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REPORT

OF THE



FAMINE OF 1891 AND 1892.

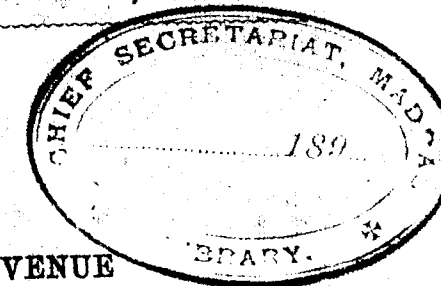
AND THE ADMINISTRATION OF THE MEASURES ADOPTED
FOR THE RELIEF OF DISTRESS.

MADRAS:

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1893.

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BOARD OF REVENUE (REV. SETT., L. RDS. AND AGRI.), 6TH SEPT. 1893, No. 369.



PROCEEDINGS OF THE BOARD OF REVENUE
(REVENUE SETTLEMENT, LAND RECORDS AND AGRICULTURE).

Resolution—dated 6th September 1893, No. 369.

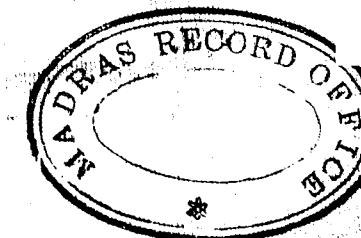
The Board begs to submit herewith the Commissioner's report on the recent
famine and the administration of the measures adopted for the relief of distress.
2. A file of the Collectors' reports is also submitted.

(A true Extract.)

(Signed) M. ADINARAYANA IYAH,
Acting Secretary.

(True Copy.)

(Signed) T. SUNDARA RAO,
Ag. First Assistant.



To the Secretary to Government, Revenue Department,
with Commissioner's report and file of Collectors' reports.
Copy to Collectors concerned, with Commissioner's
report and file of Collectors' reports.
" to other Collectors, with Commissioner's report.



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Diagrams illustrating the course of prices in typical districts.

Coimbatore	Cholum and cumbu.
Chingleput and Madras	{ Rice and ragi.
Ouddapah sub-division	{ Rice.
Kurnool and Bellary	{ Cumbu and ragi.
	{ Cholum.

REPORT OF THE FAMINE OF 1891 AND 1892.

The period of severe agricultural distress which has prevailed throughout the Presidency of Madras for the past two and a quarter years, commenced about the end of 1890 or the beginning of 1891, and was due at first to the failure of the north-east monsoon of 1890-91—a failure which was most marked in the districts of Cuddapah, Nellore, Chingleput, North Arcot, South Arcot, Coimbatore, Madura, Tinnevely and Malabar. A late and seriously deficient south-west monsoon in 1891 prolonged and deepened in Cuddapah, Nellore, Chingleput, North Arcot and Coimbatore the agricultural distress which a good monsoon would have taken away, and led to a large failure of crops in Salem, Cuddapah, Anantapur, Bellary, Kurnool and North Nellore—a failure which was afterwards intensified in portions of all the last mentioned districts by the failure of their north-east monsoon of 1891-92.

2. The failure of the late or north-east monsoon rains of 1890-91 was felt in all the nine districts first specified in paragraph 1, but special operations for the relief of distress were found necessary in the first six months of 1891 only in the districts of Chingleput, North Arcot, Nellore, Cuddapah and Coimbatore. The failure of the early or south-west monsoon rains of 1891 rendered necessary the opening of relief works in Salem, and the combined failure of the south-west monsoon rains and the north-east monsoon rains of 1891-92 compelled the extension of relief works to several new taluks of Cuddapah, to one new taluk of Coimbatore, and to a large area in Anantapur, Bellary, Kurnool and North Nellore. The bountiful rains of the south-west monsoon of 1892 brought relief to all these affected tracts and allowed of the closure of all special measures of relief in September last.

The rainfall of each monsoon period of the two and a half years ending September 1892 for each of the districts in which relief operations were carried out is shown below:—

Group and districts.	Average during 30 years.				1890-91.				1891-92.				1892.	
	April and May.	June to September.	October to March.	Total.	April and May.	June to September.	October to March.	Total.	April and May.	June to September.	October to March.	Total.	April and May.	June to September.
Deccan.														
Kurnool	1.68	18.40	8.92	29.00	1.57	22.00	5.48	29.05	1.08	10.51	3.20	14.79	1.16	26.97
Bellary	2.65	13.88	8.46	24.99	2.73	12.12	9.43	24.28	0.97	6.28	2.67	9.92	1.68	19.07
Anantapur	2.97	13.97	7.90	24.84	2.48	9.40	9.00	20.88	0.76	5.63	4.47	10.86	1.40	21.41
Cuddapah	2.40	14.81	11.91	29.12	1.66	11.05	9.96	21.78	0.79	8.92	4.46	14.17	0.99	24.60
Coastal.														
Nellore	1.84	10.71	22.38	34.93	0.47	10.55	14.79	25.81	0.38	7.27	9.34	16.99	0.47	9.57
Madura	2.04	15.08	31.61	48.73	..	13.68	10.70	24.38	0.55	6.65	23.28	29.48	0.43	28.88
Chingleput	2.68	16.44	28.99	48.11	0.75	18.85	11.36	30.96	0.73	7.35	21.38	29.44	0.42	28.27
Central.														
North Arcot	3.55	16.18	18.14	37.87	2.67	17.01	12.40	32.08	0.80	10.07	15.49	26.36	1.87	27.01
Salem	5.19	14.28	12.21	31.68	4.94	14.04	12.22	31.30	1.52	8.79	8.85	19.46	6.02	18.21
Coimbatore	5.16	8.27	12.16	25.59	6.62	6.00	14.07	26.69	2.57	4.55	12.98	21.12	6.44	8.04
Southern.														
Tinnevely	2.47	3.64	19.79	25.90	2.85	9.60	16.90	29.35	3.09	2.24	27.55	32.88	6.06	2.28

The cycle of bad seasons was, however, not yet over in the Presidency. The north-east monsoon of 1892-93 was singularly deficient in Chingleput, North and South Arcot, Trichinopoly, South Coimbatore, Madura and Tinnevely, and the necessity for carrying out relief works on a large scale throughout the Kamnad zemindari in the Madura district was only obviated by a very large migration of the people in the early months of the current year to the neighbouring delta district of Tanjore and by a fair fall of rain in March which gave employment to the residue of the population.

3. The half empty irrigation works, the dry crops failing for want of rain, the crops under irrigation works failing with the failure of the supply on which they depended, and the large areas left uncultivated altogether in parts of Cuddapah, Nellore, Chingleput, North Arcot, Coimbatore, Madura, Tinnevely and Malabar, rendered it nearly certain in December 1890 that it would be necessary to find employment for the relief of agricultural labourers who, deprived of their wonted work by the failure of the crops, would otherwise be unable to support themselves.

That the failure of the crops of a single season should be sufficient to cause extensive distress had formerly been doubted, but the experience of 1888-89 in Ganjam had shown clearly that a failure even so limited might mean famine widespread and severe, and that it was necessary to keep a most careful watch over all tracts so affected.

4. In reviewing the condition of the affected districts early in February 1891, the Commissioner of Settlement in charge of relief operations reported that the districts which had suffered the most severely from failure of the crops were Chingleput, North Arcot and Tinnevely, but that, even in those districts, there was no immediate necessity for starting extraordinary relief works, and that the ordinary public works and minor irrigation works on a slightly enlarged scale would be sufficient to give the needed employment to labour. Considerable loss of revenue was anticipated in the shape of remissions on irrigated land where the crops had been lost. Much suffering, it was also stated, must of necessity occur among the poorer classes, owing to the pressure of high prices, but it was added that there seemed no chance of the present scarcity deepening into famine, if the next monsoon was favorable.

In South Arcot and Madura, the areas on which the crops had been reported to have been lost or to be in a critical condition were comparatively small, and rain in the earlier months of 1891 had so much improved the fading crops that the Commissioner who had personally inspected the affected tracts in South Arcot, recommended that that district should be removed from the affected list. In Malabar, the first rice crop though not up to the average was hardly anywhere an entire failure, and it was not considered that the failure of the second rice crop in parts of so rich a district would be likely to entail any serious distress.

5. At the end of February it was considered that the area affected might be put down at about 18,000 square miles, comprising the taluks of Nellore south of the Penner river and the southern portion of the Venkatagiri zemindari; portions of the eastern and southern taluks of Cuddapah; the greater portion of the Kalahasti zemindari and the Wandiwash taluk in North Arcot; the northern taluks of Chingleput and portions of three others; seven taluks of Tinnevely, of which four were only partially affected, and portions of the Coimbatore district. The population of these tracts amounted to about four millions. The area shown against Cuddapah was large, but

District.	Total area.	Total population.	Area affected.	Approximate population of the affected tracts.
Chingleput	2,842	981,400	2,360	795,700
North Arcot	7,266	1,817,800	1,300	655,100
Nellore	8,739	1,220,200	2,200	261,000
Cuddapah	8,745	1,121,000	2,700	728,500
Tinnevely	5,551	1,509,700	5,700	1,272,000
Coimbatore	7,842	1,657,700	2,900	748,500
Total	40,865	8,497,800	18,100	4,078,800

and portions of three others; seven taluks of Tinnevely, of which four were only partially affected, and portions of the Coimbatore district. The population of these tracts amounted to about four millions. The area shown against Cuddapah was large, but

the failure there though widespread was only partial and much less than in the other districts. In most of the affected districts there had been fortunately some unhelped for and quite abnormal falls of rain in January and February which, though too late to save any considerable portion of the wet crops, materially improved the prospects in various ways, especially in Tinnevely and Nellore, and at the end of February there was no ground for any serious anxiety in any of the affected districts except in portions of Chingleput, North Arcot and Tinnevely. In the three districts referred to a slightly increased expenditure on repairs to minor irrigation works and on a few large additional works opened by the Public Works Department in view to guarantee employment to all comers supplemented by the liberal grant of loans under the Land Improvement Act, had enabled the ryots and the labouring classes to pass through the first two months of the year without any severe distress. Larger numbers, it was thought, would resort to the Government works during the period intervening between February and the south-west monsoon in May and June, and it was considered that it would be necessary in certain tracts to supplement the offer of employment to those capable of labour by the grant of gratuitous relief to the destitute who were unable to work; but if fair rain fell in May or June the distress, it was estimated, would be at an end, while if the rains in May and June failed the position would be grave. Preparations should, it was decided, be made to meet such an event, though there was but little probability that it would happen. The numbers on Government works of all kinds including minor irrigation works amounted at the end of February to about 600 in Chingleput and about 260 in North Arcot; in the week ending 14th March, owing to the cessation of harvest operations, the numbers rose to 3,500 and 2,200, respectively. A considerable proportion, however, of these numbers represented ordinary labourers who would be employed in ordinary seasons also on works carried out by the Public Works or by the Revenue and Local Fund Departments. In the latter district, the numbers would, it was expected, increase very considerably when the irrigation works, for the repair of which Government had sanctioned a loan of 4 lakhs to the Zemindar of Kalahasti, had been fairly started.

6. Prices.—The following table shows the prices in Imperial seers per rupee of the principal food-grains during the three months ending February 1891 as compared with the average of five years ending 1884-85 and of five years ending 1889-90:—

District.	RICE, 2ND SORT.							CHOLU.						
	Average of five years ending 1884-85.	Average of next five years.	December 1890.	January 1891.	February 1891.	Average of eleven months of 1890-91.	Scarcity rate.	Average of five years ending 1884-85.	Average of next five years.	December 1890.	January 1891.	February 1891.	Average of eleven months of 1890-91.	Scarcity rate.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Nellore	15.6	15.0	11.8	11.8	12.0	12.7	9.5	26.9	24.5	21.3	20.9	21.2	22.3	12.5
Cuddapah	15.2	15.2	11.9	11.6	11.6	13.1	9.7	30.6	28.9	26.0	23.9	24.0	28.0	13.7
Chingleput	16.0	16.0	11.7	11.7	11.6	11.9	10.0	23.7	21.0	15.2	17.4	18.7	17.6	12.0
North Arcot	16.8	15.9	11.4	11.4	11.6	12.2	10.0	29.5	27.4	23.1	22.2	20.9	24.8	12.0
South Arcot	16.9	16.7	12.4	12.8	12.6	12.2	10.0	32.6	28.3	21.8	24.8	23.6	22.9	12.0
Madura	15.5	14.1	11.2	11.1	11.3	10.9	8.5	36.0	29.2	19.8	21.6	23.6	20.1	13.8
Tinnevely	15.2	13.2	10.4	10.5	10.5	10.3	8.5	28.9	23.3	16.1	15.9	15.7	17.2	13.8
Coimbatore	16.0	14.1	11.7	11.4	11.3	11.6	8.5	27.4	22.5	18.8	18.6	18.6	19.9	11.5
Malabar	14.6	13.7	11.3	11.7	11.8	11.4	8.2	..	..	..	..	..	..	..

District.	CUMBU.							RAGI.						
	Average of five years ending 1884-85.	Average of next five years.	December 1890.	January 1891.	February 1891.	Average of eleven months of 1890-91.	Scarcity rate.	Average of five years ending 1884-85.	Average of next five years.	December 1890.	January 1891.	February 1891.	Average of eleven months of 1890-91.	Scarcity rate.
	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Nellore ..	25.3	23.1	19.6	19.3	19.5	20.6	12.0	30.3	28.7	22.5	22.4	22.1	24.2	14.0
Cuddapah ..	30.3	28.9	22.1	19.9	19.5	25.1	13.1	34.0	32.7	27.9	26.0	26.2	30.5	14.7
Chingleput ..	22.9	20.1	18.1	17.6	18.5	17.6	12.0	27.1	27.3	22.5	21.3	20.6	23.3	13.2
North Arcot ..	27.7	26.1	21.2	20.3	19.2	22.1	12.0	31.9	31.3	24.5	23.4	23.1	26.7	13.2
South Arcot ..	30.9	27.9	24.9	24.3	22.8	22.5	12.0	31.9	28.2	24.3	24.1	22.8	23.4	13.2
Madura ..	32.2	25.4	18.7	18.2	18.8	18.23	12.5	33.8	27.6	21.7	20.2	20.2	20.9	13.75
Tinnevelly ..	27.3	20.5	15.5	15.9	15.2	15.2	12.5	30.8	24.8	19.6	19.1	18.3	18.7	13.75
Coimbatore ..	32.8	26.4	22.2	21.2	20.5	22.5	12.8	32.3	28.3	24.4	22.9	22.1	25.3	13.5
Malabar ..	..	..	..	..	..	..	..	21.9	25.0	23.1	22.6	21.8	23.8	10.75

Owing to the unfavorable season in several districts of the Presidency both in 1888-89 and 1889-90, prices of all grains during those two years generally ranged higher than usual. In the year 1890-91 there was a further and marked rise beginning from November 1890 owing to the partial failure of the north-east monsoon and consequent deficient harvests. The rise, however, was gradual and prices in February 1891 were still 50 to 75 per cent. below the scarcity rate in the case of the dry grains which form the staple food of the masses, and from 25 to 33 per cent. less in the case of rice except in Chingleput and North Arcot, where the price of this grain was only 16 per cent. below the scarcity rate. All the affected districts had, however, great facilities of communication both by rail and by road, while the two worst districts, Chingleput and North Arcot, are quite close to the Presidency town. Private trade was very active as shown by the rail-borne and sea-borne trade returns, and markets everywhere abundantly supplied.

