the general physique and well-being of a population which will have lost in the infirm, the leprous, and diseased, but gained in well-nourished infants.

The Sanitary Commissioner draws particular attention to the small mortality from epidemic cholera usually so fatal among large collections of people and in communities reduced by privation. It is impossible to attribute this to any other cause than the extraordinary attention paid to sanitation and in particular to securing a pure water-supply on all relief works and in poorhouses. So far from these congregations of people proving centres for disease, it was often found that the disease originated in the villages and spread from them to the works. Where, in spite of the precautions detailed by the Sanitary Commissioner, cholera made its appearance, as it repeatedly did in certain districts, it was on each occasion successfully met by prompt transfer of the workers or poorhouse inmates to another locality, by isolation of the infected gangs, and by the protection and disinfection of the new water-supply. Over and over again were outbreaks of cholera suppressed by these measures on the appearance of the first few cases—measures, it may be added, which were only possible and effective because, on prevision of the likelihood of disease, they were preconcerted by the local officers. The success so attained is due to the skill and devotion to duty in combating these epidemics, shown not only by the officers of the Sanitary and Medical Departments, but by officials of all classes, both European and native, who were concerned in the relief operations. In each outbreak a European officer was on the spot generally within a few hours, and remained till the necessary measures had been carried out and proved effective. Several of the staff, European and native, have lost their lives in the resolute discharge of this duty: the unprecedentedly small mortality among the workers is their best epitaph.

CHAPTER XIII.

*Some reflections on measures of precaution against future
Famines.*

THIS being the first important famine which has visited these Provinces since the Famine Code was compiled in its present form, it was inevitable that alterations and modifications in various portions of the Code should be suggested by the new and very extended experience now gained. This narrative has touched more than once on circumstances which necessitated some new departure from the procedure or policy of the Code; and as these changes have been approved by results it is desirable that they should be embodied in the Code for future guidance. Steps have already been taken in this direction. In all matters of administrative policy or executive detail, then, the lessons of the famine will find their proper expression in a new and revised edition of the Code, and no further reference to them need be made in this place.

But there are other matters not of detail, but of larger moment, upon which the experience of the last two years has also thrown some light and suggested reflection. Some of them are matters which lie at the root of the prevention as well as the alleviation of famine, and in regard to them the Lieutenant-Governor desires to record some observations before bringing this narrative to its close.

In the forefront of all agencies which subserve the alleviation or prevention of famine stand Railways and Irrigation.

This narrative will have failed in its purpose if it has not made clear how large a part railways have played in recent years in the maintenance and distribution of the food supply, without which all the other relief measures would have been of no effect. The questions then naturally occur whether the experience of the famine period has shown any weak points in the railway system; whether any parts of the Provinces have been found insufficiently protected by railways; and if so, what is the order of urgency in which the protection should be supplied.

It cannot be said that the experience gained during the last two years calls for any substantial modification in the programme of railway construction which had been antecedently approved. So far as can now be seen, only three protective lines of railway, or rather the extension and linking up of existing lines, remain to be constructed: these are—

- (1) the Ghāziabad-Moradabad-Rām-nagar line ... 150 miles.
- (2) the Bareilly-Budaun-Soron line ... 60 „
- (3) the Shikohabad-Mainpuri-Farukhabad line ... 80 „

The first of these will establish communication between the Rohilkhand and Kumaun Divisions and the great Railway systems which converge on Delhi. The portion of the line between Ghāziabad and Moradabad will be of great use in developing the Meerut and Moradabad districts, and will tap important and fertile tracts of country. On the Moradabad side of the Ganges it will be a protective line, and on the Delhi side a much-needed collecting agency.

From Moradabad or some other suitable point of the existing systems to the important mart of Rām-nagar at the foot of the Garhwāl Hills, railway communication is very much wanted. Such a line would pass through a country hitherto unopened, while it will be of the utmost service to all the great extent of hill country which the existing sub-montane railways are quite unable to serve.

Communication in the Kumaun division is so difficult, and carriage so costly, that neither the railway from Najibabad to Kotdwāra, now completed, nor the railway to Kāthgodām give any substantial help to the portions of Garhwāl and Kumaun which would be supplied from Rām-nagar. In the Himālayan districts, with a population fast growing in density and harvests entirely dependent on a rainfall which is not stable, imports of grain have of late years been often necessary to prevent or alleviate distress. This import is rendered expensive at any season of the year by the nature of the country to be traversed between the existing railway system and the marts at the foot of the hills, while in the rains it is almost impossible for the same reason. A railway line connecting Rām-nagar with the existing system would therefore make a great difference in the price of grain to the natives of Garhwāl and Kumaun.

The second extension mentioned would link up the narrow gauge systems on the north and south banks of the Ganges. It would have a high protective value on a large tract of country which caused anxiety this year, though the distress in it was much less than it was in the famine of 1877-78. The necessity of protection for this area will be recognised from the fact that, with a population of 400 to 500 to the square mile, only 7 per cent. of the crops are irrigated, and that the rainfall, which averages only 33 inches, is liable to much fluctuation.

The last railway project mentioned passes partly through a country protected by canals; but when it penetrates into the Farukhabad district, it traverses country which suffers from drought. The line, therefore, would be partly protective and partly distributive, and should be remunerative.

It is not considered necessary to enumerate among the railways, whose construction is needed, the various branches and extensions of the Bengal-North-Western system which have been recognised as necessary. These are the

nexus of lines intended to supply the doab of the Ganges and Gandak, and to complete the connexion between North Behar and Gorakhpur. As it is understood that the necessity of these extensions is admitted, it is needless to dwell here upon their advantage.

When the railways now enumerated are completed, it may be fairly said that all the substantial wants of these Provinces in the way of railway communications will have been satisfied. Of course there will still remain a large field for steam tramways and perhaps light railways through the richest tracts, especially where irrigation assures a crop in all years. But these will be distributing and remunerative lines. They are not essential for protective purposes. On the whole, then, it may be said that but little remains to be done towards completing the compulsory railway programme for the United Provinces.

