CHAPTER XII.

FAMINE.

I. HISTORY OF PAST FAMINES AND OF FAMINE RELIEF.

THE information about famines due to drought, previous Famines prior to the year 1876-77, is very scanty, but dreadful famines followed the devastations of the Mahratta armies and the wars with Mysore at the end of the eighteenth century. During the invasion of Lord Cornwallis, when the country was attacked on all sides and penetrated in every direction by hostile armies, or by defending armies little less destructive, one-half at least of the inhabitants are said to have perished of starvation. In the last century, periods of scarcity occurred in 1824, 1831 and 1833. The ten years following 1851 were a time of great trial when year after year the scanty and unseasonable rainfall kept the agricultural classes in constant dread of actual want. Two or three seasons ensued which were prosperous, but in 1866, famine was again prevalent in Chitaldrug and the north-eastern parts of the State.

to 1876-77.

The failure of rain in the years 1875-76 and 1876-77, Famine of brought about a famine such as was never known before. The beginning of the calamity was the partial failure of the rains in 1875, the fall being from one-third to twothirds of the average. Much of the food crop was lost; but owing to the usual large stocks in the State, only temporary or occasional distress was caused, the price of grain being within double the ordinary rates. In 1876, the rainfall was again very short and barely a third of

the ordinary harvest was reaped. Matters were aggravated by the fact that crops had failed in the adjacent Districts of Madras and Bombay, and by the middle of December, famine had begun. From then till March 1877 matters grew worse. The only railway from Madras to Bangalore brought in daily 500 tons of food enough to support 9,00,000 people; yet the prices of the food stuffs ranged during those months at four to five times the ordinary rates. In April and May 1877, the usual spring showers fell, and hope revived. But as the month of June wore on and July came, it was apparent that the early rains were going to fail again, for the third year in Panic and mortality spread among the succession. people, famine increased and became sore in the land. In May 1877, 100,000 starving paupers were being fed in relief kitchens, but by August the numbers rose to 227,000 besides 60,000 employed on the railway to Mysore. The Viceroy, Lord Lytton, visited Mysore and appointed Mr. (afterwards Sir Charles) Elliot as Famine Commissioner, with a large staff of European Assistants. Relief works were now concentrated, and gratuitous relief was confined to those whose condition was too low to expect any work from them at all. Bountiful rains in September and October caused the cloud to lift and the pressure of famine began to abate. During the eight months of extreme famine, no crops were reaped; the price of grains ranged from three to six times the ordinary rates; and for the common people, there were no means of earning wages outside the relief works. Even in 1877-78, the yield of harvest was less than half the crop of an ordinary year. From November 1877 to December 1878, prices ranged at nearly three times the rate of ordinary In 1878-79, the season was exceptionally favourable, and though there were not wanting causes for serious anxiety, the crops, particularly the rice and ragi crops, on which the agricultural prosperity of the country

mainly depends, were most bountiful. Although the rainfall in 1878 was slightly less than that gauged in 1877, it was more seasonably distributed, and did not, as in the end of 1877, cause damage by copious but untimely fall. A plentiful harvest soon effected a most welcome fall in prices, especially in the prices of food grains consumed by the people, which were sold at rates within the reach of the poor. The mortality in this famine has been estimated at 11 millions in a population of 51 millions. The mean annual birth rate of 36 per 1,000 was reduced to one-half.

The financial effects of the famine were indeed very Financial disastrous. The invested surplus of 63 lakhs had disappeared and a debt of 80 lakhs had been incurred.

According to the Report of the Indian Irrigation Com- Bad and good mission, the average annual rainfall for Mysore is 34 years. inches and the number of dry years and years of drought that may be expected in a cycle of 50 years are 9 and 3 respectively. The Revenue Commissioner, in his report on the Administration of relief measures during 1908-09. has classified the 28 years from 1881-82 to 1908-09 into-

- (a) "Good years" (numbering 11) in which the rainfall was timely, sufficient and generally seasonable throughout the State:
- (b) "tolerable years" (numbering 9) in which either of the two monsoons proved scanty or gave rise to apprehensions of scarcity but subsequent rains materially improved the situation: and
- (c) "bad years" (numbering 8) in which the rainfall was, on the whole, defective and unseasonable or ill-distributed.

Under the last class are included the years 1883-84, Distress of 1884-85, 1891-92, 1899-1900, 1904-05, 1905-06, 1907-08 1888-84 and and 1908-09. Taking the years under class (c), we find

that the years 1883-84 and 1884-85 caused grave anxiety to the Government. In the former year, the dry crops in the north-eastern and eastern districts yielded from one-fourth to half of the normal average. In 1884-85 the unfavourable conditions of the first half of 1883-84 appeared in an aggravated form. This state of things was, however, changed by the fall of heavy rains about the end of September; and subsequently the season assumed a favourable aspect.