7. *Numbers seeking relief.*—The numbers resorting to relief works from February, the date on which special works were commenced, until June, were as shown below:—

Districts.	1891.				
	February.	March.	April.	May.	June.
Tinnevelly ..	..	253	1,639	1,842	768
Coimbatore ..	..	240	370	208	423
North Arcot ..	155	1,736	3,313	6,897	7,208
Chingleput ..	928	4,449	4,662	6,812	8,055
Cuddapah ..	..	..	..	170	325
Total ..	1,083	6,678	9,983	14,899	16,779

The largest numbers were in the Chingleput district where the numbers on works rose from 928 in February to 8,055 in June, the highest average numbers reached in any month during the continuance of distress in the district, though in one week in October the numbers reached 10,007. The numbers in North Arcot, the affected tracts of which adjoined similarly affected tracts in Chingleput, also rose considerably, though with the failure of the south-west monsoon in May and June they were to rise higher.

Measures for the gratuitous relief of indigent poor, unable to labour, were instituted about the end of March in the North Arcot district, after a visit to the distressed tracts in that district had convinced His Excellency the Governor of their

absolute necessity, and took the form of kitchens for the issue of cooked food. These were extended shortly afterwards to the Chingleput district. To these districts it was found possible to confine gratuitous relief during the first period of distress. The numbers resorting to this form of relief monthly in each of the two districts are shown in the margin.

March 1891 ..	..	..	26	..
April ..	..	..	760	..
May ..	..	..	1,102	122
June ..	..	..	1,355	208

8. In the month of April good rain had fallen in the Tinnevelly and parts of the Coimbatore district and had done much to improve prospects and to give agricultural employment. The rainfall, however, of the quarter ending 30th June, which included the first six weeks of the south-west monsoon, had been generally bad in the rest of the affected tracts. In the Rayachoti taluk of Cuddapah, the only affected taluk in that district, there had been practically no rain during the three months. In the Chingleput district the prospects at the end of June were more gloomy than they had been in May. There was a fair fall of rain in June in the Tiruvallur and Madurantakam taluks, but in neither taluk did it reach the worst tracts. In the Saidapet and Chingleput taluks the rainfall of June was only .92 and .37 inches against an average of 2.33 and 3.45 inches, respectively, while in the Ponnéri taluk the rain of the three months registered only .42 inch compared with an expected average of 3.36 inches. In the North Arcot district, prospects had been considerably improved in the Wandiwash taluk by a good fall of rain which had enabled the ryots to sow large areas of dry land with cumbu and gingelly, but in the Kalahasti zemindari, the other affected portion of the district, the rainfall had been hardly anywhere sufficient to allow of the planting of dry crops, and at the Commissioner's visits to the Maderpauk division of the zemindari he found the country entirely parched up with the exception of a few oases under wells.

In the Coimbatore district there had been no rain in June in the Udamalpet taluk, and the fall in the taluks of Coimbatore, Pollachi and Palladam had been very slight. In the northern portion of the Udamalpet taluk, the southern portion of Palladam and the north-east portion of Pollachi a considerable amount of distress was reported by the Collector, which would certainly increase if rain did not fall at an early date; the tract specified consists of very poor soil and, owing to the successive failure of crops during three years, stocks of grain were believed to be very low. Prices were rising considerably notwithstanding large imports by rail.

The rainfall in the affected tracts during the period just dealt with is shown below:—

District.	Taluk.	Rainfall, April to June inclusive.	
		Average of 10 years.	1891.
Cuddapah ..	Rayachoti ..	3.67	.37
..	Chingleput ..	4.90	1.42
..	Madurantakam ..	6.09	2.32
Chingleput ..	Ponnéri ..	3.36	0.42
..	Saidapet ..	3.46	1.54
..	Tiruvallur ..	4.10	3.59
North Arcot ..	Wandiwash ..	8.02	4.10
..	Kalahasti ..	4.33	2.05
..	Maderpauk ..	4.43	1.64
Coimbatore ..	Palladam ..	7.19	3.66
..	Udamalpet ..	5.87	1.64
..	Dharapuram ..	5.59	3.74
..	Pollachi ..	9.70	8.42

9. The area and population of the affected tracts above specified in which distress was felt at the end of June was about 3,450 square miles with a population of about 950,000. The deficiency of the south-west monsoon to date which had been markedly felt in the affected tracts had been general throughout the Presidency. The rains

had been unusually late throughout the Presidency generally, and the general outlook was far from satisfactory.

10. *Prices.*—The prices of the principal food-grains in the affected tracts during the months of January, April, and June are shown below compared with the normal prices:—

District.	Taluk.	Staple grains.	January.		April.		June.	
			Normal.	1891.	Normal.	1891.	Normal.	1891.
Cuddapah	Báyachóti	Cumbu	34.3	21.8	30.3	19.9	30.8	19.6
	Chingleput	Ragi	35.1	25.5	34.9	30.0	34.6	30.0
Chingleput	Madurantakam	Do.	26.9	19.9	25.9	19.9	25.0	20.1
	Ponnéri	Do.	26.9	21.0	25.0	19.0	25.7	18.6
	Saidapet	Do.	26.4	19.8	26.9	19.4	26.9	19.9
	Tiruvallúr	Do.	26.1	21.9	25.8	21.9	24.2	21.2
North Arcot	Wandiwash	Do.	27.9	21.9	28.5	21.9	28.5	19.9
	Kálahasti	Do.	29.7	20.9	27.4	21.8	27.7	19.7
	Madurpak	Do.	32.8	20.0	32.0	22.8	33.0	20.9
Coimbatore	Palladam	Cholum.	20.0	18.2	20.2	19.1	21.0	17.8
	Udamalpet	Do.	21.4	15.4	22.6	18.0	21.7	17.7
	Dhármapuram	Do.	19.4	15.9	21.4	20.0	20.7	18.8
	Pollachi	Do.	22.7	19.1	22.8	17.8	22.7	17.4

Prices were everywhere high, but in no case had there been any approach to famine rates, any serious rise being prevented by the large importations by rail and sea into the affected tracts. The grain trade was exceptionally active and quantities of grain were poured into North Arcot, Chingleput, Coimbatore and Salem districts from the Delta districts of the Presidency and from the Ceded districts and the province of Mysore. The area of distress was of but limited extent and was everywhere easily accessible.

11. *Second period, July to December 1891.*—The rainfall which had been deficient in the affected districts up to the end of June showed a further deficiency in July and all hopes of bringing the relief works to a speedy close, which would have been the certain result of an early and good monsoon, had to be given up. The deficiency continued through August, during which month it was specially marked in most of the worst affected areas. In the two worst taluks of Chingleput, however, a fair fall of rain at the end of the month enabled a large quantity of land to be sown, removed the water famine, and ensured an early supply of grass to the cattle. The rains of September were generally deficient, but towards the end of the month good rain commenced to fall in most districts, which continued through the first weeks in October and greatly improved the condition of the affected areas, with the exception of parts of Coimbatore and Salem.

The above remarks on the rainfall have had reference solely to the tracts which were suffering from the failure of the north-east monsoon of 1890-91. The south-west monsoon however had been late everywhere throughout the Presidency, and had up to the end of September been seriously deficient throughout the districts of Chingleput and Coimbatore and also in the Bellary and Anantapur districts. In the first and two last of the districts named the fall had been less than half the usual average, while in Coimbatore it was only slightly above half the average. The effect of this late and deficient rainfall had been to retard sowings very greatly, so that at the end of September the area sown with dry crops throughout the Presidency was only 7,626,000 against a normal area of 10,400,000 acres, showing a falling off of 27 per cent., the deficiency being most marked in the nine districts noted in the margin where the dry cultivation amounted to only 3,587,000 acres compared with a normal cultivation during the same period of 6,089,000 acres. The continued want of agricultural employment consequent on the failure of the rains led in September to the opening of relief works in four

Bellary.
Anantapur.
North Arcot.
Chingleput.
South Arcot.

Salem.
Coimbatore.
Trichinopoly.
Madura.

taluks of the Salem district, though the advent shortly afterwards of good rain enabled the works to be speedily closed in three out of the four taluks. The October rainfall at length brought relief to North Arcot, Chingleput and Coimbatore, which had suffered so seriously since the commencement of the year, and also to the greater part of Salem. In the Deccan districts, however, the fall was barely half the average.

12. The rainfall in Bellary district in October amounted to 2.14 inches only as compared with a twenty-years' average of 4.85 inches, and the total rainfall from April to October inclusive to 9.39 inches as compared with a similar average of 21.06 inches. Extensive tracts had remained unsown and the crop over large areas was reported to be poor and scanty and in many places to have completely withered. In the Kurnool district, the state of the Markapur taluk began to cause anxiety early in October, and at a later date the adjoining taluk of Cumbum also. Up to September, the south-west monsoon rains had been good at Cumbum, but very light at Markapur, while during September the rain failed almost entirely at both stations and during October only took the form of light showers. Of a normal area of 90,000 acres of dry land usually cultivated to end of September, only about 40,000 acres had been sown in 1891, and these crops the Collector reported had either vanished or been ploughed up. The situation was similar over a large part of the Cumbum taluk. A large area was sown during October and November in Markapur, but it depended on the rains of November and December, which were insufficient, to bring the crops to maturity. At the end of October prices had risen considerably and were still rapidly rising.

In the Anantapur district, owing to the deficiency of the rains of the south-west monsoon, the early crops throughout the district had been exceptionally poor, the yield being estimated at only a quarter to half the average. The total rainfall in the district to the end of October had been only 9.84 inches as compared with the normal of 21.47 inches and sowings had been seriously retarded, having amounted to only 786,567 acres against the average to the same date of 1,239,634 acres. The Dharmavaram taluk had specially suffered from the failure of rain.

13. In the Salem district, sufficient rain fell in October as already stated to admit of all labourers finding their normal agricultural employment, save in the Tiruchengódu taluk, in the northern portion of which taluk the circumstances were such as to compel the retention of the relief works.

14. The November rainfall throughout the Presidency generally, with the exception of the two southernmost districts and of the West Coast districts, fell far short of the average. In Nellore, North Arcot and Chingleput the deficiency was as noted in the margin, the deficiency in Nellore being almost entirely in the northern taluks where rain was most urgently needed. In the Deccan districts, where, as already stated above, the rains of the south-west monsoon and of October had been exceedingly deficient, the rain of November brought no compensation, the fall during the month being as shown in the margin compared with the average. In Kurnool, Bellary and Anantapur, very large areas of crop were reported to have entirely withered, while the crops over large areas in Cuddapah and North Nellore were

Districts.	November rainfall.	
	Average.	1891.
Nellore	9.11	1.46
North Arcot	7.26	2.79
Chingleput	12.30	4.75

likely to meet a similar fate unless early rain fell.

15. The December rainfall was good in Chingleput and in the previously affected areas of North Arcot, and admitted of the issue of orders for the early closing of relief works in those tracts. The situation in Coimbatore also much improved during the month, enabling the relief works to be much circumscribed. Some parts, however, of North Arcot above the gháts began to cause anxiety, while there was no improvement in the state of the western portions of Salem.

In the Ceded districts and Kurnool, except at a few stations near the southern frontier of Cuddapah and at the stations in the eastern section of the same district, there was practically no rain at all during December; over large areas the crops continued to wither, the area of totally withered crops in Bellary and Anantapur being afterwards found to be 350,728 acres and 112,701 acres, respectively, while remissions were also granted for short crops of less than a quarter average outturn on 43,981 and 113,406 acres, respectively. So large also in other parts was the area which remained unsown (in Bellary 417,500 acres and in Anantapur 201,500 acres) and so real seemed to be the demand for assistance of those whom the failure of crops had deprived of employment and of support that it was determined to open relief works in four taluks of Bellary and in one taluk of Anantapur. Works had already been opened in the Kurnool district in the previous month in the two taluks of Cumbum and Markapur where the early crop had already been lost over a large area as reported in paragraph 12 above, and in January relief works had to be opened in five taluks of Cuddapah. In regard to the Cuddapah Sub-division, in which three of the latter taluks are situated, Mr. Atkinson, the Sub-Collector, reported in December 1891—

"This is the fourth consecutive monsoon that has failed wholly or in part. We are therefore now face to face with famine. My season report for November will give full particulars of the state of crops, &c., during that month. There is no need to dwell on that subject here. I wish now only to state, as emphatically as I can, that hereafter there is no question of scarcity or distress. We are entering a period of famine. The people generally have some odds and ends of crops (heaven save the mark!) to gather, with here and there a little work on the new railway and elsewhere, which will give employment up to the third or fourth week of this month. I am told by experienced observers that the grain in hand will last about the same time. It cannot last longer, for almost all old stores of grain are exhausted and the produce of the harvest now going on is being consumed as fast as it is gathered."