If the field for railway construction is gradually contracting, so also are the possibilities for the construction of useful and remunerative canals. It may be accepted as an established fact that when the Fatehpur Branch of the Lower Ganges Canal now under construction is completed and working, there will be no more water left for any considerable extension of the canal systems drawing their supplies from the Ganges and Jumna rivers. In the opinion of the Irrigation Department of this Government, the only sources of water-supply which will then remain to the Irrigation Engineer in these Provinces seem to be the following :—

Name of river.	Source and character of water-supply.
Sarda river	Snow fed; 6,000 cubic feet per second generally available.
Ken river	The Bundelkhand hills, which form the northerly and lowest terrace of the Vendhyan system. Large, deep channels, with large flood volumes and low dry weather discharges; storage possible, with high weirs.
Dhasan river	
Tons river (Allahabad)	
Ramganga river	The outer Himalayas. Large flood volumes; low dry weather discharge.
Small hill streams in Balrampur, Gonda district, and possibly in Bahraich.	
Small hill streams in Gorakhpur and Basti.	
Small hill streams in Garhwál-Bhábar	
Small rivers in Bareilly district and neighbourhood.	

There are of course many more rivers in the plains of the North-Western Provinces and Oudh; but none has any considerable volume in years of drought, and the water level is generally too much below the surface of the country to allow of the construction of an economical canal.

The Sarda River project.—The Sarda river is the only river in the Provinces, after the Jumna and Ganges, which affords a sufficient and permanent supply of water: the construction of a canal system fed by it has for many years been under discussion, and several projects have been actually prepared. The original project for the Sarda canal, to cost about six crores, provided irrigation for all the Oudh districts (except

Kheri) lying between the Gogra and Ganges, and also for parts of the districts of Allahabad, Mirzapur, Benares, Jaunpur, and Azamgarh in the same doab.

This project, however, was vehemently contested by the great talúqdárs and other landlords of Oudh, their substantial objections being that irrigation was not wanted in Oudh, that if introduced it would generate fevers; and that the intervention of the Canal official between them and their tenants would cause difficulties. In their opposition the landlords were supported by some influential and experienced officials. The opposition prevailed; and the project was dropped for a time. It was resuscitated in 1880, when drought threatened, and a modified estimate was prepared, which provided for the irrigation of the Gogra-Gumti doab only, including the districts of Sitapur, Bara Banki, and Fyzabad and parts of Lucknow, Sultánpur, and Azamgarh. This project, which was estimated to cost 3½ crores, was postponed indefinitely in 1883.

In October last year the failure of the crops threatened to be greater in Oudh than elsewhere, and the question of undertaking the Sarda canal as a relief work came again under discussion. The magnitude of the work, however, was so great, while the injury to the country, if a mistake were made, would be so far-reaching, that the Lieutenant-Governor decided not to enter on this great undertaking as a famine relief work without careful preliminary inquiry. But, in view of the possibility that the famine might continue for longer than a year, Sir Antony MacDonnell considered it desirable to come to some decision on the question whether a canal could be advantageously made or not. Accordingly Mr. M. King, Superintending Engineer, was deputed to enquire into the merits of the project, and he spent four months of the cold weather in doing so. Mr. King's report has not yet been finally considered; but it may here be said that, in his opinion, Sitapur, Hardoi, Lucknow, and Bara Banki are the only districts of Oudh into which canal irrigation could be profitably introduced. The facts to be deduced from Mr. King's report are, on the one hand, that the water-supply from the proposed canal would be for these four districts practically unlimited, that a canal could be made for about 4½ crores, which would possibly return 5 per cent. on the outlay;* and that these districts would be protected from the effects of drought, their wealth greatly increased, and about 265 square miles of shallow tanks reclaimed for *rabi* cultivation.

*The question of return is very uncertain.

On the other hand, the report shows that there are serious, though probably not insuperable, difficulties attaching to the project, arising from the high spring level of subsoil water, nature of subsoil, and drainage. The construction of

the canal continues to be viewed with disfavour by a large, though a decreased, proportion of landowners and cultivators and there is some doubt whether adequate water-rates could be realized.

The matter is still under the Lieutenant-Governor's consideration; but the facts which have been established by Mr. King's inquiries show the prudence of the decision which rejected the work as a famine relief measure.

The Ken River project.—This project, which affects a portion of the Banda district only, was prepared in 1876-77, and again examined in 1896, with the conclusion that it should not be taken up until the Betwa Canal had shown better results. Since then the Betwa Canal has irrigated about* 85,000 acres between September

* Of this, 31,000 acres only got a first watering; but the crops were brought to maturity by timely rain.

1896 and February 1897; and as the Ken project seems likely to cost about the same as the Betwa Canal cost, but to give decidedly better results, it is the Lieutenant-Governor's intention to depute an officer next cold weather to revise the Ken project and bring it up to date. It might perhaps be carried out as a protective work for about 40 lakhs, and be capable of irrigating about 80,000 acres of spring crops, besides saving a considerable area of autumn crops if the rains fail in late August and September.

The Dhasan River project.—The supply of the Dhasan (Hamirpur district) fails entirely in dry seasons, and reliance would therefore have to be chiefly placed on storage. Three projects were proposed in 1869, the most practicable of which provides for 600 cubic feet per second throughout the year, at a cost of 25 lakhs. In the case of a very dry season, however, the reservoir would be emptied by the end of March, as happens with the Betwa canal. Considerable additions to the estimate of 1869 will be required, and there is little doubt that it would cost as much as the Betwa or Ken, i.e. 40 lakhs. The project is a possible one, but not so good as the Ken river project.

The Tons River project.—A canal from the Tons river in the Allahabad district was prospected for, and some levels taken last cold weather. It would water a tract of some 96,000 acres (culturable area) south of the city and station of Allahabad. There is sufficient supply in the river to irrigate, with a little aid from storage, about half of this area in a dry spring season, besides giving help to the autumn crops if the rains ceased early. But the river, which is of the same character as the Betwa and Ken, is liable to very heavy floods, and the cost of the head works would probably be almost prohibitive considering the limited area commanded. The canal would not cost less than 25 lakhs.

The Rámghanga River project.—Several projects were proposed about 1869 for a canal from the left bank of the Ganges, which was to assist one from the right bank of the Rámghanga. There was also a project for a canal from the left bank of the latter river. These were for the irrigation of the Bareilly, Bijnor, Moradabad, and Budaun districts. They were finally abandoned in 1876 because (among other reasons) there is not sufficient water-supply at times for the existing Ganges canals; because the spring level is generally near the surface, and temporary wells can be made cheaply in many places; and because canals from the Rámghanga would cost a very great deal in comparison with the results they would be likely to produce. From this it is apparent that the prospect of irrigation from the Rámghanga is not hopeful.

There remain the possibilities of irrigation from small hill streams; but it is unnecessary to consider these in detail. Such irrigation, though beneficial to the lands served, must, without very costly reservoirs, always be on a small scale; moreover, the water level near the hills is generally near the surface; and the irrigation from these streams can have but slight effect on the general food supply, while it raises intricate questions of private rights which often militate against effective and prompt action.