Distress of 1891-92.

The five years preceding 1891-92 were years of normal prosperity. In 1891-92 the rains of October proved a sad disappointment. In the maidan parts of Mysore and Hassan District, the south-west monsoon was scanty and precarious. The northern and eastern districts did not get any of the early rains. A few showers which came later on permitted of the sowing of nearly the usual extent of land with ordinary dry crops in the northern taluks. These began to fade from insufficient moisture.

Besides the regular relief works, but under the same agency and serving the same objects as those works, were the drinking water-wells for which a total grant of Rs. 1,38,000 (chiefly from Local Fund) was sanctioned. There were in hand 850 such wells, principally new wells undertaken wherever most needed, besides a number of old wells which required deepening. They were all works of permanent utility but were of special immediate value owing to the scarcity of drinking water which existed in most places.

In 1891, the Government resolved to make advances for the sinking of irrigation wells at a normal rate of interest, repayable by easy instalments in a long series of years; no further security was demanded than the well and the land it irrigated, exemption to the raiyat from enhanced assessment on the ground of the well being guaranteed. Accordingly the working of the scheme in

the year 1892, in each of the districts of Kolar, Tumkur, Chitaldrug and Bangalore, was entrusted to a special officer under the Deputy Commissioner. The loans sanctioned aggregated Rs. 2,80,000 for 917 Kapile and 530 Yātam wells esculated to irrigate 5,252 scres.

Another important class of works for which Government loans were given was the construction and repair of Sāguvali Kattes. During the distress of 1891-92, loans to the extent of Rs. 21.175 were sanctioned for 251 such works calculated to benefit 5.069 acres.

The total outlay on the several measures adopted by Government (excluding remission of revenue) was Rs. 14,05,000.

The rainfall in July and August 1899 was below the Distress of normal and the north-east monsoon was also deficient and unequally distributed. In the case of dry crops, the late sowings proved more or less a failure; and as regards irrigated crops, the serious deficiency in tank-filling rains affected the outturn of the Kārtik harvest and prevented cultivation of the Vaisakh. There was a general rise in the prices of food grains, especially ragi. Towards the close of the official year, the outlook in the maidan parts was again gloomy. A few test works to give relief to villagers were opened in the Bagepally Taluk of the Kolar District and Mandya Taluk of the Mysore District. The rains of September and October 1899 considerably improved the prospects in almost all parts of the State.

The heavy rains of 1903-04 had been productive of Distress of serious injury to the tanks of the Kolar District. 1904-05, the north-east monsoon was a failure and in the next year, all the Districts, except Bangalore and Hassan were similarly affected. In 1907-08, the maidan districts except Mysore fared badly, the early rains being neither seasonable nor evenly distributed. The north-east

1899-1900.

monsoon proved most disappointing in all the districts and the rainfall in November was scarcely above the average with the result that there was insufficient supply of water in the tanks for the *Vaisakh* crops. The year 1908-09 was thus preceded by three bad years.

The distress was severe in intensity both on account of the antecedent bad years as well as of the very deficient and unseasonable rainfall, combined with insufficient stock of food grains and abnormally high prices. December 1908, the effects of the severe drought began to be felt by the people. Even before this, the raivats in the arid tracts of Tumkur and Hassan Districts became solicitous about fodder for cattle and went in large numbers to the jungles in the malnad parts of Mysore, Shimoga and Kadur. In the Districts of Mysore, Tumkur and Chitaldrug, the distribution of gratuitous relief on a small scale became indispensable. By January 1909, the campaign of relief operations was systematically taken on By the end of January and the commencement of February, the raivats of small holdings and the labourers began to feel the pinch. The hottest part of the year having set in, the difficulty for water and fodder began to greatly aggravate the hardships of the people who could only reap a very scanty harvest and who were therefore forced to buy food grains at high prices. Thus a number of causes combined to make the distress acute in February and March. In April, May and June, the relief operations were in full swing in the maidan districts but the rains of April and May mitigated the distress to a large extent. In June and July, the break in the rain caused apprehensions, but in August, the copious rainfall materially improved the situation and by the end of September all the special relief establishments were practically abolished.

The affected tracts comprised about 5,600 villages, spread over all the districts, with a total area of about

7,800 square miles and a population of about one million and four hundred thousand.

The total cost to Government under direct and indirect measures of relief amounted to Rs. 19 lakhs.