16. The rainfall of 1891-92 in the districts and taluks in which relief operations were carried on during that year is shown below compared with the average fall expected:—

Districts and taluks.	Normal.				1891-92.			
	April and May.	June to September.	October to March.	Total.	April and May.	June to September.	October to March.	Total.
Nellore.								
District average	1.84	10.71	22.38	34.93	0.38	7.27	9.34	16.99
Ongole	1.91	14.22	17.96	34.09	..	8.45	6.12	14.57
Kandukur	1.60	12.36	19.21	33.17	1.05	9.40	6.17	16.62
Kavali	1.51	11.87	26.17	39.55	..	9.50	9.85	19.35
Kanigiri	1.75	9.79	12.87	24.41	2.20	6.30	4.20	12.70
Udayagiri	2.23	7.75	19.73	29.71	0.95	6.32	6.35	13.62
Atmakur	2.06	7.72	22.18	31.96	0.50	4.15	3.80	8.45
Rapur	2.30	10.65	27.68	40.63	..	5.60	11.15	16.75
Nellore	1.98	10.43	26.35	38.76	..	7.95	9.24	17.19
Gudur	1.49	8.16	22.81	32.46	..	6.25	8.90	15.15
Venkatagiri	2.24	10.73	18.84	31.81	0.25	8.21	11.71	20.17
Chingleput.								
District average	2.68	16.44	28.99	48.11	0.73	7.35	21.36	29.44
Ponnéri	2.92	14.72	32.96	50.60	0.27	6.31	23.30	29.88
Tiruvallūr	2.42	14.63	25.64	42.69	0.95	10.01	21.66	32.62
Saidapet	1.88	15.07	34.59	51.54	0.62	6.06	24.26	30.94
Conjeevaram	2.23	17.86	24.59	44.68	0.92	8.89	15.80	25.61
Chingleput	2.35	18.04	26.38	46.77	1.05	6.79	25.93	32.77
Madurantakam	2.63	17.58	25.41	45.62	0.50	6.75	20.36	27.61
North Arcot.								
District average	3.55	16.18	18.14	37.87	0.80	10.07	15.23	26.10
Kálshasti	2.86	13.18	31.40	47.44	0.70	6.60	23.78	31.08
Pólmur	3.23	17.75	17.88	38.86	0.90	9.94	18.48	29.32
Wandiwash	3.73	19.62	22.53	45.88	0.71	10.91	27.12	38.74
Panganáru	3.35	12.62	12.74	28.71	1.05	6.43	6.55	14.03
Salem.								
District average	5.19	14.28	12.21	31.68	1.82	8.79	8.35	19.46
Tiruchengódu	4.89	11.94	11.12	27.95	2.25	5.68	3.76	15.69
Salem	5.62	17.63	11.96	35.21	1.94	8.63	6.28	16.85
Dharmapuri	5.43	13.81	12.40	31.64	1.57	8.16	6.25	15.98
Utangiri	3.68	14.43	13.61	31.72	1.40	9.28	12.38	23.01

Districts and taluks.	Normal.				1891-92.			
	April and May.	June to September.	October to March.	Total.	April and May.	June to September.	October to March.	Total.
Coimbatore.								
District average	5.16	8.27	12.16	25.59	3.57	4.55	12.98	21.10
Pollachi	6.11	12.96	11.14	30.21	7.90	5.72	15.32	28.94
Udamalpet	4.85	3.44	13.59	21.88	1.64	0.70	14.95	17.29
Coimbatore	4.31	5.82	11.65	21.78	2.95	2.27	15.46	20.68
Palladam	4.63	4.00	11.78	20.41	2.82	2.67	18.87	24.36
Dhármapuram	4.44	3.55	11.77	19.76	0.80	3.28	10.36	14.44
Erode	5.31	9.71	11.43	26.45	3.19	7.26	10.78	21.23
Bhaváni	5.03	10.75	12.50	28.28	3.77	10.48	13.26	27.51
Kurnool.								
District average	1.88	18.40	6.92	27.20	1.08	10.51	3.20	14.79
Markapur	2.07	12.24	10.97	25.28	..	4.43	3.90	8.33
Cumbum	2.11	12.12	10.74	24.97	6.18	11.89	3.60	21.67
Koilkuntla	1.70	17.40	5.45	24.55	2.95	12.35	5.27	20.57
Kurnool	2.09	19.56	4.66	26.31	2.14	9.46	2.38	13.98
Pattikonda	1.83	15.24	6.01	23.08	0.74	12.31	3.43	16.48
Bellary.								
District average	2.55	13.66	6.49	22.70	0.97	6.28	2.67	9.92
Adóni	2.08	17.30	5.99	25.37	0.42	7.62	1.82	9.86
Alór	2.18	13.96	6.40	22.54	0.70	6.72	1.65	9.07
Bellary	1.83	11.85	6.11	19.79	1.40	4.41	2.15	7.96
Ráyadrug	2.50	9.53	7.03	19.06	0.25	4.42	1.60	6.27
Anantapur.								
District average	2.87	12.97	7.90	23.74	0.76	5.63	4.47	10.86
Dharmavaram	2.54	11.03	8.13	21.70	0.65	4.52	2.99	8.16
Anantapur	2.30	12.06	6.82	21.18	0.87	4.14	4.74	9.75
Gooty	2.44	13.44	7.48	23.36	0.04	6.80	3.80	9.84
Tadpatri	1.84	14.48	7.06	23.38	1.00	6.50	4.37	11.87
Cuddapah.								
District average	2.40	14.81	11.91	29.12	0.79	8.92	4.46	14.17
Badvel	1.80	14.53	13.21	29.54	1.20	7.80	2.92	11.92
Sidhout	2.54	18.39	13.56	34.49	0.75	13.98	3.71	18.44
Ráyachóti	1.93	12.95	11.03	25.91	..	4.80	2.03	6.83
Kadiri	2.84	14.90	9.90	27.64	1.20	3.96	4.68	9.84
Madanapalle	3.46	12.10	12.87	28.43	1.22	6.89	6.24	14.35
Vayalpad	2.72	11.04	13.27	30.03	0.90	9.78	5.69	16.37

Everywhere, as already noticed, the south-west monsoon had been bad, but, in the districts which had suffered in the early part of the year, the failure of the early rains had been largely redeemed by the north-east monsoon. In Bellary, Cuddapah, Kurnool, Anantapur, North Nellore, and in portions of North Arcot, Salem and Coimbatore a very deficient south-west monsoon had been followed by an equally deficient north-east monsoon. Prices were high everywhere throughout the Presidency owing to the failure of the crops in so many districts and especially high in the districts just named, and it had become certain that large relief works would be necessary, though at the end of 1891 it was difficult, as it always is, to gauge the extent of the distress.

17. *Prices.*—The following statement gives the prices of the principal food-grains in the affected districts and taluks for the months of July, October and December 1891 as compared with the normal and with those which prevailed in the corresponding months in 1876:—

District.	Taluku.	Staple grains.	July.			October.			December.		
			1876.	Normal.	1891.	1876.	Normal.	1891.	1876.	Normal.	1891.
Nellore ..	District aver- age.	Cholum ..	26.7	26.1	21.3	17.6	25.3	12.0	8.7	25.3	14.4
		Ragi ..	29.3	30.2	23.2	18.8	29.1	20.5	8.8	29.1	15.0
	Ongole ..	Cholum ..	25.2	23.7	20.1	20.8	23.6	18.9	9.7	23.8	12.4
		Ragi ..	31.6	29.2	24.7	24.5	27.5	..	8.8	26.0	..
	Podili ..	Cholum ..	28.4	25.8	22.6	18.5	25.1	21.7	9.7	25.6	16.1
		Ragi ..	32.5	29.5	27.2	20.1	27.9	23.8	9.1	29.7	17.6
	Udayagiri ..	Cholum ..	23.9	25.0	24.4	16.6	24.2	21.1	8.8	23.7	18.8
		Ragi ..	27.2	29.3	27.2	15.8	28.6	24.2	9.0	27.3	19.5
	Nellore ..	Cholum ..	26.9	23.6	20.0	14.6	22.8	17.0	7.4	22.7	11.8
		Ragi ..	26.8	27.5	21.1	16.6	25.9	17.3	7.1	23.8	12.2
Madras ..		Cholum ..	26.9	21.6	19.5	..	21.6	17.4	..	21.6	13.0
	Gudur ..	Ragi ..	25.5	25.5	20.2	..	25.5	16.8	..	25.5	13.4
	Madras ..	Rice ..	11.7	13.8	11.0	9.7	13.3	10.0	7.1	13.5	9.1
		Ragi ..	19.9	26.7	19.0	13.2	26.8	6.9	8.1	27.1	12.5
	District aver- age.	Rice ..	15.4	15.7	10.3	11.6	15.2	10.1	7.9	15.4	9.6
		Ragi ..	20.5	26.0	17.6	17.0	27.5	15.8	9.4	27.7	20.9
	Ponnéri ..	Rice ..	15.1	17.1	10.8	12.5	16.1	10.2	8.0	15.8	9.9
		Ragi ..	19.2	26.9	17.4	17.1	28.1	14.4	9.6	26.4	11.9
	Tiruvallur ..	Rice ..	12.8	15.0	10.4	10.6	14.4	9.7	8.0	14.5	9.5
		Ragi ..	18.3	28.2	17.3	16.1	28.9	14.4	9.0	28.9	13.1
Chingleput ..		Rice ..	14.4	15.6	10.5	12.3	15.4	10.1	9.0	15.0	9.7
	Chingleput ..	Ragi ..	22.3	24.2	17.0	19.1	25.1	16.1	10.7	25.2	12.1
		Rice ..	15.3	16.6	11.2	11.4	16.0	10.3	7.4	15.7	10.3
	Madurantakam.	Ragi ..	22.3	25.0	17.1	19.1	26.8	16.1	9.5	26.4	12.5
	District aver- age.	Cumbu ..	18.3	25.2	18.4	13.5	28.4	14.3	8.6	27.8	11.2
		Ragi ..	21.5	30.9	20.6	14.6	31.9	18.9	8.7	31.9	13.1
	Kalahasti ..	Cumbu ..	..	31.5	17.0	..	31.9	15.8	..	30.6	10.9
		Ragi ..	16.9	33.9	29.4	12.2	34.8	17.3	8.6	33.7	12.7
	Polur ..	Cumbu ..	19.3	27.6	17.2	17.9	31.1	15.2	9.1	27.7	14.4
		Ragi ..	20.0	27.7	17.8	14.7	30.4	18.4	9.1	30.3	13.5
North Arcot ..		Ragi ..	20.0	26.6	17.3	19.7	27.7	17.3	10.0	9.5	13.1
	Wandiwash ..	Ragi ..	19.7	39.7	25.3	11.3	41.3	21.4	6.9	39.7	12.8
	Punganūru ..	Ragi ..	19.7	39.7	25.3	11.3	41.3	21.4	6.9	39.7	12.8
	District aver- age.	Cumbu ..	19.6	25.4	19.5	15.9	29.8	16.6	8.9	29.9	13.0
		Ragi ..	20.7	30.0	22.6	14.6	32.2	20.0	8.7	30.4	13.1
	Tiruchengōdu.	Cumbu ..	17.9	21.8	18.6	18.4	23.6	14.3	9.9	24.8	12.8
		Ragi ..	19.1	24.6	19.1	15.4	30.5	17.4	9.0	27.9	12.2
	Salem ..	Cumbu ..	20.0	24.6	20.4	18.8	23.5	18.0	8.0	24.6	14.3
		Ragi ..	21.5	28.8	21.9	15.9	39.2	19.2	8.3	29.8	13.2
	Dharmapuri ..	Ragi ..	19.0	33.8	24.8	11.3	31.9	21.3	7.7	31.2	12.8
Salem ..		Cumbu ..	18.0	26.9	20.3	15.5	29.2	16.3	8.4	31.7	13.6
	Uttankarai ..	Ragi ..	21.0	30.7	21.0	14.3	30.9	20.2	8.5	31.6	13.9
	District aver- age.	Cholum ..	19.2	24.2	17.2	15.6	24.6	66.5	8.9	25.4	13.1
		Cumbu ..	20.7	28.4	18.2	18.9	28.7	16.2	11.1	31.2	16.3
	Pollachi ..	Cholum ..	18.8	22.5	15.7	18.9	24.2	18.3	9.5	23.1	14.8
		Cumbu ..	21.2	27.8	..	22.1	27.5	..	11.6	29.3	20.7
	Coimbatore ..	Cholum ..	18.4	21.0	17.7	16.4	22.2	16.6	8.4	22.5	19.6
		Cumbu ..	17.9	23.9	18.1	19.2	23.9	15.6	9.5	24.4	16.3
	Palladam ..	Cholum ..	18.1	20.2	15.8	15.7	20.7	16.3	8.7	19.4	13.0
		Cumbu ..	22.9	28.5	20.7	24.2	28.6	15.9	12.7	30.3	16.6
Coimbatore ..		Cholum ..	18.3	19.8	16.6	13.0	20.8	15.2	8.2	20.0	14.0
	Dhárāpuram ..	Cumbu ..	23.6	27.5	18.3	19.7	28.0	15.6	12.3	27.7	13.8
		Cholum ..	18.8	23.8	17.4	12.6	24.6	17.4	8.7	25.4	12.2
	Bhavāni ..	Cumbu ..	17.2	22.6	18.3	15.9	25.6	15.9	10.0	26.5	13.5
	District aver- age.	Cholum ..	24.4	23.6	26.7	9.3	30.0	21.5	7.0	31.0	13.4
		Ragi ..	26.4	30.4	27.3	10.6	29.4	21.2	7.5	31.0	14.9
	Markapur ..	Cholum ..	31.6	27.7	..	14.2	27.4	19.0	7.9	27.9	13.0
		Ragi ..	34.5	28.5	24.0	16.9	26.6	21.5	7.5	27.0	16.0
	Cumbum ..	Cholum ..	23.7	26.2	21.3	9.5	26.6	20.5	7.9	28.9	13.8
		Ragi ..	27.0	27.6	24.0	9.0	27.1	20.6	7.5	29.0	13.5
Kurnool ..	Koilkuntla ..	Cholum ..	22.9	25.6	28.4	13.8	25.2	23.7	7.1	27.3	13.6
	Ramallakot ..	Do.	24.7	27.3	25.0	7.5	26.2	19.9	7.2	26.4	12.0
	Pattikonda ..	Do.	27.3	30.6	26.3	9.8	32.8	21.6	8.8	33.7	14.4
	District aver- age.	Cholum ..	22.0	29.7	26.4	10.2	31.2	21.9	7.4	32.3	14.2
		Do.	24.7	26.4	23.2	11.1	27.1	19.1	8.2	29.1	13.0
	Alūr ..	Do.	23.7	26.3	27.4	10.8	29.9	22.0	6.9	29.6	13.3
	Bellary ..	Do.	21.6	26.6	27.9	9.3	27.7	20.9	7.7	29.3	13.7
	Rayadrug ..	Do.	20.6	28.6	25.0	10.3	29.7	21.6	7.2	33.4	13.4
	District aver- age.	Cholum ..	23.2	31.1	27.7	10.6	31.7	21.0	7.5	32.4	12.4
		Do.	25.2	29.6	26.8	11.3	29.7	20.6	7.2	32.2	11.4
Anantapur ..	Anantapur ..	Do.	25.5	27.7	25.2	11.5	31.5	20.8	8.0	33.4	13.5
	Goety ..	Do.	25.0	26.8	25.8	10.8	30.2	20.3	8.2	33.2	13.4
	Tadpatri ..	Do.	22.7	24.9	23.7	10.6	26.1	20.5	8.0	27.2	12.6

District.	Taluku.	Staple grains.	July.			October.			December.		
			1876.	Normal.	1891.	1876.	Normal.	1891.	1876.	Normal.	1891.
Cuddapah	District aver- age.	Cholum ..	21.9	29.0	23.5	11.8	29.6	17.8	7.2	30.4	12.7
		Cumbu ..	21.1	29.0	18.6	11.6	30.0	16.2	7.4	31.0	13.0
		Ragi ..	22.7	33.1	25.9	12.0	33.0	19.6	7.4	33.9	14.0
	Badvel ..	Cholum ..	25.7	25.7	22.1	13.4	24.7	18.2	7.1	26.3	12.5
		Ragi ..	25.9	28.4	24.0	13.1	27.5	21.2	7.7	27.0	13.1
	Siddhavattam.	Cholum ..	20.3	23.1	18.2	15.0	23.4	16.8	7.5	22.5	12.2
		Ragi ..	24.0	29.1	24.0	14.6	28.2	19.5	8.5	27.3	13.3
		Cumbu ..	23.2	30.9	19.0	12.0	32.0	16.7	8.7	34.5	14.5
	Rāyachoti ..	Ragi ..	24.0	34.4	27.8	12.8	35.2	19.5	7.6	36.2	15.0
		Cumbu ..	23.9	32.0	23.2	12.3	33.1	15.2	6.5	36.8	13.1
Cuddapah	Kodiri ..	Cumbu ..	24.8	34.5	31.9	12.8	34.6	18.5	7.1	38.3	15.6
		Ragi ..	18.8	40.9	27.9	11.3	44.6	21.0	6.8	44.2	13.1
	Madanapalle ..	Cumbu ..	16.7	31.3	17.6	11.3	34.1	14.5	6.5	34.7	12.5
		Ragi ..	16.0	32.2	16.6	8.0	32.6	14.2	5.4	34.2	12.2
	Vayalpad ..	Cumbu ..	16.5	40.0	25.4	8.3	39.8	19.1	6.0	38.4	14.4

18. In the districts which had suffered from the failure of the rains in 1890, the rise in prices had been continuous since the beginning of the year though it had been very gradual and had been much mitigated by the great activity of the grain trade. With the failure of the south-west monsoon the rise in these districts became more rapid, and the sudden cessation of imports from the Deccan districts and Mysore towards the end of the year, consequent on the failure of the crops in those districts, sent prices up almost to famine rates. It did so, however, at a time when the advent of the rains had afforded the usual employment to all agricultural labourers, and placed them in a position to bear with less difficulty the enormous rise in the price of their ordinary food.