It may be added, however, that this source of irrigation has not been neglected by Government, wherever it can control the course of the streams, as in the Kumaun Taráí. Even further away from the hills—as in some of the Rohilkhand districts—small rivers are more or less utilized for irrigation under Government control. From time to time a river is taken up and the system of irrigation improved; but, it is repeated, the improvement in this direction can only be in a small way.

To recapitulate. The Sarda scheme, which is one of great magnitude, has been lately enquired into and reported on, and is under consideration. The Ken project, costing about 40 lakhs, seems likely to be a useful protective work, and the estimate will now be brought up to date. The Dhasan project will be further examined should the construction of the Ken canal be put in hand. The Tons scheme is too expensive for the small area commanded. The Rámghanga schemes give no promise of success. There are no other considerable sources of supply; but improvements and extensions, in a small way, will continue to be made in submontane tracts.

The preceding observations show that, in the Lieutenant-Governor's opinion, there is not, if the great Sarda canal scheme be excluded, much scope in these Provinces for further extensions of canals. Without prejudging the conclusion he may come to on a further careful and leisurely examination of the case, Sir. Antony MacDonnell is not

sanguine that the Sarda project will be practicable. If not, then the best hope for an extension of irrigation lies in the construction of wells. Sufficient reference has already been made to the great benefit which in a single year has resulted even from temporary wells. From masonry wells, which command a perennial water-supply, the advantage is increased manifold. It should be the declared policy of the Administration to promote the construction of those wells. The construction of them should be actively encouraged by the grant of liberal advances. It has been alleged in some quarters that the state of the law of landlord and tenant discourages the making of wells—of all agricultural improvements the most necessary and the most within the tenant's reach. This is a matter which calls for examination with a view to the removal of obstacles to investments of capital which cannot fail to be beneficial to both landlord and tenant.

During the last two years the incidence of the Government assessments of land revenue upon the cultivated area has constantly engaged the Lieutenant-Governor's attention. It has been stated in some quarters that the condition of the cultivator has been, of recent years, changed for the worse by reason of excessive increases in the Government revenue, and that his power of resisting the pressure of adverse seasons has been proportionately diminished. In the following chapter reasons will be given, based on the experience of the present and previous famines, in favour of the view that, generally speaking, in these Provinces the cultivator's power of resistance has not decreased within recent years, but has improved. Still it was desirable to ascertain whether, in the Bundelkhand region especially, the acuteness of the distress might not, to some extent, have been aggravated by local and exceptional circumstances connected with the land revenue assessment.

From the personal experience of settlement operations on a large scale which the Lieutenant-Governor has had since his assumption of office in these Provinces, he is satisfied that the principles upon which the Government share of the assets of landed property is assessed are reasonable and sound, and that the various settlement authorities in carrying these principles into effect act fully up to the spirit of their instructions. But it may have happened that settlements concluded several years ago, during the cycle of prosperity, have become harsh and onerous in the adverse seasons, which have recently visited the Provinces. It is with the view of ascertaining whether, in any particular locality, the assessments of the past have fallen out of harmony with existing conditions that the Lieutenant-Governor has directed a special inquiry to be made. This special inquiry is now being conducted in the Bundelkhand region. It will, if necessary, be extended to other tracts in which the famine has been most acute; and its objects will

be to discover what the exact condition of things is and whether within recent years there has been any agricultural depression which can be fairly attributed to other than merely climatic causes. Should this inquiry bring to light that the assets of landed property have seriously decreased, either permanently or owing to temporary causes, and that the Government demand presses heavily on any estates, then a suitable remedy will be applied.

Only one word more remains to be said in this brief summary of questions which have, during the recent relief operations, attracted the Lieutenant-Governor's attention. The lesson which, above all others, famine experience teaches is the necessity for timely preparation. It is impossible, therefore, to exaggerate the importance of maintaining, from year to year, a careful watch on the character of the seasons, on the nature of the harvests, and on the condition of the people. Opportunity for insisting on this matter was recently taken by the Government of these Provinces in connexion with an interesting note on agricultural depression recently submitted by the Director of Land Records and Agriculture. It is the practice for District Officers to submit annually reports regarding agricultural prosperity or deterioration which are or should be based on the facts recorded in the agricultural registers maintained by the local kanúngos or revenue supervisors. Commenting on the shortcomings of such reports, the Government made the following remarks:—

"It is desirable that steps should be taken to derive full advantage from the information that is contained in these reports, or that should be found in them if they were properly compiled. They should, in the opinion of the Lieutenant-Governor and Chief Commissioner, embody the experiences of the individual districts during the years to which they refer. The history of past years shows that the climatic conditions of the province vary considerably from year to year, and yet that all these variations have been generally experienced at some time or other within a cycle (the length of which has been differently estimated by various authorities), after which they repeat themselves. In other words, an accurate account of the agricultural condition of the province and its individual districts for that cyclical period will afford instances of all the various forms of depression affecting a district, either as a whole or in part, to which that district is ever likely to be subject. If, then, these records of the annual history of a district for the whole period of such a cycle of years be compiled with accuracy and intelligence, and so collated as to form a connected and intelligent account of the agricultural history of the district for that period, we should have for all time a valuable and useful guide for Government and for the district officials to the weak points in the agricultural prosperity of each district, and more especially regarding the manner, the extent, and the precise localities in which it is affected by climatic variations. With this object in view it is not sufficient that these records of a district's vicissitudes should be found in annual reports. They should be carefully examined by the Director of Agriculture; where from any cause they are defective, the defect should be rectified at once; the significance of the records of one year compared with its predecessors should be noted; and after every five years all the reports should be collated and

the inferences or results set forth in a clear light. Thus a manual of the agricultural conditions of each district might, in time, be compiled, which would be invaluable to Government and to all officers to whose charge the district is entrusted in future.

"The two great dangers to which the agriculture of this country is exposed are undoubtedly flood and drought. The evils resulting from either one of these calamities have the effect of blinding the observer for the time being to the disastrous effects of the other. There are in most districts portions in which floods are the more serious evil, and to which a dry year brings relief; there are other portions in which drought has the more serious effect for evil; and yet again other parts, such as the *bhur* tracts, which suffer almost equally from excessive or from deficient rain. It is, on the other hand, fortunate that what is a serious evil in some portions of the province carries with it some compensating advantages in other parts. But with a careful and intelligent account of the effect of the climate on every district and its component parts, an account based on actual experience extending over a cycle of years, it is hardly possible that any climatic danger could overwhelm a district and take by surprise those who are responsible for its administration without their being prepared for the evils they would have to face and guided as to the measures they should take to counteract them."