The south-west monsoon of 1923 was very feeble in Distress of the eastern districts of the State and the north-east monsoon that followed was a complete failure. The result was that a major portion of the Kolar and Tumkur Districts and a small portion of the Bangalore and Mysore Districts suffered from drought, want of cattle fodder and want of employment for the labouring classes.

As soon as the first signs of distress was apparent, suitable measures of relief were taken. The sinking of temporary wells was largely resorted to. The import of fodder was encouraged by Railway freight facilities, and Government depôts, for selling straw and hay procured from elsewhere, were opened. Forests were thrown open for free grazing and the driving of valuable cattle to malnad forests was organised. Tank maintenance, tank restoration and village improvement works were started as locally required, to provide labour within easy reach. Land improvement, Takavi and Irrigation well loans are being freely given. Relief to weavers, mainly through Co-operative Societies, has been arranged for. In extreme cases, gratuitous relief is being afforded to helpless Certain relaxations have been ordered about persons. the levy and collection of revenue on wet lands in the affected tracts. The growth of fodder crops has been encouraged under the Krishnaraja Sagara and Vani Vilas Sagara.

Instructions issued up to 10th April 1924 have been summarised in a hand-book which has been recently.

Since the operations connected with relief are still going on, the total cost has not been given.

II. THE CAUSES OF FAMINE.

The causes of Famine.

The following extract from the Imperial Gazetteer of India describing the causes of famine holds good in Mysore also: - "Famine is a disease of all agricultural India is and has always been mainly agricultural under conditions peculiarly exposed to famine. The soil is parcelled out in minute farms. The farmers have no capital and depend on unorganised credit which shrinks when harvests fail. Off the land. but dependent on it, are millions of agricultural labourers, the vast majority of whom have only casual employment and are thrown out of work when the harvests fail. Thus the masses of the Indian people depend upon harvests, and these depend upon a periodic, by no means regular rainfall." When both the monsoons fail, distress becomes inevitable and its intensity is often governed by the quantity of rainfall in the years immediately preceding. Not only human beings but cattle also suffer from failure of rainfall owing to lack of water-supply and fodder.

III. THE FAMINE PROBLEM AND MODERN RELIEF.

The Famine problem.

The consolidation of British rule in India has put an end to rapine and war. Engaged in peaceful occupations, the people are rapidly multiplying; but the growth of new industries absorbs only a portion of the increase in population. The pressure on the land, therefore, increases, the supply of agricultural labour outruns the demand for it in the maidan districts and agricultural wages are low. Agricultural holdings get sub-divided and become small in extent owing to laws of inheritance. Primitive methods of cultivation are therefore followed and agricultural profits are low. Food grains and fodder are not usually accumulated for more than a year and only about 16 per cent of the occupied area is protected by irrigation, the rest being liable to suffer from the effects

of drought which, as pointed out above, recurs in at least 12 years out of a cycle of 50 years, Hence the famine problem.

The first Mysore Famine Code was ushered into The Famine existence amidst the agonies of the great Famine of 1876-78. In supersession of discordant orders and divergent methods, it was an authoritative declaration of policy and procedure in detail. The Famine Commission of 1880 commended the idea and the Government of India afterwards laid down the broad principles of famine administration in a draft provisional Code for British India and another for Native States. In adopting the draft provisional Code for British India, with modifications required to adapt it to the local circumstances and administrative machinery of Mysore, one point upon the importance of which the Durbar laid special stress was the provision of works for the relief of the agricultural population in the vicinity of their villages. This principle was maintained in the subsequent Code of 1896 and received the approval of the Government of India in their Resolution published on the 31st August 1901.

According to Section 49 of the Famine Code of 1909, Famine the Revenue Commissioner is vested with the chief executive control of Famine Administration in addition to his ordinary duties, unless a separate Famine Commissioner is appointed.

The Revenue Commissioner is kept informed at all times of the state of the season and the course of prices.

Standing preparations.

Complete and well-considered programmes of relief works are prescribed for each district showing the population and the maximum number of units in thousands for whom relief work is required. Reserves of tools and plant are stocked and lists of persons suitable on

emergency for famine establishments are prepared in each district.

Danger signals.

Apart from the failure of rain and the upward tendency of prices, the following symptoms demand attention as being warnings of possible distress:—

- (1) Contraction of private charity indicated by the wandering of paupers;
 - (2) Contraction of credit;
 - (3) Feverish activity in the grain trade;
 - (4) Restlessness indicated by an increase of crime;
- (5) Unusual movements of flocks and herds in search of pasturage; and
 - (6) Unusual migration of people.

Preliminary action.