In the Deccan districts, the rise to the scarcity or famine rate approached in its suddenness to the experiences of 1876. In the Bellary district, which all indications in 1891 pointed out as the district most likely to suffer severely from the failure of the harvest, the price of cholum rose from 26.1 imperial seers per rupee in August to 17.1 seers in November and to 14.2 in December. In the Cumbum and Markapur taluks of Kurnool, with an affected area of about 1,645 square miles containing a population of 158,772, the price of ragi, which in July averaged 24 imperial seers per rupee, had risen in November to 20.5 seers and in December to 14.7 seers and was to rise in the succeeding month to 12.4 seers, the normal price for December being 26.8.

In the Darsi and Podili taluks of Nellore, with an affected area estimated at 1,540 square miles and a population of 158,097, the price of ragi had risen from 22.9 imperial seers per rupee in October to 17.5 seers in December and was to rise in January to 13.9 seers, the usual price in January being 27.5.

In the four taluks of Cuddapah which form the sub-division, in which the area over which the crops seriously failed amounted to about 2,329 square miles with a population of about 313,263, the price of ragi, which had ranged considerably above the normal rate since December 1890, rose from 28.2 seers in July—a month in which the normal price is about 37.4 imperial seers per rupee—to 19.6 seers in October and to 14.6 seers in December, in which month the normal price is about 39 seers.

19. Numbers employed on works.—The numbers to whom employment was given on public works during the six months ending December 1891 are shown below:—

Districts.	July.	August.	September.	October.	November.	December.
Tinnevely ..	729	524	..	..	..	..
Coimbatore ..	1,620	3,313	6,912	4,298	3,086	2,855
Salem ..	..	..	..	7,393	4,167	3,521
North Arcot ..	6,571	8,499	10,248	10,408	5,287	3,856
Chingleput ..	7,157	7,515	7,289	7,899	5,747	3,571
Nellore ..	398	2,502	3,895	3,916	1,030	1,153
Cuddapah ..	159	397	1,885	744	259	..
Kurnool ..	..	..	..	..	1,361	2,179
Bellary ..	..	..	..	..	..	1,839
Anantapur ..	..	..	..	..	..	394
Total ..	16,634	22,750	29,719	34,658	21,827	18,698

Relief works in Tinnevely were closed in August, but for some two or three months before that date they had ceased practically to be relief works and were kept open in view to the completion of the works which consisted of repairs to the small irrigation tanks. In Coimbatore, the maximum monthly average numbers, 6,912, were reached in September and it was found possible to close all the works in December, though a failure of the rains in one taluk necessitated their being re-opened in the succeeding April. In Salem, the failure of the south-west monsoon rains following on a previous bad season necessitated the opening in September of relief works in four taluks, to which between 7,000 and 8,000 labourers at once resorted. Good rains, however, falling shortly afterwards enabled all relief works to be closed in three out of the four taluks. The numbers on works consequently fell from an average of 7,393 in October to an average of 3,821 in December. In North Arcot, the failure of the early monsoon rains largely increased the numbers in need of employment, which rose from 7,208 in June to 10,408 in October. The good rains of October, however, brought the usual agricultural employment, and the numbers fell to an average of 2,856 in December and to 736 in January, when all works in the hitherto affected tracts were closed.

In Chingleput, the average monthly numbers were highest in June, when they reached 8,655. They remained steady at about 7,000 till October, when they rose to an average of 7,899, the highest figures having been reached on the 3rd October, when they stood at 10,007. The good rains in October, however, led to a speedy fall in the numbers. The average numbers employed in December were 3,571, and the works were all closed early in January.

20. In Nellore, it was not found necessary to give any State relief on works till July. The numbers resorting to works in the affected tracts, which during 1891 were confined to the southern portion of the district, ranged from 398 in July to an average of 3,916 in October, when the coming of the rains led to a reduction in the numbers to an average of 1,153 in December when all the works in the hitherto affected portion of the district were closed. The failure of the rains of 1891-92 carried distress into a new portion of the district, where in January 1892 it was found necessary to commence State relief.

In Cuddapah, the distress during 1891 was confined to a single taluk—Rayachoti—and the numbers never rose above a monthly average of 1,385, the figure reached in September, and it was found possible to close all works in November, though the necessity for opening them again in that and several other taluks speaking

The failure of rains in the Deccan districts led to the opening of works in Kurnool in November and in the Bellary and Anantapur districts in December. The Commissioner had in each case travelled through the tracts in which failure of crops had occurred and had satisfied himself that the loss to the agriculturists must inevitably be very serious.

21. The average numbers employed monthly between July and December through-

July	...	...	...	...	16,634
August	...	...	...	...	22,750
September	...	...	...	...	29,719
October	...	...	...	...	27,265
November	...	...	...	...	16,309
December	...	...	...	...	10,465

distress into new and extensive tracts, so that the numbers on relief works in all districts taken together for the last three months of the year, October being the month which saw the first extension of the area of distress into Salem, were—

October	...	...	...	...	...	...	...	34,568
November	...	...	...	...	...	...	...	21,827
December	...	...	...	...	...	...	...	18,098

22. *Gratuitous relief.*—The numbers on gratuitous relief during the last six months of the year continued to bear a comparatively small proportion to the numbers on

works, though the careful inspections made in the affected tracts left no doubt that the relief granted, which was refused to none in need, was sufficient to meet the needs of all willing to accept it. The following statement shows the numbers gratuitously relieved monthly in each district for the period in question :—

Districts.	July.	August.	September.	October.	November.	December.
Coimbatore	..	..	466	875	782	401
Salem	..	..	..	182	239	308
North Arcot	1,794	2,994	4,374	3,339	2,197	1,455
Chingleput	540	1,752	2,107	1,950	905	133
Cuddapah	..	7	14	4	..	..
Kurnool	..	..	..	..	..	67
Total ..	2,334	4,753	6,961	6,350	4,123	2,364

In the first half of the year gratuitous relief was granted in the Chingleput and North Arcot districts only. During the latter half of the year it continued to be granted in these two districts and was extended to Cuddapah in August where, however, it was found afterwards to be unnecessary, to Coimbatore in September and to Salem in October. The failure of the rains in the Decan and in North Nellore led to the opening of relief kitchens in Kurnool in December, and in Anantapur in the succeeding January. In the other districts in which relief works were carried on in 1892, gratuitous relief was found necessary on a very limited scale and was not extended to the Punganuru zemindari, the newly affected portion of North Arcot, nor to Bellary and Cuddapah till March, nor to Nellore till May.

23. *Third period, January 1892 to September 1892.*—During this period, with the exception of the early portion of the month of January when works were being finally closed in the areas which had suffered through the whole of the year 1891, distress was limited to the four Deccan districts, to North Nellore, to one taluk (the Punganuru zemindari) in North Arcot, and to the Tiruchengódú taluk in Salem, and to a limited area in the Bhaváni taluk of the Coimbatore district.

24. In December, in which month the monsoon ends in the Deccan districts and North Nellore, the failure of the rains had been more or less disastrous in portions of eight districts, and the area of the tracts seriously affected or likely to be seriously affected at an early date were in the report on the state of the season for that month estimated at 21,366 square miles with a population of 3½ millions, an estimate which was raised in January to an area of 31,069 square miles in nine districts with a population of 4,750,000 as shown below:—

District.	Total.		Affected portion.		
	Area.	Population in thousands.	Area.	Population in thousands.	Particulars.
	SQ. MLS.		SQ. MTS.		
Kistna	8,397	1,856	1,755	234	One taluk and portions of three.
Nellore	8,784	1,464	5,837	943	Eight taluks.
Kurnool	7,514	818	3,169	336	Two taluks and portions of six.
Bellary	5,975	900	4,639	750	Five taluks and portions of three.
Anantapur ..	5,275	709	3,707	479	Four taluks.
Cuddapah ..	8,722	1,272	5,277	700	Five taluks and portions of two.
North Arcot ..	7,616	2,180	648	92	One taluk.
Salem	7,629	1,963	5,112	1,342	Six taluks.
Coimbatore ..	7,860	2,005	895	104	Portions of two taluks.
Total ..	67,653	13,166	31,069	4,980	

In the above nine districts, in all of which it was anticipated in January that distress would be severe, it was found eventually necessary to open works in all but the Kistna district, but the lapse of two months showed that the effect of the failure, of the rains would be less serious than was anticipated over large areas in Kistna, Nellore, Kurnool, Bellary, Anantapur, Cuddapah, Salem and Coimbatore, and the

statement of affected areas submitted with the report for March, which is summarised below, shows with fair accuracy the areas in which the failure of the rains involved serious distress to the ryots:—

District.	Total.		Affected portion.		
	Area.	Population in thousands.	Area.	Population in thousands.	Particulars.
Kistna	SQ. MLS. 8,397	1,856	SQ. MLS. 1,364	151	One taluk and a portion of another.
Nellore	8,765	1,464	4,502	711	Six taluks.
Kurnool	7,514	818	2,975	316	Two taluks and portions of four.
Bellary	5,975	900	2,836	473	Three taluks and portion of one.
Anantapur	5,275	709	3,707	479	Four taluks.
Cuddapah	8,722	1,272	4,768	597	Five taluks and portion of one.
North Arcot	7,616	2,180	649	92	One taluk.
Salem	7,529	1,963	1,562	666	Two taluks.
Coimbatore	7,860	2,005	357	60	Portion of one taluk.
Total	67,653	13,166	22,709	3,545	

The area shown as affected in this statement was 22,709 square miles with a population of a little over 3½ millions.

25. *Prices, January 1892 to September 1892.*—The prices ruling in each taluk in the affected tracts during the months of January, April, June and September 1892 are shown in the subjoined statement compared with the normal prices:—

Districts.	Taluku.	Staple-grains.	January.		April.		June.		September.	
			Normal.	1892.	Normal.	1892.	Normal.	1892.	Normal.	1892.
Nellore	Ongole	Cholam	23.5	12.7	24.0	14.4	23.5	14.4	23.5	21.6
		Ragi	26.1	14.0	26.5	17.0	30.0	17.0	28.5	17.0
	Darsi	Cholam	24.5	14.0	25.6	13.6	25.1	13.6	23.6	14.5
		Ragi	29.1	14.9	27.2	13.6	27.1	13.6	26.2	16.0
	Podili	Cholam	25.9	13.8	25.1	18.7	26.1	12.7	25.2	17.2
		Ragi	32.0	13.7	29.5	13.6	28.6	13.6	29.0	18.7
	Kanigiri	Cholam	25.5	15.3	26.3	13.8	28.2	13.7	26.8	15.7
		Ragi	30.1	13.6	31.4	14.0	35.3	13.6	32.1	16.5
	Udayagiri	Cholam	23.6	12.7	24.2	14.4	24.9	13.6	23.1	15.4
		Ragi	26.7	14.1	28.5	15.3	29.7	13.6	28.2	15.4
Kurnool	Markapur	Cholam	29.0	12.8	27.7	14.6	27.7	13.6	27.5	17.4
		Ragi	27.0	12.8	28.2	13.6	28.5	14.6	27.5	17.6
	Cumbum	Cholam	26.7	12.6	26.1	12.6	24.1	13.4	25.4	18.0
		Ragi	28.1	12.0	27.8	13.5	27.6	14.3	26.9	17.6
	Koilkunda	Cholam	27.3	12.6	27.2	14.2	26.5	13.4	25.2	20.1
Bellary	Pattikonda	Do.	31.3	14.7	29.5	15.2	28.0	15.3	31.9	19.8
	Adoni	Do.	28.0	14.4	26.4	14.4	26.0	14.3	29.1	18.0
	Alur	Do.	27.3	13.4	27.8	14.3	27.5	14.1	28.6	19.2
	Bellary	Do.	28.7	14.7	28.8	14.7	27.6	14.3	27.5	21.1
	Rayadrug	Do.	32.7	14.8	30.9	16.2	28.6	16.5	29.3	23.0
Anantapur	Dharmavaram	Do.	31.7	12.6	28.9	14.9	29.2	15.6	28.8	20.2
	Anantapur	Do.	32.8	13.4	28.7	13.8	28.3	14.9	28.6	17.6
	Gooty	Do.	32.9	13.4	27.5	14.2	26.5	13.7	30.0	19.3
	Tadpatri	Do.	28.0	14.5	25.9	13.4	26.3	14.4	26.0	18.2
	Badvel	Cholam	25.8	12.4	25.6	12.9	25.8	13.4	25.2	15.4
Cuddapah	Rayachoti	Ragi	26.8	13.3	27.5	13.5	28.5	15.8	27.9	17.6
		Cumma	34.3	13.1	30.3	13.4	30.8	14.5	30.2	17.4
	Madanapalle	Ragi	35.1	15.0	34.9	15.4	34.5	15.3	33.8	30.0
		Cumma	34.6	11.6	32.0	11.6	30.7	11.6	31.3	14.0
	Vayalpad	Ragi	42.9	13.9	39.6	17.3	41.3	17.3	40.6	23.2
North Arcot	Punganuru	Cumma	31.9	12.1	30.9	12.3	33.3	12.2	31.8	12.7
		Ragi	40.0	13.5	39.8	15.8	40.0	16.5	39.0	18.8
	Tiruchengode	Ragi	40.5	13.4	40.3	15.1	40.7	16.8	39.3	22.7
Salem		Cumma	24.0	13.2	21.4	13.0	25.3	12.2	22.4	21.2
Coimbatore	Bhavani	Ragi	26.8	12.1	27.8	12.6	27.0	12.9	25.7	19.6
		Cumma	25.7	16.9	24.0	15.1	26.1	15.7	25.1	19.7

A comparison between the figures given in this statement and those in the statement appended to paragraph 10 above will show how very much higher the range of price was in the tracts affected in 1892 than in those affected in 1891.