It is believed that the adoption of the system indicated in the preceding extract will place a District Officer in a position to know well beforehand what he has to expect, and thus enable him to advise the Government as to the future, and to take these timely precautions which prevent surprise and thereby rob a famine of something of its terrors.

CHAPTER XIV.

General considerations regarding the condition of the people, and the power of resistance to distress displayed by them.
Conclusion.

ALL inferences as to the economic condition of the Provinces must no doubt be qualified by the extent and effectiveness of the relief system; but discounting this, the belief may fairly be entertained that the agricultural classes were not without resources which enabled them to oppose on this occasion an unwonted resistance to an unprecedented pressure. For this belief many reasons can be given. In the first place, this famine period was free from that general lawlessness and disorder which characterized the famines of the earlier part of the century. Without labouring a comparison or insisting on conclusions from statistics which are often too imperfect to admit positive conclusions, it may be said that the narratives which have been preserved of the earlier famines down to the famine of 1837-38*—both before and immediately after the introduction of British rule—leave no doubt as to the social conditions which prevailed at such times. Each story is one of rapine, plunder, and desolation: the strong preying on the weak, the effacement of law and order, and the wholesale abandonment by the people of the tracts of country in which famine existed. The contrast between the past and the present is wanting in minute detail; but the broad lines are clear and unmistakeable.

* The official record of this famine states as follows:—
"The beginning of trouble in 1837-38 was marked by a spirit of lawlessness and freebooting throughout the country. Neither the stores of the merchant nor the grain in transit was safe from attack. The starving people forgot all rights of possession, and violently laid their hands on their neighbours' supplies. In almost every district a larger police force had to be entertained, and this item added in no small degree to the burden of Government."

Again the history of the earlier famines shows them to have been invariably accompanied by migration on a large and organized scale from the distressed tracts. As soon as the crop failure and the exhaustion of food supply were declared, a movement of the population set in towards those parts of the country where either the information or the traditions of the people led them to expect that food and work could be found. Such records as exist of famines which occurred in the last century or in the early part of this century show that whole tracts of country were thus left desolate by the withdrawal of a large part of the population, and that the affected districts took years to recover from the loss of their population.

This feature of famine times was conspicuously noticed as late as 1837. In 1860-61, and again in 1868-69, extensive movements of the population were observed either in the

shape of migration from one part of the Provinces to another, or of emigration from the affected parts of these Provinces towards the country lying outside, or the immigration from Foreign States of people attracted either by the greater prosperity or by the existence of relief measures in this territory. Even in 1877 there was much migration and wandering of the people within the Provinces, and there was a very noticeable movement of emigrants from Native States into or through certain British districts. In strong contrast with this characteristic of previous famines was the entire absence during 1896-97 of any organized movement among the people, or even of desultory wandering on any noticeable scale.

The foregoing narrative has, indeed, shown that a substantial number of emigrants from Native States found their way to the relief works and poorhouses of parts of these Provinces; but even here there does not seem to have been any concerted or considerable movement of the population of these States. It is true that on this occasion there was no general failure of fodder, and therefore that incentive was wanting which leads pastoral or agricultural communities to wander in search of pasturage for their cattle. This, however, goes but a small way towards explaining the unusual stability displayed by the population on this occasion. A fuller explanation is to be found in the measures of Government which encouraged the people to settle quietly in their homes under the assurance that they would receive such protection and support as the resources of Government could extend to them. Undoubtedly this tranquillizing influence had very great effect; but with full consideration for all these exceptional circumstances, it is probable that, unless there had been some very substantial improvement in the economic conditions of the Provinces, the migrations in search of food and labour, which characterized earlier famines, must have been repeated, even though on a diminished scale.

Another argument in support of the growing substance and wealth of the people is to be found in the rapid recovery of agriculture, which characterizes recent famines. This recuperative power has been of gradual, not sudden, growth. In the absence of agricultural statistics it is impossible to formulate a precise comparison; but from such general accounts as exist some inferences may be drawn.

The contemporary accounts of the condition of the country show that the famines of 1783 and of 1803-4 were followed by waste and desolation, which ensued from the exhaustion of agricultural stock and agricultural labour.

Colonel Baird Smith, a competent investigator, has ascertained that—

“the famine of 1837 so affected the agricultural prosperity of the affected districts that the stamp of this terrible famine remained uneffaced in the

Agra division by the lapse of two-and-twenty years, and that the State received from that division less revenue by an aggregate amount of Rs. 1,32,85,000 than it would have done had it been possible by any expedients to have warded off the catastrophe.”

In 1861 the recovery was more rapid, but the country affected in the North-Western Provinces (about 10,000 square miles) was comparatively small and the adjacent regions had good crops.

In 1868 these Provinces “felt only the fringe of the famine” and naturally soon recovered from its after effects.

In 1877 the famine, it is true, was not preceded by years of scarcity;* but the distress was severe while it lasted. Its effects were not so much mani-

* “The seasons of 1874, 1875, and 1876 were favourable in the North-Western Provinces and Oudh, and the harvests of those years were considerably above the average. The stocks depleted by the drought of 1873 and the drain to Behar (in 1874) were thus replenished, and became abundant and cheap, prices being lower than they had been for more than 20 years.”—*Indian Famine Commission's Report*, page 191.

festated in the spring sowings, which followed it immediately under favourable conditions, as in the *kharif* sowings of the following year. These showed a decrease of 3 per cent. under the normal cultivation. There was therefore some deterioration.

It would be too early to attempt an estimate of the future effects on the Provinces of the trial, the severest within the century, through which they have just passed; but it is possible to observe the unprecedented rapidity with which agriculture is recovering as soon as natural conditions permitted its resumption. The great failure of the autumn harvest of 1896—itself preceded by several bad years—was succeeded in 1897 by a *rabi* which gave only 60 per cent. of a normal outturn. Yet there is, throughout the Provinces generally, no trace of the desolation and loss or deterioration of cultivation or exhaustion of agricultural labour which followed those earlier famines. On the contrary, the Director of Agriculture, reporting on the 9th November 1897, says—

“The area under the *kharif* (autumn) harvest is now calculated to be 3½ per cent. above the normal, and there has been virtually no crop failure anywhere. The outturn is (with the exception of two doubtful districts) given as from 14 to 16 annas, and several District Officers go up to 17 and 18 annas. An exceptionally fine harvest has been secured over all the Provinces in an abnormally full area.