When the failure of rain causes anxiety, active preparations are made to put heart into the people. Accordingly meetings are held, the famine policy is explained, nonofficial relief agency and private charity are organised, and a central committee of the most influential residents is appointed in each taluk to advise generally, to stimulate private charity, collect subscription in cash or grain and later on, if necessary, to manage village works. inspection begins, programmes of public and village works are scrutinized to see whether the included in them for the tract likely to be affected are sufficient, arrangements are made for the tools and plant of all kinds required for the selected works to be held in readiness for immediate use, preliminary arrangements are made for strengthening the Civil, Engineering, Police and Medical establishments, as necessity arises; every effort is made to ensure and to encourage prompt disposal of applications for Takāvi advances for the sinking of wells, the construction or improvement of private tanks, etc.; early steps to meet the scarcity of fodder or drinking water are taken and enquiries as to the extent to which suspension of revenue will be necessary, are instituted.

If the unequiness intensifies, the Government would review the financial position and decide what allotments should be made in the event of famine relief being necessary and what services should be reduced for the purpose.

The preparations above referred to having been comp- The period leted, further developments are watched. If the outlook does not materially improve, the fact whether there is merely scarcity or whether distress requiring relief exists, is determined by properly putting into operation a "test work." Every arrangement is made to ensure safety and health of the mass of people in the areas affected. When test works begin to attract people in large numbers, the existence of distress is considered proved. The condition of those who seek employment on the test works is closely watched and a look-out is kept by village inspection on the condition of those who stay in their villages. Simultaneously with the opening of test works, poor houses at the chief centres of the tracts under observation are opened.

The measures adopted are naturally such as would fit Measures in with the needs of the situation, according to the nature adopted on the of the suffering of the people and the kind of relief that declaration can be effectively applied as a remedy. The following are the measures usually adopted:-

- (1) Permission for the temporary cultivation of tank beds.
- (2) The throwing open of the State and District Forests and certain Amrut Mahal kavals for free grazing of cattle, the cutting and stacking of hay at convenient centres for the use of cattle and the grant of permission for cutting and removing the date leaves for cattle.
- (3) Gratuitous relief to the old, decrepit and the infirm and gosha women.
- (4) The grant of loans on a very liberal scale under Takāvi and the Land Improvement Regulation, the grant of M. Gr. VOL. III. 26

advances for earth-work to tanks and the purchase and storing of soed grains for sale to raiyats.

(5) The expansion of ordinary village and public works,

roads works and other works of public utility.

(6) The remission of hulbanni, mohatarfa and land revenue in regard to wet lands and suspension of land revenue in regard to dry lands.

(7) Relief to weavers by way of advances.

(8) Grain compensation allowance to officials on low pay and village servants.

Policy before the monsoon breaks. As the hot weather draws on to an end, the question would press for consideration whether all or any of the large works should be closed at once and the workers thereon distributed on small public works and village works near their homes, their dependents being admitted to village gratuitous relief, or whether such works should be kept open till the monsoon has actually declared itself. At the same time, steps would be taken to distribute donations, if any, received from charitable relief funds and $Tak\bar{a}vi$ advances for the purchase of seed and cattle.

Policy at the commencement of the rains. Premature action would be guarded against and measures of relief not entirely withdrawn until after the monsoon has actually declared itself. As soon as the commencement of the rains opens employment in the fields, the task would be raised for the able-bodied workers; and dependents and weakly gangs or weakly persons individually tasked would be, as far as possible, drafted to their homes, such of them as require relief, especially the children, being brought upon the village gratuitous relief lists until the harvesting of earliest principal crops brings a substantial increase to the earnings of the able-bodied.

Closure of relief.

The process of gradual closure of works would begin as soon as the demand for field employment sets in, and all works would be closed by the time the earliest principal autumn $(K\bar{a}rtik)$ crop is ripe. When the earliest of the principal autumn crops is gathered in any tract, gratuitous relief would be generally closed, the recipients being given a valedictory dole, in grain or cash, sufficient to support them for about a fortnight.

The aim of the relief operations undertaken during the period of distress prior to the actual prevalence of famine conditions has been to prevent congregation of needy labour on large works, comparatively small works being fairly well distributed all over the affected tracts. put heart into the raivats by a liberal distribution of loans at the outset has also been aimed at by the measures adopted both in 1908-09 and 1923-24.

IV. PROTECTION AGAINST FAMINE.

The principal protective measures thus far successfully Protection taken have been the extension of railways, so as to admit famine. of the import and distribution of food grains to all parts. and the extension of irrigation and other facilities for increasing cultivation. Plans for suitable relief works are also kept in readiness to be put into operation at the first appearance of necessity arising from scarcity.