While the prices in Tiruvallūr and Ponnéri, the worst affected tracts in Chingleput, one of the early affected districts, had not by June 1891 become dearer than

19 seers per rupee, the price of ragi, the staple grain in the Cumbum and Markapur taluks of Kurnool, was never in the first six months of 1892 cheaper than 15.9 seers per rupee, and generally ranged between 12 and 14 seers per rupee.

In the worst affected tracts in North Arcot in 1891, the prices of the staple food-grain in the first six months ranged between 19.7 and 21.8 seers per rupee, while during the first six months of 1892, the prices in the Alūr, Adōni and Bellary taluks of the Bellary district were never cheaper than 15.4 seers per rupee and were generally between 14 and 15 seers only per rupee.

The prices of ragi, the staple grain in the sub-division of Cuddapah in the first six months of 1892, ranged between 13.3, the dearest taluk average in January, to 17.2, the cheapest taluk average in any other month of the six.

26. The very much higher range of prices in 1892 than in 1891 was due mainly of course to the very much larger area affected in 1892 by the failure of rains. Prices in the distressed tracts in the Chingleput and North Arcot districts in 1891 were largely kept down by importations from their neighbouring unaffected districts, notably from the Deccan districts, which were tempted by the comparatively high prices prevailing in 1891 to part with a large quantity of their surplus grain unconscious of the severe distress which was so soon to fall upon themselves. The distress in 1892 was so severe in so large an area and the surplus produce in the Presidency generally was so small that resort had to be made largely to other provinces for the grain required in the Deccan at a cost which forbade any expectation of keeping prices at the point maintained in the distressed areas in 1891.

27. The effect of the bad seasons of 1890-91 and 1891-92 on the prices of food-grains in the Presidency will be seen from the subjoined statement which gives the Presidency prices of the principal food-grains in each of the past nineteen years:—

Faeli or year ending 30th June.	Rice.	Ragi.	Cholam.		Cumbu.
			Including Trichinopoly and Madura.	Excluding Trichinopoly and Madura.	
1283 (1873-74)	15.6	27.8	25.3	25.2	25.4
1284 (1874-75)	16.0	29.0	26.4	26.4	27.0
1285 (1875-76)	15.5	27.1	25.9	25.4	25.8
1286 (1876-77)	10.2	15.1	14.7	14.4	15.1
1287 (1877-78)	8.0	11.3	11.3	10.6	11.5
1288 (1878-79)	9.8	15.9	14.8	14.6	15.7
1289 (1879-80)	13.6	23.0	21.8	21.6	22.0
1290 (1880-81)	15.5	30.2	29.3	28.7	28.4
1291 (1881-82)	16.1	32.2	31.5	30.5	30.2
1292 (1882-83)	16.1	32.6	31.4	30.8	30.5
1293 (1883-84)	16.0	32.3	31.4	30.0	30.4
1294 (1884-85)	13.9	26.7	24.6	24.0	24.0
1295 (1885-86)	13.9	26.5	23.9	23.1	23.8
1296 (1886-87)	15.2	29.1	27.7	26.6	26.7
1297 (1887-88)	15.6	30.4	28.3	27.9	26.5
1298 (1888-89)	14.3	27.9	25.5	25.1	23.8
1299 (1889-90)	13.1	27.4	24.4	24.2	23.6
1300 (1890-91)	12.6	25.2	23.4	23.6	22.7
1301 (1891-92)	10.5	17.8	16.9	16.8	16.4

* Trichinopoly and Madura are excluded owing to the inclusion of rates for an inferior variety in some cases for these districts.

28. Though prices in the affected tracts were everywhere exceptionally high, it will be observed by a reference to the appendix that they nowhere touched the prices in the great famine, though the rapid rise in prices in parts of the Bellary, Kurnool and Nellore districts towards the end of 1891 gave grave ground for fear that these prices would be approached.

While in the Cumbum and Markapur taluks of Kurnool the prices of the staple grain ranged between 12 and 14 seers per rupee in the first six months of 1892, the

prices in the same period in 1877—distress having begun to be seriously felt in the last few months of 1876—were about 9 seers per rupee and in the first month of the six were as high as 7.5 seers per rupee. In the Adóni, Alúr and Bellary taluks of the Bellary district, where the prices of grain in the first six months of 1877 were between 7 and 8 seers per rupee, they were in the same months of 1892 between 14 and 15 seers per rupee.

The highest prices reached in each affected district during the recent period of distress and the date of the highest price are shown below :—

Districts.	Rice.			Cholum.		
	Seers per rupee.	Taluk.	Month.	Seers per rupee.	Taluk.	Month.
1	2	3	4	5	6	7
Coimbatore	7.4	Palladam ..	April 1892 ..	10.6	Bhavani ..	May 1892.
Salem	8.6	Dharmapuri ..	December 1891 to September 1892.	..	..	..
North Arcot	9.0	Kalahasti ..	December 1891 and February 1892.	..	..	..
Chingleput	8.7	Saidapet ..	June 1892 ..	..	..	..
Nellore	8.0	Gudur ..	July	..	..	..
Cuddapah	7.1	Sidhout ..	August	..	..	..
Anantapur	7.6	Dharmavaram ..	February 1892.	12.4	Ongole ..	December 1891.
Bellary	7.8	Gooty ..	December 1891 to June 1892.	11.4	Madanapalle ..	Do.
Kurnool	7.5	Rayadurg ..	December 1891.	11.4	Dharmavaram ..	Do.
Kistna	7.6	Koilkuntla ..	December 1891 to March 1892.	13.3	Alúr ..	Do.
		Palnad ..	December 1891.	12.0	Ramalakót ..	Do.
				12.4	Palnad ..	Do.

Districts.	Ragi.			Ragi.		
	Seers per rupee.	Taluk.	Month.	Seers per rupee.	Taluk.	Month.
	8	9	10	11	12	13
Coimbatore	13.1	Bhavani ..	December 1891 to February 1892.	11.8	Erode ..	January 1892.
Salem	11.8	Tiruchengodu.	February and March 1892.	11.0	Salem ..	Do.
North Arcot	12.7	Kalahasti ..	February 1892.	..	..	..
Chingleput	11.1	Chingleput ..	March 1892 ..	..	..	..
Nellore	11.6	Nellore ..	February 1892.	..	..	..
		Gódur ..	December 1891 to March 1892.	..	..	..
Cuddapah	13.1	Badvel ..	December 1891.	10.9	Váyalpád ..	March 1892.
Kurnool	12.0	Cumbum ..	January 1892 ..	..	..	..
Kistna	..	..	..	13.6	Vinukonda ..	February 1892.

29. *Numbers resorting to the works.*—The average numbers who resorted in each month to the special works opened for the relief of distress are shown in the subjoined statement :—

District.	January.	February.	March.	April.	May.	June.	July.	August.	September.
Nellore ✓	5,841	3,753	5,688	6,644	11,107	22,744	16,723	2,846	..
Kurnool ✓	6,956	13,020	20,263	24,421	28,647	25,100	17,094	10,141	2,339
Bellary ✓	5,686	6,035	7,297	9,138	12,806	18,010	10,730	5,429	601
Anantapur ✓	515	487	910	1,159	1,211	1,234	141	..	..
Cuddapah ✓	2,997	3,513	5,094	9,085	11,959	11,402	5,680	2,383	257
North Arcot ✓	736	87	161	690	1,514	1,798	471	..	..
Chingleput ✓	236	..	..	..	..	..	..	..	..
Salem ✓	4,473	4,543	2,679	4,979	5,887	6,652	4,273	695	..
Coimbatore ✓	..	..	..	..	542	704	647	278	..
Total ..	27,340	31,438	42,092	56,668	73,835	87,587	55,390	21,494	3,197

There was no considerable increase in the numbers employed in February over those employed in January. A steady increase, however, then commenced and the numbers of the employed rose from 31,000 in February to an average of 42,000 in March, 56,000 in April, 74,000 in May and 87,000 in June, the highest numbers employed in any week being 92,353, in the week ending 18th June, though the maximum numbers had been previously reached and a decrease had already set in in several districts in which good rain had fallen. The rains of June, which were exceptionally favorable in the Deccan districts, and the rains of July, which were equally favorable in North Nellore, speedily, however, led to a diminution in the numbers seeking relief, which fell to an average of 55,000 in July and of 21,000 in August, by the end of which month it was found possible to close relief works everywhere with the exception of the Cumbum and Markapur taluks of Kurnool, the Alúr taluk of Bellary, and the Ráyachóti taluk of Cuddapah where they were, however, closed in the succeeding month.

30. Judging by the numbers seeking relief, the areas which suffered most from distress owing to want of employment were the Ráyachóti and Badvel taluks of Cuddapah, the Udayagiri, Podili and Darsi taluks of Nellore, the Cumbum, Markapur and Koilkuntla taluks of Kurnool, the Adóni, Alúr and Bellary taluks of Bellary, and the Tiruchengódu taluk of Salem. In these taluks the numbers on relief works during the week in which in each respective taluk they had attained their maximum, bore the following percentages to the total population of the taluk according to the last census :—

District.	Taluk.	Population of taluk.	Highest number employed in any week.	Highest percentage employed of total population.
Cuddapah	Ráyachóti ..	118,236	4,182	3.7
	Badvel ..	93,152	5,683	6.1
Nellore	Udayagiri ..	100,227	7,090	7.1
	Podili ..	68,466	..	..
	Darsi ..	84,631	18,733	12.2
Kurnool	Cumbum ..	117,602	13,506	11.6
	Markapur ..	99,971	9,347	9.3
	Koilkuntla ..	86,544	4,488	5.2
Bellary	Adóni ..	160,795	4,566	2.8
	Alúr ..	88,088	11,877	13.5
	Bellary ..	180,353	3,547	2.0
Salem	Tiruchengódu ..	248,679	7,186	2.9

31. *Gratuitous relief.*—The numbers gratuitously relieved in each month during the period are shown below. They bear a peculiarly small proportion to the numbers on works, a state of things attributable largely to the fact that labour even on the very small wage allowed was everywhere generally preferred to idleness and that all capable of work were encouraged to do something to help themselves. The kitchens were largely intended for the support of those children of the labourers on the works who were too young to do anything, but much unwillingness to send their

young children to the kitchens was evinced by the labourers, and as the children were found to continue in good health and condition notwithstanding their failure to resort to the kitchens, little pressure was put upon them to make them do so.

Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.
Nellore	..	..	..	..	95	111	175	122	7
Kurnool	332	412	438	454	487	582	449	335	123
Bellary	..	..	37	29	29	42	45	31	..
Anantapur	278	571	240	146	131	60	20	..	..
Cuddapah	..	..	6	18	73	81	55	2	..
North Arcot	356	..	30	60	52	45	17	..	..
Salem	292	250	234	211	204	173	112	58	..
Coimbatore	63	..	..	..	..	..	..	..	..
Total ..	1,321	1,233	985	916	1,071	1,094	873	548	130

32. The deficiency of the rainfall, the failure of crops and the measures taken to relieve the distress among the agricultural population consequent upon this failure have been detailed in the preceding paragraphs. It remains to consider first the necessity, and second, the suitability and the adequacy of the special measures taken to meet the distress.

33. *Necessity for special measures of relief.*—The cost to the State of providing employment to all comers willing to work may be so enormous; the difficulty of preventing abuse in the event of very large numbers resorting to works is so serious, and the risk of demoralising the labourers by the grant of a wage for an inadequate amount of work is so great that a Government may well hesitate to admit that it must face these risks and provide work for all comers at a cost which it is impossible to calculate.

34. An extensive failure of crops must in any country produce much distress, but it is inevitable that it should do so in a country, where, as in Southern India, the land is held in innumerable small properties by proprietors possessed of little, if any, agricultural capital beyond the animals and the few instruments actually used in the tillage of the farm.

The failure of the crops of a single year in Southern India must deprive the majority of the petty landholders and labourers affected of their ordinary means of livelihood, and unless employment can be obtained by them under the richer landholders in the distressed tracts or in the neighbouring tracts which have been unaffected, or not so seriously affected by the drought, they must look to the State for their maintenance until a more favorable season shall bring them their wonted means of livelihood. Not only are they deprived of the produce of their land, but they have inevitably to face in the present state of the country with its restricted means of communication a large rise in the price of the necessaries of life—a rise to double, as in the recent distress, or it may be to four times the normal prices, as in the great famine in Bellary, and a failure of the grass and water which is generally concurrent with a failure of the crops adds to the ryots' difficulties in maintaining himself and his family, the serious difficulty of keeping alive his cattle on which his future livelihood depends, or the equally serious difficulty of finding a purchaser for them at a reasonable price.

35. The necessity of affording relief at the cost of the State when a failure of the crops is likely to lead to famine is admitted, and though it is desirable that no inducement should be held out to the people by the untimely opening of relief works to rely solely on the aid of the State when other suitable private employment might be obtainable, it is essential, if the object of relief is to be obtained, that the relief works shall be provided before the labourers have lost their strength. It is equally essential that the works opened to give relief to the distressed shall be so managed as to give employment not only to able-bodied labourers accustomed to work, but to all who are in actual need, a limitation of the wage and the exaction of a suitable task being relied on to prevent all but the really needy from seeking employment. The need for relief is not restricted to the able-bodied labourer accustomed to road or tank

work, but may be expected amongst all who are directly depending upon the crop which has failed and amongst the whole of the poorer portions of the population which find that their earnings, where they can find any employment at all, are, owing to the rise in the price of food, insufficient for their maintenance. For these weak ones not less than for the able-bodied the provision of relief is necessary, and it is likely to be necessary for the former sooner than for the latter.

While as already stated there may be some risk that an untimely opening of relief works may induce the people to rely too largely on the aid of the State when other suitable private employment might be obtainable, there is on the other hand very great danger in postponing the opening of works for any length of time after the failure of the harvest has made it *prima facie* certain that numbers must be in need, not only because of the sufferings which such a course must entail on those who have been deprived of their ordinary means of livelihood, but because the influx of labourers is likely then to be so large as to render a proper organization of relief a matter of the greatest difficulty.