“The cane crop, as already mentioned, is above the average except in parts of Rohilkhand, where a 13 and 14-anna crop is estimated. For the *rabi* (spring) harvest it would be premature to make any forecast, though by all accounts a fully normal area is being sown.”

This statement of the existing condition of agriculture goes to show that the people have resumed the usual tenor of their lives with energy, undemoralized by the hardships or the incidents of the preceding year. The only circumstance which has come to the Lieutenant-Governor's notice tending to suggest deterioration is the cultiva-

tion in certain tracts of a larger area with oil-seed instead of the more valuable wheat, owing to the dearness in the price of wheat for seed and the comparative cheapness of the oil-seed. But even this circumstance affects only the most distressed part of the Allahabad division and it needs confirmation: on the whole there would seem to be no substantial deterioration, and this fact would seem to indicate an improvement in the resources and in the resisting power of the population.

Any estimate of the economic effects of different famines is necessarily obscured by the success of relief measures in modifying or averting those effects. It is constantly necessary, therefore, in comparing the condition of the period during and after the present and past famines, to remember that relief was, upon the present occasion, distributed in a complete and effective form, for which no previous parallel can be found in these Provinces. What would have happened had relief measures not been initiated before distress appeared and developed as it expanded, must remain largely a matter of speculation. To this modifying influence the further qualification must be added, that modern improvements in communications and the canal irrigation have completely altered the economic conditions in these Provinces. Reference has already been made to the effects of the system of irrigation in protecting the country from drought and promoting cultivation. The influence of improved communications has been even more important and more general. Railways have opened new markets, made the surplus of one region available to supply the deficiency of another and stimulated the cultivation of more valuable staples. Cultivators have obtained a certain market and an enhanced and stable price for their produce. Grain which, in seasons of plenty, used to rot in the fields or perish by waste or deterioration before it could be consumed, has become a profit to the producer and an addition to the general resources of the country, in which more of it seems to be consumed than used to be the case or than can be attributed to the mere growth of population. Ignorant or short-sighted alarmists find in these movements of trade proof that the resources of the country are being dangerously exhausted by the new facilities for carriage. The experience of this famine—a famine of slow growth, wide extension, and great severity, and therefore a crucial test of the subject under notice—has shown that large stocks of food are still kept in reserve in accordance with immemorial practice, and that the same facilities which permit the export of a surplus enable the consumers in times of scarcity to supply deficiency by import.

All observers are combined in thinking that the high prices of recent years, together with the increased facilities for transport, have enabled the cultivating classes to derive much profit by the sale of their surplus produce. This has

added to their wealth, and enabled them to improve their general standard of living. How long this improvement will last, how long the surplus which makes it possible will continue to be produced, depends on the growth of population, the progress of agricultural improvement, the maintenance of moderate taxation, and finally on the advance of general enlightenment. Into speculations on these interesting subjects the Lieutenant-Governor will not now enter; but he has faith in the future, in the people, and in the equity and resourcefulness of British statesmanship.

But, if we may hopefully regard the prospects of agriculture in these Provinces, there is another and a less pleasing aspect of the case. Beyond the cultivating classes there is a large and growing section of the community who subsist by day labour, whose wages have not generally risen with the rise in prices. It would be incorrect to say that this class has appreciably shared that improvement which the cultivating classes owe to extended irrigation, better communications, and higher prices.

During the present famine the vast bulk of the recipients of relief were persons of the labouring class. Cultivators or their families were found in fewer numbers upon relief works, and scarcely ever entered the poorhouses. Even the gratuitous village relief was very largely bestowed on the helpless families of day labourers and artisans. The form in which pressure upon the cultivating classes chiefly manifested itself was in the unusual share which they themselves and their families took in field work, for which they had been accustomed to employ hired labour. In those districts which escaped crop failure the pressure fell almost exclusively upon the town population, to whom the high prices of agricultural produce brought only distress. Yet even in such tracts the general prosperity which prevailed enabled such classes, largely artisans, to find employment and subsistence without recourse to State or charitable relief.

The general conclusion, then, which the Lieutenant-Governor is disposed to draw is that the cultivating classes, whether tenants or proprietors, have displayed in this famine a command of resources, either in the shape of capital or credit, and a power of resistance, which have not been paralleled in any previous period of scarcity; but that this improvement has not been materially shared by the labouring classes. The labouring classes would probably have suffered more severely than before but for the extensive and elaborate measures organized by Government to assist them.

Perhaps some encouragement for the future may be found in a movement, which has set in, of labour from the congested districts in the eastern part of the Provinces towards Assam and Eastern Bengal, which have become accessible by

the extension of railways. If relief is not found in emigration of this sort it is difficult to see from what direction relief is to come. For industrial enterprises are of slow growth, while the waste tracts within the Provinces suitable for cultivation are no longer considerable, and further extensions of canal irrigation are limited by the appropriation of all the chief sources of water-supply.

CONCLUSION.

THE story of the famine has now been told. The foregoing narrative has explained how the disasters of four successive years so reduced the resources of the people that in the worst afflicted tracts famine asserted itself in the summer of 1896: it describes how the failure of the rains in 1896 intensified that famine, and extended it over large tracts that had so far struggled against the adversities of the seasons: it sketches the organization created to bring relief in suitable shape to all classes of the famine-stricken population: it tells how the famine grew in extent and acuteness through the winter months of 1896-97, and how the relief was developed to meet the increasing distress: how the spring harvest of 1897 lightened the pressure in all but the worst districts, and how the advent of the rains brought about new conditions favourable to the people, but necessitating new dispositions to meet them: it shows how the pressure slowly relaxed as the field of agricultural labour reopened with the progress of the rains, and how it disappeared as a bountiful autumn harvest replenished the food stores of the Provinces and rendered it possible to wind up by cautious steps the various relief measures which had for many weary months been the sole resource of hundreds of thousands of destitute people. The operations of the Department of Public Works have been described with the necessary technical detail, and the other agencies which co-operated in the work of relief have been portrayed and their results exhibited. The question of prices and food supply has been examined; the movement of crime has been measured, and the law-abiding character of the great mass of the people has been acknowledged; the possible extensions of the Railway and irrigation system have been glanced at, and the need of preparation and foresight in connection with seasonal changes and agricultural gain and loss has been adverted to.

Some effort has been made to illustrate the social and economical condition of the people, their resources and their power of resistance to natural calamities, by comparison with previous famines and their consequences to the community; and, finally, the state of public health during the famine period has been stated and cited as the test and crown of the great and complex organization whose object was to preserve human life.