A permanent system of intelligence exists in all System of districts, under which the necessary agricultural and vital statistics are collected regularly at fixed intervals by the village and taluk officers and submitted to the Deputy Commissioner. The rainfall returns are carefully studied. The rise of prices is also carefully observed. Predisposing circumstances of wide-spread agricultural depression, such as successive failure of the early and late rains, abnormal rainfall, failure of one or more harvests, movements of large numbers of people in search of food or labour, and noteworthy increase in the mortality among

intelligence.

human beings or cattle, etc., are also carefully observed and considered.

Irrigation. .

Experience has shown that everywhere throughout the State, save in a narrow strip of assured rainfall along the western border, irrigation is necessary as a protection against occasional famine and the vicissitudes of ordinary seasons; while throughout the State it is useful in affording employment to the agricultural classes in the interval between the reaping of the dry crops in December and the setting in of the rains in May. None of the more valuable crops, such as sugar-cane, garden produce and the best qualities of rice can be grown profitably without irrigation; and on an average the value of the produce of a single crop is said to be nearly quadrupled in ordinary years by an assured supply of rivor water and increased thirty-fold in a year of drought.

Existing
State
Irrigation
Works.

The conformation of the country, eminently adapted as it is for the construction of tanks, has been almost fully utilised for this purpose from time immemorial. There are, in addition, numerous canals or river channel works. Many of these have been improved or constructed by the State and nearly all are under State management.

Large Works.

The Marikanve Reservoir (Vani Vilas Sagara) was completed in 1908 at a cost of Rs. 44½ lakhs. It has a capacity of 30,025 millions of cubic feet. The reservoir is expected to fill at least once in five years and to admit of an annual supply of water for irrigation of about 30,000 acres of rice lands. The channels taken from the right and left banks of it extend to a length of 29 miles and command 12,500 acres of wet land each. The reservoir is capable of furnishing water for irrigation all round the year.

Another large work recently undertaken is the Cauvery Reservoir at Kannambādi at an estimated cost of Rs. 365 lakhs in all. With an assured supply of water from the reservoir, the way has been paved for the cultivation of high class perennial crops not hitherto grown in this valley. Arrangements are being made to cultivate, with the aid of the storage, about 10,000 acres of sugar-cane under the existing and new channels.

Direct irrigation from channels such as those taking River off from the Cauvery and its tributaries is also a sure channels. protection against famine. Most of the river channels lie in the Cauvery Valley. Their total number is 53 and their aggregate length slightly under 1,000 miles.

The tanks are of two classes, namely:—

Tanks.

- (1) major tanks, and
- (2) minor tanks.

There are in the State 2,668 major and 22,228 minor tanks. On an average there is one tank for every 11/2 square mile in the State. Efforts are being made to restore both major and minor tanks requiring repairs. There are also large stores of sub-soil waters below tank beds and in the sandy streams, which might be tapped and lifted by pumps worked by some kind of motive power, and some progress has been made in this direction.

The total number of wells in the State is 40,464 Wells. irrigating on an average 2 acres per well and paying an assessment of Rs. 5 per acre or 10 per well. The wells are very numerous in the Kolar and Tumkur Districts.

A system of railways expressly designed to serve as a Railways. protection, by importing and distributing food grains in

times of searcity, radiates from Bangalore and there is no district without a railway running through some part of it. Since the great famine of 1876-78, when the only railway was the Bangalore branch of the Madras Railway as far as Bangalore Cantonment, the pressure of severe distress has been averted by the construction of new lines traversing the interior of the country.

Other efforts to increase material prosperity.

Much has been done in other departments to promote general prosperity. The land revenue has become progressively moderate in assessment and elastic in collection Loans are given by the State, during times of drought. at low interest and on easy terms of repayment, for land improvement and for the purchase of seed and bullocks, Separate departments of Government are charged with the work of starting Co-operative Credit Societies for ameliorating the condition of the people, with the carrying on of experiments in agricultural improvements the development of arts, industry and and with Since the year 1911-12, the commerce in the State. Economic Conference and its various Committees have had for their special aim the improvement of the material condition of the people in various directions.

Famine Insurance Fund. To avoid an unnecessary resort to borrowing when the State is called upon to meet a heavy demand for famine relief, Government decided in the year 1906-07 to lay by two lakhs of rupees a year as an insurance against famine. Since that year, a provision of two lakhs of rupees was regularly made for some years, and the provision was in 1916-17 even raised to Rs. 5 lakhs a year. In recent years, this provision has had to be dropped owing to financial stringency.

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