36. Among large crowds of labourers who have abandoned in panic the means of subsistence however limited which they may have possessed near their homes and have resorted *en masse* to the Government relief works, it is at first difficult, if not impossible, to enforce a suitable task, while the withholding of any considerable portion of the small famine wage on the ground that it has not been earned means great suffering imposed on the labourer for what is not his fault. The difficulty of ensuring an adequate grain supply in the vicinity of works to which there is a sudden access of large numbers must also be considered. Large sums of money may be expended, and indeed must be expended, in the payment of the crowds resorting to the work, but little work will have been performed for the money, and there will be no certainty that the money expended will have served its purpose in maintaining life owing to the uncertainty whether grain will be forthcoming to meet the enormously increased local demand for it.

37. In the great famine of 1876–78 much of the early and ineffectual expenditure and much of the loss of life seems to be attributable to the neglect to open works at a sufficiently early date, and to the fact that when works were eventually opened the numbers resorting to them were so enormous as to render efficient control for weeks impossible.

In the Bellary district the fact that relief works would almost certainly be necessary was realized at an early period in 1876, but in the taluks in which the results showed that the need for relief was most urgent, that is, Adoni, Alur and Bellary, they were postponed till September. The numbers relieved, which in July 1876 were, for the district as a whole, only a few thousands, rose to 36,000 in the middle of October, to 174,000 in the middle of November and to 347,000 on the 30th December.

In the Kurnool district there was in May 1876 no idea that any relief work would be needed. The season in the year 1875–76 was not considered to have been exceptionally unfavorable. There had been no appreciable rise in prices up to March and the Collector reported to the Board in May after a tour he had made through the district that “there was no tract affected or likely to be affected by anything approaching to a scarcity or a drought.” Before three months, however, were over the south-west monsoon on which the district mainly relies had partly failed and relief works were demanded by the Divisional officers in the Markapur taluk and in the Koilkuntla taluk. The opening of works in the district generally as in Markapur was, however, delayed till October when they were opened everywhere. By the middle of November the numbers employed had risen to 67,000 and by the end of the same month to 166,000. On the 16th December they were 203,500 and on the 30th December 254,000.

38. To say that efficient organization was wanting in these districts in the first few months is not to condemn the District officers. It was impossible under the circumstances that it should be otherwise. The magnitude of the disaster was greater when it actually came than it would have been possible to conceive. The expenditure owing to want of organization and the loss of life in the first few months were both very large, and it is probably due to the overcrowding consequent on want of proper organization, to the omission to make regular payments of wages owing to want of

sufficient establishments, and probably also to the inability of vast numbers assembled in a single spot to get grain even when money was available that the outbreak of cholera was due, which in December 1876 and January and February 1877 carried off, according to the village death returns, 14,002 in Bellary, 9,494 in Kurnool, and 21,917 in Cuddapah—numbers which, large as they are, take no account of the deaths on the relief works among the three quarters of a million people who lined the road works or of those who fell victims to the disease away from their villages before joining the works.

39. In the recent famine in Ganjām in 1889, the warning of the great famine was so far followed that works were opened at an early date after the commencement of distress was recognized. A very fatal error was made, however, in restricting the grant of employment to the able-bodied and in refusing employment to those unable to turn out a fair day's work. Although severe distress was prevalent in the early part of the year, no works guaranteeing employment to all comers willing to work were opened in the plains until the beginning of May and the consequences of the delay in affording employment to the needy were disastrous. A visit of His Excellency the Governor to the district in June 1889 and a tour through the most distressed tracts convinced him that "a large amount of distress amounting to starvation existed, and that the most urgent orders and the most prompt action were required if many lives were not to be lost by the most lingering and dreadful of all deaths." The time, however, for relieving the people by the opening of works had slipped by, and the grant of gratuitous relief on a lavish scale had become necessary. The numbers relieved by the grant of grain or money doles as being incapable or unfit to labour increased from 9,000 in the first fortnight in June to upwards of 27,000 by the end of the month, the figures at the end of the four succeeding weeks in July being 30,625, 49,431, 69,521 and 70,184, respectively, until the highest figure, 93,561, was reached on the 3rd August. The numbers fed in kitchens, which, during the first week of their opening (the third week in June), averaged 1,967, increased to upwards of 9,000 in the second week in July and to 11,632, the highest numbers recorded on the 10th August. Between that date and the end of the third week in September, the numbers fluctuated between 11,000 and 10,000, and then with the improvement in the season and in agricultural prospects began rapidly to decrease till at the end of October it was found possible to close the kitchens altogether. The numbers on grain and money doles were reduced in the last three weeks in August to an average of 51,191; by the end of September the numbers so relieved had been reduced to 28,000, and by the end of the following month it was found possible to discontinue this form of relief altogether.

The cost incurred in gratuitous relief was Rs. 3,49,438-0-5, of which no less than Rs. 2,64,865-13-1 was expended in money-doles. The expenditure on works carried out to give employment to the needy was Rs. 2,44,916-9-11.

40. The determination of the period at which relief works become necessary is one of some difficulty, but reliance may, as a rule, be placed on the demand of the people for employment, especially in tracts where the rules under which relief works are administered are known to the people and the limited wage which alone is admissible under the Famine Code for all but the really able-bodied minority, coupled with the prescribed task, may, in the Commissioner's opinion, be safely looked to to keep all but those who are really in need from resorting to the works.

41. The experience of the past two years has shown that where the distress was great, labourers gladly accepted the proffered work notwithstanding the lowliness of the wage, but that where any other work was obtainable, the famine relief works were not resorted to. Numerous instances may be adduced to show that a properly tasked relief work will not attract those who can find work elsewhere. In the Gooty taluk of Anantapur, a taluk with a population of 142,197, where the failure of crops was undeniably very large, no works were found necessary, while in the immediately adjoining taluk of Alūr in the Bellary district the numbers employed exceeded 6,000 in three months, May, June, and July 1892, and reached in the 3rd week of June the large figure of 11,877. There is little difference in the general condition of the population in the two taluks concerned, and in the great famine of 1876-78 each

of these taluks went through the extremity of suffering, the numbers in the Gooty taluk during the early months of the famine, November, December 1876 and January 1877 averaging 22,000, while those in Alūr averaged 24,000. The particular circumstances of the year 1892, however, among them being the fact that the recent construction of a railway through the taluk had thrown much money into the hands of the working classes, were such as to enable the Gooty taluk to weather the storm without recourse to Government, and of its own will it did so, while the Alūr people had to succumb. Regarding the failure of the Gooty labourer to resort to the works, the Collector of Anantapur writes:—

"How the people in the north and west of Gooty taluk tided over the season is a mystery to me. In the neighbouring taluk of Alūr extensive relief was necessary and the conditions of soil and rainfall are similar. I was besieged by persons at Wajra Karur and Uravakonda demanding relief, and on account of loud complaints opened a kitchen at Uravakonda. On providing work not a soul would stir. It is the more inexplicable, as in 1884, when the famine was much less sore in the land, a great deal of earthwork on the Dharmavaram-Guntakal Railway was done."

In the Hadagalli taluk of Bellary, the Collector, who had visited the taluk during the harvest season towards the end of 1891, came to the conclusion that the large failure of crops, of which his inspection had convinced him, and which had also been witnessed by the Commissioner, was such as must inevitably compel a resort to relief works on the part of considerable numbers of the population. Relief works were opened on precisely the same terms as those which drew thousands of poor labourers in the taluks of Alūr and Adōni of the same district, but none resorted to them. Emigration to neighbouring and more favored districts, coupled in some cases with savings from the previous year, enabled the people to dispense with relief works, and they did so. A similar result was experienced in the western taluks of Bellary in 1875, the year preceding the great famine. The south-west monsoon had entirely failed in three taluks, the cultivated area to the end of July amounted to only 90,000 acres against an average of 220,000 by the end of July, prices rose from an average of 39 seers in the previous year to 12 seers, and the opening of works was largely called for. The numbers who resorted to the works, however, never exceeded 652 in any taluk. In the succeeding year when a further failure of rain had deprived the people of their resources, the numbers on works in the same three taluks ran up to 13,000. Mr. Wolfe-Murray, the Collector of Cuddapah, writes:—

"In parts of the Sidhout taluk the usual test to decide whether work was really needed was applied by opening works at famine rates, but there were no candidates at the price, and the Sub-Collector Mr. Atkinson writing of a portion of the Madanapalle taluk, in which crops had been fair, states that works originally started at normal rates were deserted when famine rates were introduced."

The experience in the Ramnad zemindari in last March was of a like nature. Great suffering had been experienced owing to a terrible loss of crops and a very considerable proportion of the population, men, women and children, the young and the old, taking with them their cattle and all their belongings migrated into the adjoining district of Tanjore, where the unfailing Cauvery had given its wonted wealth of crop. The opening of relief works was thought necessary to assure a subsistence to those who had been unable to emigrate, but though works were commenced on the usual terms, none came to them. It is true that good rain fell shortly before the opening of the works and assured useful employment in cultivating the fields to all who had been previously in need, but the result was satisfactory as showing that the wage which is everywhere found to have been sufficient for the upkeep of the workers is nevertheless by no means an attractive wage, and will not be accepted save by those in absolute need.

The experience in Cuddapah was similar to that elsewhere. Mr. Atkinson, the Sub-Collector, writes in his general report on the famine:—

"The question naturally arises when any given period of scarcity is the right moment to enforce the Famine Code and open relief works. It seems to me that any hesitation in enforcing the Code is a mistake. It is the only certain means I know of to test the extent of distress.

The most experienced observers are apt to be mistaken in their estimates of the condition of the people. The Famine Code, on the other hand, affords a test of almost mathematical accuracy. I need not do more than just note how immensely such a test lightens the anxieties of district officials. At the same time the enforcing of the Famine Code, if properly carried out so far from being expensive, is a guarantee against waste of money. Thus it may be doubted, whether one-half of those who resorted to the relief works opened in Ráyachóti taluk in August 1891 would have remained there had tasks been enforced and payments made in accordance with the Code.*

42. It is of course necessary, not only in view to preventing all avoidable expenditure of the funds of the State, but also in view to restricting the consumption of the limited amount of food available in a period of famine, that the wage shall not be greater than is sufficient for its purpose, which is to maintain the labourer in health and strength, though it is of vital importance that it shall be sufficient for this purpose. The question of what is a suitable wage will be discussed in a later portion of this paper. It will be sufficient to remark here that the relief wage granted on all relief works during the recent period of distress and which is that prescribed in the Madras Famine Code for 2nd and 3rd class labourers fulfilled, in the opinion of all who have reported on the question, all the requirements of a relief wage. It was a sufficiency, but not more than a sufficiency.

43. For the reasons given above the Commissioner is of opinion that the fact that relief works carried out strictly under the provisions of the Famine Code are freely resorted to may be accepted as sure evidence that they are needed and that so long as the saving of life is to be the criterion of the profitableness of famine expenditure, all considerations, whether they have regard to the wishes of the people or to the saving of expenditure to the State, demand that the opening of relief shall be timely—shall be too early rather than late. The failure of the harvests in different districts during the past period of distress showed that the opening of relief works was desirable, and the fact that, notwithstanding the lowness of the wage, they were so largely resorted to leaves no doubt in the Commissioner's opinion that they could not have been avoided without the risk, the Commissioner would say the certainty, of grievous loss of life.

44. *Suitability and adequacy of the measures taken for the relief of distress.*—The measures taken for the relief of distress were the following:—

The opening of works.

The establishment of kitchens for the distribution of gratuitous relief in the form of cooked food.

The grant of advances for the digging of irrigation wells and for other agricultural improvements in view to giving employment on eminently useful works.

Grant of employment to weavers in their own trade.

Remissions of the Government assessment or its postponement in cases where the failure of crops was excessive.

Opening of forest reserves for grazing free or at reduced rates of charge.

The storage of hay in forest reserves for sale to cattle-owners.

45. *Works.*—There are two systems under which relief is given in the form of works. One system consists in a mere extension and multiplication of the ordinary public works in view to enlarge the field of employment, but with no modification of the normal rates of payment for work or of the system in which in normal times the labour is organized for the work which is generally the contract system. Payment in this case is made for work by the piece, but without regard to the amount earned by particular individuals or gangs, which, according to the industry of the workers, may be twice, three times or four times as much as may be necessary for the support of the workers, or may be, on the other hand, in the case of idle or incapable workers less than, in a time of famine with exceptionally high prices prevailing, would be sufficient for subsistence. Under the other system, known as the task-work system,

* The Collector explains in a note on the margin of Mr. Atkinson's report the circumstances under which a higher rate of wages than was admissible under the Famine Code was granted in Ráyachóti at the time referred to, but Mr. Atkinson's intention was not to question the propriety of the higher rate of wage granted in Ráyachóti. It was granted at a time prior to the enforcement of the Famine Code and before the general opening of relief works had rendered the limitation of the wage a financial necessity.

payment is made to each individual worker and is limited to an amount sufficient to keep him in good health, the worker being required to perform as a task a fair day's work for a person in his physical condition; the wage is on the other hand not allowed to fall below a sum which is necessary for the labourer's subsistence.

The second system requires a considerably larger supervising staff than the first and involves regular and frequent payments, and in consequence the necessity of very frequent measurement and registration of the work actually turned out; but it ensures employment and a sufficiency to all who are willing to work at a cost to the State which is as closely as possible proportioned to the extent of distress. An extension of ordinary contract works has great advantages as enlarging the field of employment, but offers no test of the extent of distress similar to that afforded by task-work on a famine wage, and affords no certainty that all in need are obtaining employment. A contractor cannot be expected to, and will not, give employment to inefficient workers, however needy they may be.

In a time of severe distress when famine is driving large numbers of unskilled labourers to seek employment, the opening of large works managed on the task-work system will be found to be a necessity. So much experience has been gained in recent famines in the organization of these works and in the best system of controlling and managing them that given a reasonable supervising staff, but little more difficulty exists in carrying them out than is experienced in ordinary contract work.

46. The reports of the District officers and those of the Local Fund Engineers, which are appended to this report, show that excellent work can be obtained from labour so organized, and that on a properly managed work there is no great difficulty in determining the task of a gang and in deciding with accuracy the extent to which the task has been performed. Task-works may be made, and the Commissioner is satisfied were made throughout the recent period of distress, very strict and, where necessary, very severe tests of the necessities of those resorting to them.

47. *Works most suited for famine relief.*—The works on which famine labour was employed during the past famine were—

- (1) Minor irrigation works.
- (2) Large irrigation works.
- (3) Roads.
- (4) Fencing of forest reserves.
- (5) Removal of prickly-pear.