The statistical results of the various forms which the relief measures took have been duly exhibited, and it is not necessary to repeat them here in detail. But by way of final summary it may be said that the famine and scarcity extended with various degrees of intensity over an area of more than 72,500 square miles with a population of 34½ millions. Beyond this lay an area, co-extensive with the Provinces, within which the pressure of high prices fell heavily on all, and particularly on the labouring classes.

The relief measures, which commenced in Bundelkhand in March 1896, continued till the middle of October 1897. The number of persons who received support for one day amounted to 304 millions of people in round numbers, or if the relief given from the Indian Charitable Relief Fund be included to about 334 millions, a total which is nearly equal to the population of the United Kingdom, of India and the Colonies.* This is equivalent to

* The Statesman's Year-Book for 1897 gives the population of the United Kingdom of India and the Colonies as 347,278,469. a daily average of 1,688,000 persons supported for six months.

The cost to the State (all charges included) amounts to two crores and 17 lakhs of rupees or £1,400,000 at the present rate of exchange. Each person supported represents a daily charge to the revenues of 13 pies or .07 of a rupee.

The indirect loss in the remission of land revenue has been already stated at 60 lakhs of rupees. The famine has also had injurious effects in various other sources of revenue, such as Excise, Stamps, and Income Tax. It will not be possible to state the loss in these departments until the year's accounts are balanced; but the probability is that it will be covered by about 25 lakhs.

Thus the direct and indirect cost of the Famines of 1896 and 1897 to the Government of India may be put at about three crores of rupees, or two million pounds sterling at current rates of exchange.

In 1896 the death-rate for the United Provinces was 33·32, and for the 12 months—October 1896 to September 1897—during which the famine prevailed, the rate was 36·30 per thousand of the population. The similar rate for the previous decennial period was 33·04.

In these few figures is concentrated the history of a series of great calamities mitigated by efforts which taxed all the resources of the Government and all the energy, skill, and devotion of its officers. They represent much suffering borne with submissive patience and quiet endurance by the people, and great difficulties overcome, under Providence, by the unwearying toil, the humanity, and the patient resolution of a great body of workers.

It is, perhaps, too soon to make a proper estimate of the political effect of the measures by which Government

exerted itself to save its subjects from the effects of this famine. Some officers report that there are no noticeable manifestations of gratitude. Other officers, and these not the least observant, give an entirely different opinion, and say that the feeling of gratitude is deep and widespread among all classes. An observant European officer, noticing the confidence with which the children, at first timid, now meet advances, writes as follows: "The utter confidence of the children" (in the Government official) "is a curious and very touching thing to see. Young lads and children have keen ears and close memories. Their looks and manners are the surest indication of what kind of pictures their parents paint in their home talk. The pictures must be in warm and glowing colours."

A most trustworthy native officer says that in his district the feeling of the people finds expression in the saying that the *Sarkar* has saved them from ruin like that of a *Bharat*. A *Bharat* is that war of universal desolation which is familiarized to the Hindu mind by the great Hindu epic.

It has already been noticed that the ballads of the *Holi* festival, last March, sang, in rude verse, the story of the bountiful charity that was being then dispensed. The songs of the people disclose their thoughts.

The Lieutenant-Governor believes that the relief operations now closed have inspired a feeling of gratitude and confidence; and his hope is that this feeling will grow and endure when the vicissitudes of the struggle are over and the return of prosperity allows the people to fully realize the nature and extent of the efforts made in their behalf during the time of the trial. Of all the measures by which relief was conveyed to those who needed it, the one which most profoundly impressed the people was the system of gratuitous outdoor relief. Outdoor relief at the homes of the people did not merely preserve life and mitigate those material hardships which are inseparable from other forms of relief. It also respected those customs, feelings, and prejudices—half estimable, half pitiful—which are often dearer than life itself to those whom Government undertook to protect. The people were struck both by the benevolence of the motives which inspired this kind of relief, the generosity with which it sought no return, and the immense and elaborate organization created to administer it. They found in it a type and a proof both of the power and resources of the Government and of its humane care for even the feeblest of its subjects.

The very magnitude of the relief operations would make them impressive.

A two-fold duty alone remains for the Lieutenant-Governor to discharge. One is to express the grateful acknowledgments of this Government to the Governor-General in

Council for the constant encouragement, consideration, and support which he has accorded to it in the fulfilment of its task. The second duty is to place on record this Government's appreciation of the services which have secured the success of relief measures during this memorable year. It is difficult for the Lieutenant-Governor and Chief Commissioner to express his sense of the greatness of these services; but he has endeavoured in a separate proceeding to set forth the names and services of those officers of Government and private gentlemen to whom he is most beholden for sustained and effective work. When almost every officer of Government, each in his own grade and sphere, has rendered good service, it is not an easy task, nor one free from suspicion of invidiousness, to single out individuals for special mention. But the excessive severity of the distress in particular districts threw upon the officers posted there an enhanced degree of responsibility and an increased burden of hard work which did not fall to the share of their colleagues in other districts. The officers, thus tried by circumstances of the greatest difficulty and danger, have exhibited a zeal, self-sacrifice, and resourcefulness in meeting difficulties, which have been worthy of the best traditions of their services; and the Lieutenant-Governor tenders to them his special thanks. The most prominent are—

Of the Civil Service of India—

- * Mr. A. W. Cruickshank, Commissioner, Allahabad Division.
- „ H. C. Ferard, Collector of Banda.
- „ D. Calnan, Collector of Jalaun.

Of the Public Works Department—

- Mr. C. G. Palmer, Superintending Engineer, Allahabad Division.
- Colonel R. R. Pulford, C.I.E., R.E., Superintending Engineer in Oudh.

Of the Medical Department—

- Surgeon-Lieutenant-Colonel Thomson, Sanitary Commissioner.

The Lieutenant-Governor desires also to mention in this place the name of Mr. C. W. Odling, the Chief Engineer and Secretary to Government, who during the two famines powerfully contributed to the success of the operations of the Department of Public Works which, under the orders of Government, he directed.

Among the many non-official workers in the great charitable field, the Lieutenant-Governor would take the liberty of specially mentioning the name of Miss Hewlett of the London Mission, whose self-sacrificing labours among the poor at Mirzapur attracted his particular attention.

The names of the native noblemen and gentlemen who have helped the Administration by active personal assistance or in other ways have been recorded with suitable

acknowledgments in a separate minute; but here the Lieutenant-Governor desires to acknowledge the great benevolence displayed during the year by His Highness the Mahārāja of Benares.

ORDER.—Ordered that a copy of this Resolution be submitted to the Government of India, Revenue and Agricultural (Famine) Department.

Ordered also that a copy be published in the *Government Gazette*, North-Western Provinces and Oudh, for general information.

T. STOKER,
Secretary to Govt., N.-W. P. and Oudh.

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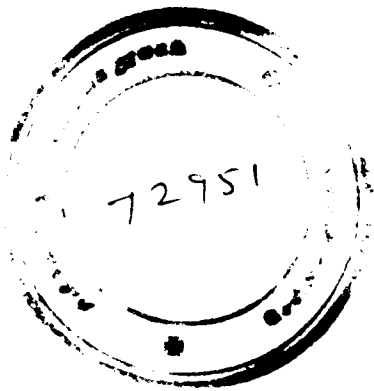
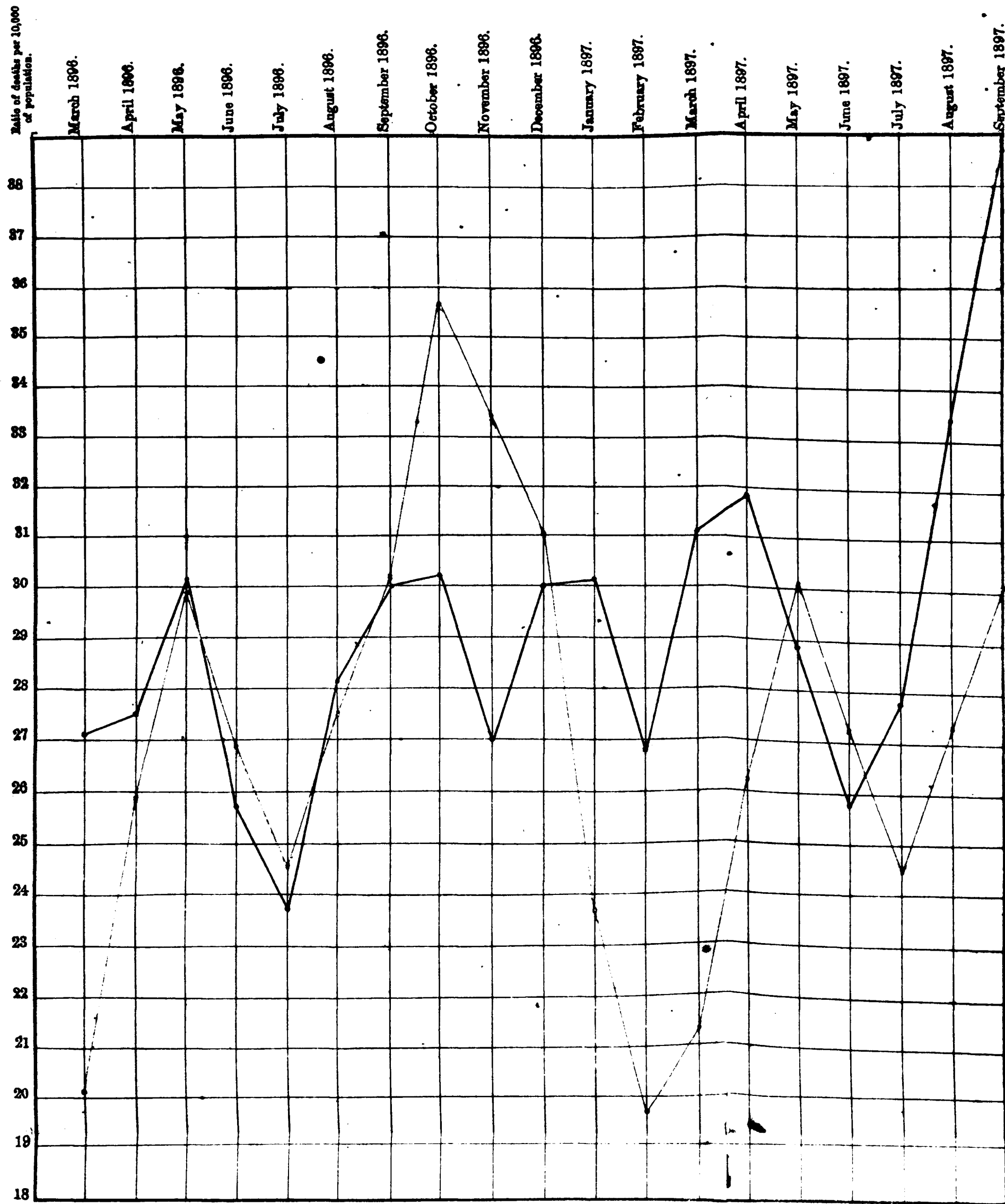