48. *Minor irrigation works.*—In districts, such as North Arcot, South Arcot, and Chingleput, where minor irrigation works are numerous, much useful employment can be given in the early stages of a period of distress in putting these useful works into thorough order. Most useful work is afforded and afforded near the homes of the people, and the extent to which the works are resorted to will form a good test of the gravity of the situation, more especially if the rates for earthwork are reduced somewhat below the normal rates. Time will also be afforded for the opening, if necessary, of large central works. Minor irrigation works however are so scattered and so numerous that it is difficult without a very large establishment to properly supervise them, or to ensure that those only who are in need of employment are taken on to the works and that none of the really needy are excluded. They cannot, as a rule, owing to their smallness and their scattered nature, be managed as task works, but the contracts for their execution may be advantageously given to the heads of the villages in which the tanks are situated, the rates for each description of work being reduced to an amount which will tend to ensure its being taken up only by the most needy.

49. *Large irrigation works.*—No more useful employment can be found for famine labour than the repair of the large existing irrigation works or the construction of new ones in suitable localities. On these large works whether tanks or channels, the work to be performed will in most cases be presumably sufficient to give employment to such numbers as will warrant the employment of a suitable staff to admit of the

work being carried out on the task-work system. Much of the work can in most cases be performed by unskilled labour, and as the repair of the irrigation works is one which devolves on Government quite apart from the existence of famine, it is at most a necessary expenditure anticipated.

An objection to the employment of famine labour on large tanks is that, though it may be possible to employ large numbers on a particular work, this cannot be done without considerable crowding and with the consequent risk of the outbreak of epidemics. This great risk was exemplified in many cases in the great famine, and also in the last famine in Kurnool, where work was brought to a standstill in more than one instance on a particular tank consequent on the outbreak of cholera due apparently to overcrowding.

50. *Roads.*—No work more fitted for employing famine labour can be found than the construction of a new road or the storage of metal and gravel along the side of an existing road. The nature of the work is easily learned, very large numbers can be employed without overcrowding since they can be spread over as many miles as may be necessary,* and the concentration of labour admits of its easy inspection and supervision by the superior officers—a supervision and inspection absolutely necessary in the case of famine labour which is dependent for existence on the punctual and honest payment of the small wage which alone it is permitted to earn. The ease with which large numbers were entertained and employed on roads is amply testified to by the Collectors and is indeed beyond question.

51. A very excellent manual of rules for the management of labourers on relief works, so far as regards their division into gangs, the preparation of nominal rolls, the fixing of the task of the gangs, the stacking in heaps of prescribed dimensions of the metal collected or broken, or of the gravel dug, the measurement and record of the work of each gang, the mode of calculation of pay earned, the number of gangs to be paid daily, the different forms to be used, &c., was drawn up by Mr. G. Stokes, the Collector of Salem, and was amplified and enlarged from the results of later experience by Mr. R. Sewell, the Collector of Bellary. The instructions will be revised and brought up to date, and with the forms prescribed will be printed as an appendix to the Famine Code. The instructions were found suitable in all districts, where they were worked, whether by Tahsildars, by Revenue Inspectors, by Public Works officers, or by Local Fund Engineers, and their adoption on all road works opened as famine relief works should be made compulsory. Experience shows that work on roads will have to be more and more resorted to to give employment to famine labour even if the work should be only useful as affording a test of the necessity for relief. In large tracts of the Ceded Districts, of Kurnool and of North Nellore—tracts which are specially liable to famine—road work is almost the only work on which labour can be employed.

52. Dr. Maclean, the Collector of Nellore, would prefer irrigation works to road works, and makes the following remark in paragraph 158 of his report:—

“Roads form no doubt excellent relief works, but I have not observed that the drawbacks arising from their itinerating character have been generally taken into account. When there are large numbers engaged on a road work, the work must shift its locality more or less rapidly, for it soon exhausts itself, and when thus shifted it has a tendency to show great fluctuations in numbers according as it is near to or far from any populous centre. Except possibly at the height of the late drought and hot season, it is scarcely too much to say that the executive officer in charge of even a major tasked work had it in his power to about double his numbers or about empty the work by moving the work 10 miles this way or that way. For this reason I kept the detailed allocation of the road works very rigidly in my own hands and endeavoured so to maintain some continuity of action; but for all that it was impossible to avoid a certain capriciousness from this cause. In reading the statistics of labourers on works, this factor has to be considered as much as that of the abstract demand for work due to season. On account of the above drawback, I on the whole prefer for relief a large irrigation work which never shifts and which more fairly gauges the abstract demand.”

* It was found possible on the road works without overcrowding to employ two gangs consisting of 100 labourers each—men, women and children—in each furlong, or 1,600 labourers along a mile of road. A supervisor with a staff of three head masts and 12 sub-masts, men who were required to know nothing more than how to measure up heaps of material and record measurements, had no difficulty in supervising 50 gangs or 6,000 labourers, and two pay-masters paying daily were able to pay each gang three times a week.

Dr. Maclean's remarks seem based to some extent on a misapprehension. That work should be as near as possible stationary is doubtless desirable, but the completion of any given five miles of road, or of the mere collection and stacking of gravel or metal for its repair would not give less employment probably than would be involved in the repairs of any irrigation work, and there is no reason why labour should be moved from a section of road before it is completed than it would be from an irrigation work. It is unintelligible that an officer could be allowed to remove gangs from a tract where employment was in great demand to a tract where it was in less demand, unless and until all work had been completed in the former tract.

53. Where the large numbers needing employment at the cost of the State render it necessary that a famine wage shall be introduced, it is essential that works shall be carried out only in those spots where proper supervision can be guaranteed, and that for this purpose the labour shall be concentrated to the greatest possible extent consistent with health. No work admits of this concentration more thoroughly than does road work. The desirability of bringing work as near as possible to the homes of the labourers is great, and all possible endeavour should be made to carry out this object in reason, but unless regular supervision and regular payment can be guaranteed on numerous small and scattered works, and the difficulty of ensuring this is one which cannot be lightly faced, the Commissioner has no doubt whatever that the interests of the labourer are better consulted by bringing him to a central work where effective supervision can be enforced.

54. *Fencing Forest Reserves and the removal of Prickly-pear.*—Both these works were undertaken during the past period of distress. They are useful works, but the latter does not give employment to large numbers, and though considerable numbers may be employed on the fencing of a particular forest reserve, the numbers must be

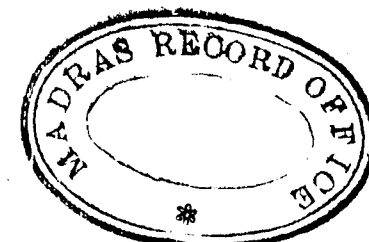
Paragraph 39 of his report on the famine.

very greatly scattered or the work will be too quickly completed. In Cuddapah forest fencing was found by the Sub-Collector and Tahsildar to be—

“Not a very satisfactory method of giving relief. An excess of women and children is much more difficult of proper accommodation than on roads. The severity of the work varies immensely. At times when the forest boundary passes over large expanses of rock far from villages, from water and even shade, the task in the hot weather is almost insupportable. The coolies are spread over very large distances rendering supervision especially difficult.”

The Sub-Collector remarks that “in the end the fencing is only of doubtful utility,” but to this the Commissioner is not prepared to assent. A very excellent wall was erected round a forest reserve at Kalyandrug in the adjoining district of Anantapur which should be very useful, and there is no good reason why a wall erected by famine labour should not be a good and useful one. On the whole, however, the Commissioner considers that for the reasons given above forest fencing cannot with advantage be undertaken as a famine work, unless it is desired to give work to villages in the vicinity of the forest and no more suitable work can be found. Forests are, as a rule, situated in remote and thinly-peopled tracts, whereas a famine work is required where it will be within easy reach of large numbers. Scattered works as already stated can seldom be properly supervised.

55. *Gratuitous relief.*—The smallness of the numbers seeking gratuitous relief as compared with the numbers seeking employment has been already referred to and will be seen in the following statement, which compares the numbers on works and on gratuitous relief respectively in the great famine, in the famine in Ganjam in 1888–89, and during the recent period of distress:—



REPORT OF THE FAMINE OF 1891 AND 1892.

Months.	1854.	1866-67.		Great Famine of 1876-78.		Ganjām Famine of 1889.		Famine of 1891-92.	
	Numbers on works.	Numbers on works.	Numbers on gratuitous relief.	Numbers on works.	Numbers on gratuitous relief.	Numbers on works.	Numbers on gratuitous relief.	Numbers on works.	Numbers on gratuitous relief.
	In 1854.	1866.		1876.		In 1889.		1891.	
January ..	8,766	..	..	..	..	3,855	147	..	..
February ..	16,017	..	584	..	..	13,080	71	1,083	..
March ..	22,279	..	737	..	..	15,515	169	6,704	26
April ..	48,299	150	1,547	..	..	13,710	694	10,743	760
May ..	77,862	425	2,535	..	..	16,775	2,365	18,123	1,224
June ..	93,092	783	5,647	..	..	18,572	14,741	18,342	1,563
July ..	97,654	1,572	21,367	1,000	..	13,691	83,760	18,968	2,334
August ..	77,768	6,529	82,945	5,000	..	11,402	73,428	27,503	4,753
September ..	65,869	13,999	93,053	15,000	..	14,595	51,534	36,679	6,960
October ..	47,115	16,552	100,359	131,000	5,000	11,172	14,594	41,008	6,350
November ..	18,268	79,729	386,000	20,000	..	4,421	..	25,950	4,123
December ..	..	25,614	58,687	926,000	60,000	..	..	21,082	2,384
		1867.		1877.				1892.	
January ..	..	33,019	27,620	997,481	84,897	..	..	28,661	1,321
February ..	..	28,890	14,049	807,128	60,008	..	..	32,671	1,233
March ..	..	21,435	6,951	641,937	101,453	..	..	43,077	985
April ..	..	8,828	4,656	678,289	301,696	..	..	57,584	916
May ..	..	5,393	3,913	722,020	375,845	..	..	74,006	1,071
June ..	..	..	..	808,482	491,949	..	..	86,681	1,094
July ..	..	..	..	867,906	713,909	..	..	66,263	873
August ..	..	..	..	919,712	1,131,216	..	..	22,042	548
September ..	..	..	..	712,968	1,555,160	..	..	3,327	130
October ..	..	..	..	503,122	1,207,611	..	..	..	..
November ..	..	..	..	309,547	572,713	..	..	..	..
December ..	..	..	..	212,002	305,811	..	..	..	..
				1878.					
January ..	..	..	..	153,536	206,304	..	..	..	..
February ..	..	..	..	141,801	154,207	..	..	..	..
March ..	..	..	..	127,094	119,853	..	..	..	..
April ..	..	..	..	108,098	94,597	..	..	..	..
May ..	..	..	..	123,023	86,566	..	..	..	..
June ..	..	..	..	134,627	79,749	..	..	..	..
July ..	..	..	..	135,042	84,177	..	..	..	..
August ..	..	..	..	117,904	76,892	..	..	..	..
September ..	..	..	..	93,312	61,659	..	..	..	..
October ..	..	..	..	67,097	43,313	..	..	..	..
November ..	..	..	..	33,720	19,463	..	..	..	..
December ..	..	..	..	14,182	4,614	..	..	..	..

NOTE.—Accurate information is not available regarding the figures of 1876; the figures are given on the best information available.

The smallness of the proportion seeking gratuitous relief during the period of distress just passed as compared with that seeking employment is due in part to the comparative lightness of the pressure of distress, which enabled the well-to-do villages to help such of their poorer neighbours as were unable to go to the works, and also, when the comparison is made with the great famine, to the higher wage now granted which enabled the earner to support such of the aged and the very young of his family as were unable to work. The smallness of the numbers was also due very largely to the disinclination of the people to accept gratuitous relief in the only shape in which it was granted, in the form that is to say of cooked food given in a public kitchen. There is no reason to suppose that serious suffering was caused during the period of distress just passed by the restriction of gratuitous relief to those who were willing to accept cooked food, for a very considerable portion of a munificent donation made by the Maharajah Holkar, which was distributed among District-officers for grants to poor caste people who were debarred by caste scruples from entering kitchens, remained unutilised at the end of the famine, and it is beyond doubt that the enforcement of the restriction saved considerable expenditure which would otherwise have been incurred, but which results show was not necessary. The enforcement of the restriction however in circumstances similar to those of the great famine would have resulted in purely gratuitous humiliation to thousands whose distress was undoubted.

56. The indisposition of the people in Bellary, Cuddapah, Kurnool, Nellore, Coimbatore and Salem to resort to kitchens is in contrast to the readiness of those in North Arcot and Chingleput to avail themselves of this form of relief. Doubtless the pressure, on the lowest classes in the two last-named districts must have been more severe than in the former, for the experience of the great famine showed that very large numbers in the former districts were willing to accept this form of relief when driven to it by their inability to earn wages on the works, the numbers in camps in which cooked food was issued in each of the districts named having

Bellary	...	...	...	25,000	figures given in the margin. The following remarks are made by District and Divisional officers in regard to the general dislike to kitchens evinced by the people, though the records of the great famine of 1876-78 show that in a time of extreme
Cuddapah	...	...	...	8,500	
Kurnool	...	...	...	11,600	
Nellore	...	...	...	20,000	
Coimbatore	...	...	...	70,000	
Salem	...	...	...	44,000	

averaged monthly during 1877 the

distress all these prejudices will yield to necessity.

57. Mr. E. A. Smith, Deputy Collector in charge of the Tiruchengódu taluk, Salem district, writes:—

"The people fed at the kitchen were chiefly chucklers and pariahs. Very few caste people resorted to the kitchen as they consider it a disgrace to be fed at the kitchen. In a few cases parents had to be compelled to send their children who were in bad condition to the kitchen, but they soon disappeared with the children."

58. Mr. Pinto, the Deputy Collector in charge of the Tiruvallúr taluk in Chingleput, states:—

"The object of my inspections in the villages was to search out real distress in order to apply the necessary remedial measures without waste on the one hand or neglect on the other; two things made the arriving at a just conclusion a difficult matter. The people had (1) a cheering recollection of the money-dole of 1877 which they highly prized and (2) a horror of the relief camps of that season. They much overstated their case in the hope of getting a money-dole again and declined cooked food in relief kitchens owing to the repulsive recollections of the relief camps of 1877. The one induced a belief in great distress; the other negatived the same. It was necessary, therefore, to steer a safe middle course in drawing conclusions from such facts and check every statement with other facts or events before accepting them. Every man or woman of and above middle age had some melancholy story to tell of the disease and death suffered in the relief camps of 1877. Their disinclination had deepened into prejudice and even superstition. The name of the relief camp had to be altered from Kanjitotti into Annachattram to make it less shocking. The ration had to be served in the shape of a liquid meal in the morning and solid in the evening instead of solid both times. Chillies had to be reduced and salt had to be increased. The result was that no disease broke out nor deaths occurred in our relief kitchens which in time became unobjectionable and even popular to such a degree that admissions had to be refused with great difficulty. Caste people held back as long as possible and would not come to the kitchen till they had exhausted all other means which were comparatively more numerous to them than to the non-castes."