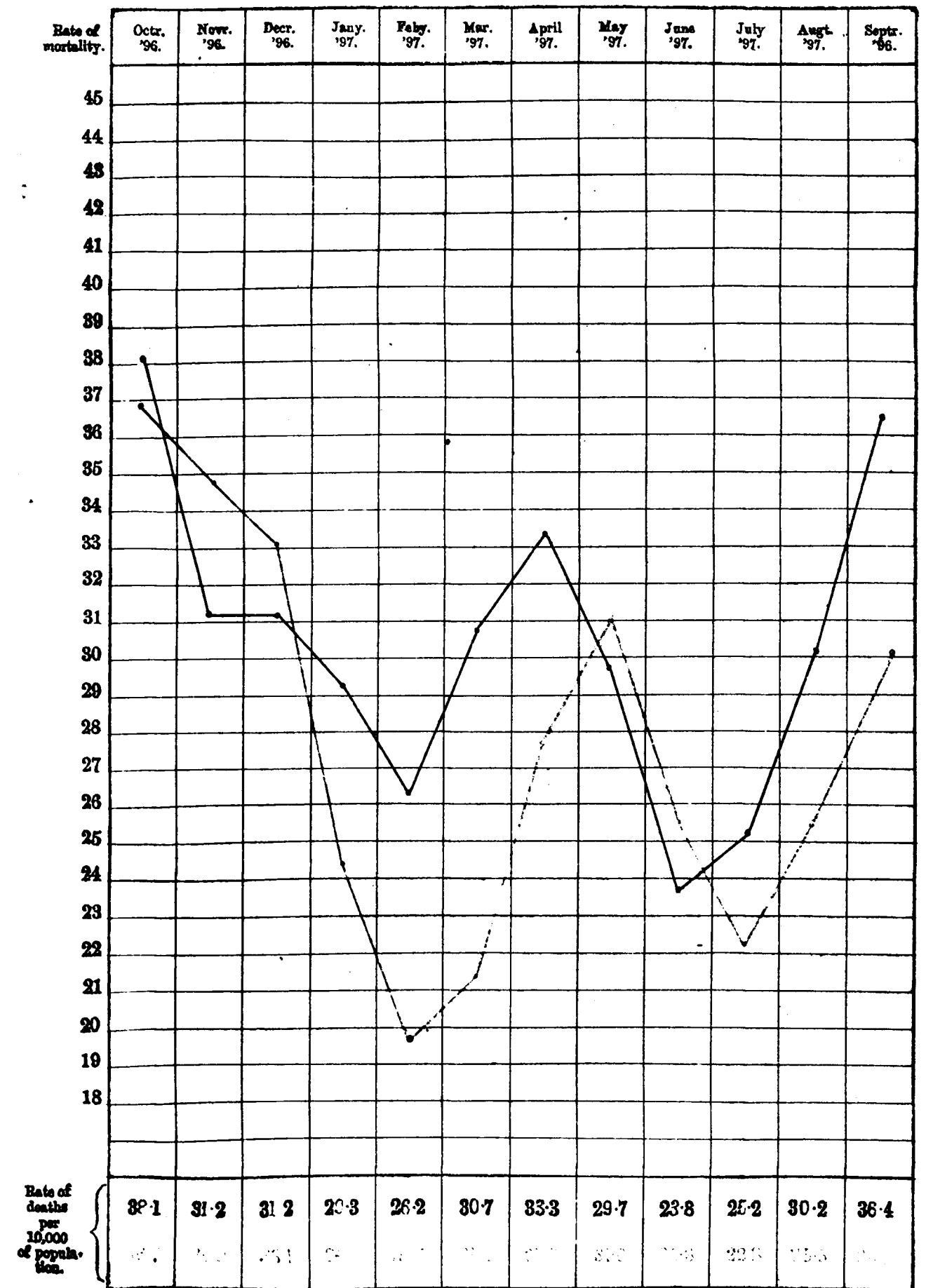
Diagram showing Provincial Death-rate, North-Western Provinces and Oudh, from March 1896, to September 1897
with average based on figures of previous ten years.



The black line indicates the actual death-rate.

The red line indicates the normal death-rate.

Diagram showing the mortality in Scarcity districts in famine period, compared with decennial mean in same districts.

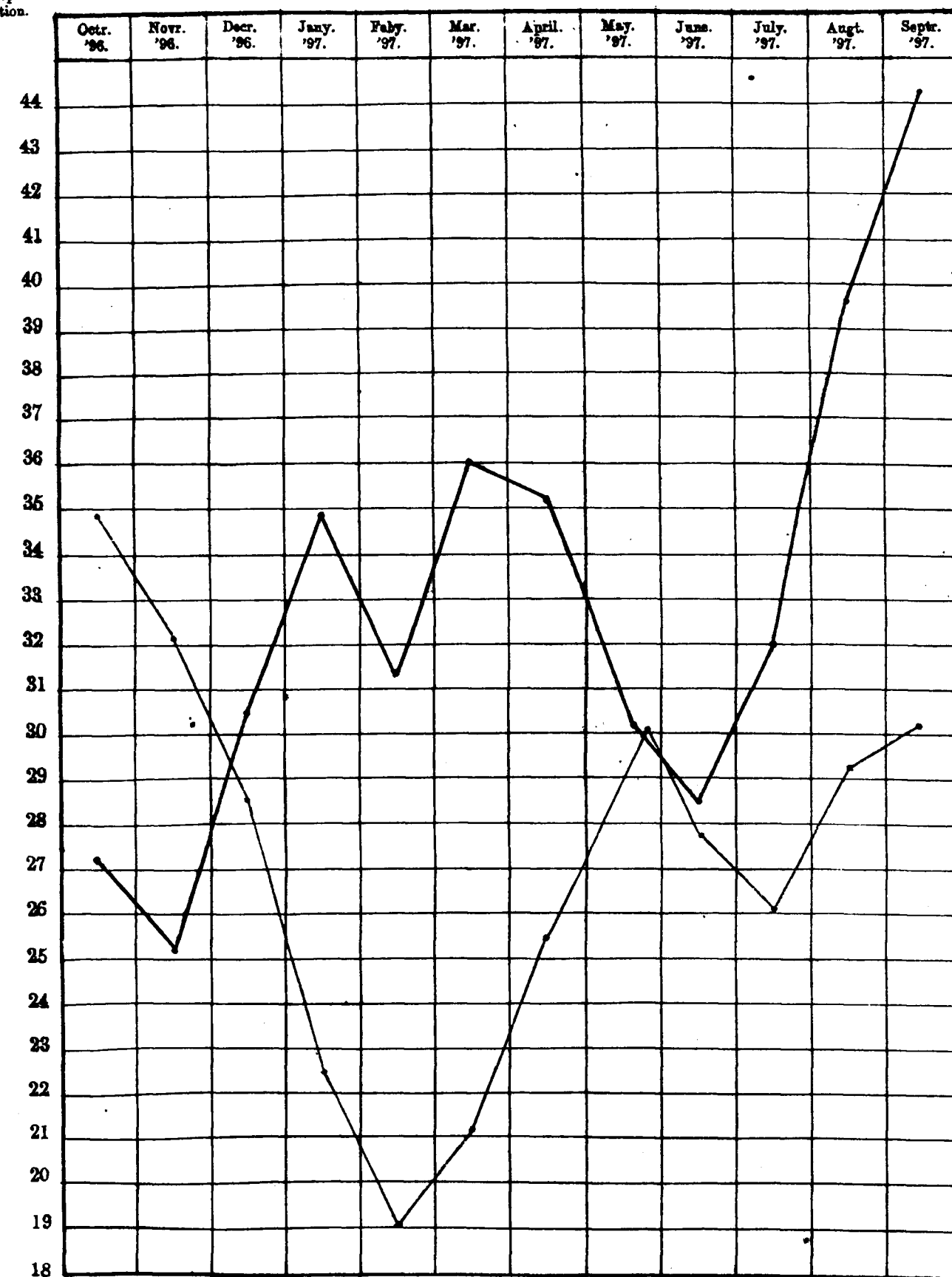


Famine period in black. _____

Decennial mean in red.

Mortality in famine districts in famine period as compared with decennial mean in same districts.

Death-rate per ten thousand of population.



Famine period in black. —

Decennial mean in red. —