"Really destitute people had at their command various makeshifts which they tried before coming on Government relief; they at first fell to the seeds of mavaragu, a weed that grew abundantly over shavi. It generally always exists, but is removed when the crop is worth weeding. When the crop withered the weed was left alone; it flowered and seeded affording gratuitous food to the destitute. The next resort was to various other seeds of grass: ari vrathan, mattanka, narival and kudraikolumbu. Another resource was the ant-holes which were invaded for the sake of the grain and grass seeds stored by the ants therein. Later on the bamboo seeded and afforded food to some destitute people. The flower of iluppai, the seed of the korakkapalle, the fruit of the prickly-pear,—all came in aid of the poor, each in its turn."

"People not accustomed to hard labour usually resorted, therefore, to every expedient possible in preference to labour on a relief work, and if they happened to lose their physique before they took to work, they became fit for gratuitous food. Irulars and Enadies and some Pariahs are generally of this class and they formed a respectable proportion of our kitchen population."

59. Regarding the Cuddapah sub-division, Mr. Atkinson writes:—

"Gratuitous relief was very sparingly given, only in the Ráyachóti kitchen during part of August, September and October 1891 and the Váyalpád kitchen during part of May, June and July 1892. A few gosha females and children were also relieved in Ráyachóti and Gurrum-konda from funds provided by His Highness the Maharajah Holkar. No kitchens were opened on the works. Mr. Foord made an experiment and found that there was no demand for such an institution. On each of the larger works there was a small number of individuals incapacitated either by old age, lameness, deformity, blindness or the like from turning out a fair task. Such persons were entered in the gangs, were given some light or suitable work, and in calculating the task of the gang were not taken into account. This system appeared to give satisfaction to

the individuals themselves, and certainly saved the expense and the worry of a kitchen. The children never seemed to be in want of gratuitous relief and were supported by their relatives. Their condition never gave cause for anxiety."

60. Regarding the Bellary district, the Deputy Collector writes:—

“One children’s kitchen was opened on the Adóni-Nagaladinna road work on the 7th March 1892 and it was closed on the 2nd August last with the work itself. The total amount spent in connection with it was Rs. 235-2-2 and the average attendance at it was about 15. Similarly a children’s kitchen was opened on the 1st March last on the Alúr-Guntakal road work and it was closed on the 31st August last. The amount spent in its connection was Rs. 436-3-9 and the average attendance at it was about 20. It was noticed that, as a general rule, the coolies here did not like to send in their children to the kitchens, even although the kitchens were quite close to the place where their gangs were working, and this disinclination seems to my mind to be due to a superstitious idea that they seemed to have had that it is a very mean thing even for the poorest and the lowest class person to say that his or her child has gone to the “*koara*” as they call it.

61. M.R. Ry. Venkata Ram Dass Naidu, Deputy Collector in charge of the Cumbum and Markapur taluks of Kurnool, writes:—

“In this division all the classes that were really affected could have gone to the kitchens if they had chosen to do so. Perhaps Muhammadan gosha women should be treated as an exception, and in their case special arrangements were made. Among the classes that resorted to the kitchens are—

- | | |
|---------------|-----------------|
| 1. Kapus. | 7. Potters. |
| 2. Boyas. | 8. Muhammadans. |
| 3. Shepherds. | 9. Pariahs. |
| 4. Barbers. | 10. Chucklers. |
| 5. Washermen. | 11. Christians. |
| 6. Weavers. | |

"Six kitchens were opened, the number relieved varying from 199 in December 1891 to 457 in April and to 233 in September.

"The number would have been much larger but for the *superstition* with some parents that children fed in kitchens would not live long. Probably the mortality in the kitchens in the great famine of 1876-78 gave rise to this false fear. I know of many instances in which mothers wept and sobbed when pressed to send their badly-looking children to the kitchen.

"Two of these kitchens were stationary kitchens, while the other four were work kitchens and were moved from place to place as the work to which they were attached progressed to suit the convenience of the non-working children fed therein."

62. *Advances for Land Improvements.*—Among the most important of the measures adopted for the relief of distress was the grant of advances to land-owners for the improvement of their lands, the advances being utilised for the most part in the construction of wells. The advantage of giving employment to labour on works of this nature at a cost to be borne by the owners of the lands benefitted instead of by the State is unquestionable if the improvements to be effected are really remunerative and if measures are taken to ensure that the advances are honestly spent on the works for which they are taken.

Of the benefit derived from wells in a country like the Presidency of Madras, the greater part of which is subject to frequent droughts, many of them resulting in actual famine, no one who is familiar with the country can have any possibility of doubt. In an ordinary year the possession of a well means to the owner a crop or it may be a succession of crops throughout the year of a value far in excess of that raised by his neighbours in adjoining lands where no well is. In a season of drought it means to the great majority of well owners, for few wells dry up in the first season of failure, a good crop when grain is at famine prices, with food for himself and his family and ample fodder for his cattle, while the lands of his neighbours which have no wells are yielding nothing or next to nothing, and the family of his neighbour is perhaps driven to resort to distant relief works, and their cattle are dying or being kept alive at a great cost by grass brought from distant jungles. If any proof were needed of the advantage of wells it would be found in the eagerness with which the ryots have come forward to take advances for constructing them, and the innumerable wells which they are digging all over the country.

63. At an early stage of the period of distress the special well rules under which advances at specially favorable rates were admissible in the districts of Bellary, Anantapur, Kurnool and Cuddapah were extended by Government to Ganjam, North Arcot, Coimbatore and Tinnevely, and in August 1891 to the rest of the Presidency,

and the earnest endeavours of Government to bring home to the people the advantages which the rules held out were largely furthered by the personal exertions of His Excellency the Governor, whose encouragement to all the officers in the distressed tracts—and few of the distressed tracts were not visited by him—to persevere in the good work of increasing the number of wells has been the cause of so much of the success which has been achieved.

64. The annexed statement shows the sums disbursed in the affected districts under the Land Improvements Loans Act for the construction of wells or for other land improvements during the period of distress from January 1891 to September 1892:—

District.	Commencement of period during which loans referred to were granted.	Land improvement loans.									
		For the repair or construction of wells.						For other land improvements.			
		Granted.		Disbursed.		Wells.		Granted.		Disbursed.	
		Number.	Amount.	Number.	Amount.	Completed.	Under construction or repair.	Number.	Amount.	Number.	Amount.
	1901.		RS.								
Coimbatore.	1st January ..	6,201	12,07,200	122	7,89,292	545	4,808	326	74,079	314	66,853
Salem ..	1st April ..	1,663	1,82,510	563	1,62,383	434	1,231	19	5,155	19	4,905
North Arcot.		4,768	6,24,117	4,300	4,16,473	1,097	2,727	55	8,795	54	8,546
Chingleput.	1st January.	5,449	7,27,806	4,677	4,66,708	2,882	1,605	32	8,327	27	2,625
Nellore ..		551	85,938	483	63,878	95	248				
Cuddapah ..		6,118	9,12,505	5,128	5,26,803	621	3,435	553	77,230	493	69,631
Anantapur ..		525	97,315	431	65,315	28	330	144	29,820	144	28,820
Bellary ..	1st October.	842	1,89,109	816	1,32,275	33	700	708	97,111	690	93,231
Kurnool ..		1,266	3,25,347	1,202	1,98,761	18	1,044	54	7,395	54	4,870

"Out of the sums advanced for wells it will be seen that, up to the end of September 1892, 5,753 wells had been completed and 16,128 were under construction, many of them having since been completed. Of the sums advanced for "other land improvements" the greater portion of that advanced in Anantapur and Bellary was for the removal of "nuth" grass, a grass (*Ischaemum pilosum*) with a deep, wiry and 'widely' spreading root. In Cuddapah the expenditure was largely for levelling and for reclamation of lands, and in Coimbatore for removing prickly-pear, levelling and embank-

65. It is almost inevitable that in districts where, to meet the needs of a period of severe distress, loans have been issued on an exceptionally large scale there should be instances where the loans have been fraudulently misapplied. Now that the period of exceptional pressure on all the district establishments has been relaxed, these cases will be inquired into and loans which have been misapplied will be summarily recovered. In the great majority of instances, however, the Commissioner is satisfied that the advances have been honestly utilized to the great advantage of the borrower and of the State. In this connection Mr. Sturrock, the Collector of Coimbatore, than whom no officer has laboured more earnestly to give his district the full benefits to be derived from the liberal loan rules, reports as follows:—

* "The wells in this district are usually large and sometimes very large pits sunk in solid rock frequently to a very great depth. Revetments are ordinarily only required for a few feet before the rock is reached, and when these are kept in order, the well is practically a permanent improvement. The Head Assistant Collector, who has been in the district for several years and has inspected a large number of works, writes—

"A large proportion of the works reported by Revenue Inspectors as completed are checked by Tahsildars and Divisional-officers, and although there are no doubt many cases in which borrowers do succeed in securing a portion of the loan for other purposes, there are just as many in which the borrower completes from his own funds a work which he would not have

begun without a loan. The high value of well land in this district makes it a matter of little difficulty to obtain good security for all the loans advanced, and although the price which has been taken in the matter during the period under report can only be practically tested in the course of years yet to run, a certain amount of experience has already been obtained in this district since 1887, and no case of insufficient security has yet come to notice, while it is only in rare cases that it has been necessary to enforce punctuality of payment of instalments by the issue of coercive process other than a mere formal notice of demand.

"The money advanced has been very well spent; no doubt a few rupees here and there are misapplied, but practically every borrower sinks a new well or repairs an old one, and materially improves the value of his property.

"The Sub-Collector, who has been but a few months in the district, writes—

"... the generosity of Government has often been abused; several instances have lately come to my notice in which it is evident that persons have looked on the Special Well Rules as a new way of paying old debts or of turning an honest penny by lending out at the usual exorbitant interest money which was obtained from Government at 3 per cent. ... Even in cases where work has been done, the ryots are often able to pocket a large proportion of the principal.

"After having inspected more than fifty wells and reviewed numerous inspection reports, I have no hesitation in saying that the Head Assistant Collector's remarks represent the normal state, while the Sub-Collector's deal with those more or less exceptional cases which as the rules are brought into practical working, but become as gained and rapidly diminish when a ryot takes an interest in his well. In reports on wells by them the following results were found during the last five months of the period under report:—

	Wells inspected in the month.	Percentage found not begun or left unfinished.
"May	510	18
"June	635	17
"July	891	15
"August	1,131	13
"September	1,189	9

"This is a continuous record of improvement, and I invariably found that the unsatisfactory taluks were either those in which a large number of loans had been disbursed shortly before inspection, or those in which the Tahsildars had had to be found fault with for want of interest in the work."

66. Mr. Thomson, the Collector of Chingleput, states—

"The loans were obtained by over 4,600 families, which means assistance to about 25,000 persons besides the employment of work-people. As a general rule, the borrowers, as far as possible, employ their own materials and household labour for the purpose of burning bricks and doing the unskilled part of the work, appropriating its value for their own relief.

"The frequent and persistent inspections that have been made have prevented any large proportion of the sums advanced from being misapplied. Occasionally, when the expenditure was apart from the legitimate purpose, the loans relieved distress in some other shape, namely, some five borrowers employed their loan in business, the profits of which kept them alive during the season. Loans were also taken with the object of part-going towards defraying Government revenue demands. Private debts were discharged; one grantee paid the loan into the hands of a dancing-girl and proceeded with her on a holiday trip to be set upon by robbers who eased them of their burden; another built a house; another purchased jewels for his wife; and another performed a marriage. But these cases of absolute misuse were so rare and the securities so safe that there has been no difficulty in either recovering the Government money or insisting upon the completion of the works agreed upon.

"It may be said that while repair works afforded relief to coolies and agricultural labourers, the loans benefited the poorer pattadars and land-owners who, but for this timely and substantial assistance, would have been led to the transfer of their lands by sale or mortgage, or to otherwise get themselves hopelessly involved."

67. The sums advanced under the Agriculturists' Loans Act in the affected tracts for the purchase of fodder and of cattle and seed-grain are shown below:—

District.	Period referred to.	Agricultural loans for the purchase of							
		Fodder.				Cattle and seed-grains.			
		Granted.		Disbursed.		Granted.		Disbursed.	
		Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
Coimbatore ..	1st January 1891 to 30th September 1892.	..	Rs. ..	..	Rs. ..	1,128	80,656	884	65,840
Salem	1st April 1891 to 30th September 1892.	..	..	..	..	209	10,309	209	10,309
North Arcot ..	1st January 1891 to 30th September 1892.	7	890	7	890	172	3,126	171	3,096
Chingleput ..		..	..	..	..	617	29,564	598	28,549
Nellore		1,136	95,124	1,136	95,124	245	9,346	183	6,393
Cuddapah		..	..	..	..	574	34,687	557	32,942
Anantapur	1st October 1891 to 30th September 1892.	65	2,609	65	2,609	16	1,385	15	1,325
Bellary		1,912	45,096	1,903	43,930	30	398	30	398
Kurnool		680	19,157	561	16,341	172	5,542	172	5,542

68. Relief to weavers.—In December 1891, it was reported that, owing to the high prices prevailing and cessation of demand for cloth, the condition of the weaving population of Salem, and especially of the lower classes of weavers working for hire, was such as to demand special measures for their relief. Some cases of migration were reported, and inquiry showed that there were about 2,600 families working seven thousand looms in Salem town and 1,000 more working two thousand looms in other parts of the district that required relief; while there was little or no inclination on the part of the weavers to resort to the ordinary relief works. The Collector, Mr. G. Stokes, proposed a system of relief under which the Government should purchase from the weavers cloths of specified kinds made by them, paying for them the quantity of material used and third-class wages for the number of days required for making each cloth, the quantity of material and the number of days required being settled beforehand. The plan was approved, but it was found subsequently to be unnecessary to put it in force for the relief of the weavers in Salem as the headmen of the weaver caste combined together to purchase the cloths made by weavers and so provided them with employment.

On the suggestion of the Collector of Ganjam it was ordered that weavers to whom advances might be made should be restricted, as far as possible, to the manufacture of articles likely to be used by Government.

69. It was found necessary at a later date to give this form of relief in the Kurnool district. In Kodumur in Pattikonda taluk, and in the villages around, some cases of actual migration were reported and relief was stated to be required. The proposals of the Collector for giving relief on the plan proposed by Mr. G. Stokes in Salem were sanctioned in May 1892, and work was commenced on the 9th June 1892 and closed at the end of August following. The largest number of looms employed was 363 and the number employed at one man, one woman and one child for each loom was 1,089. The total quantity of work turned out was 1,792 female cloths and 326 dungry cloths. Payment was made for each cloth for one man, one woman, and one child for two days; third-class wages being paid at the current price of cholam. The total amount advanced was Rs. 3,555-12-11, and the cloths made were valued locally at Rs. 3,380-8-0. The cloths were, however, taken to Kurnool for sale where they realised Rs. 1-2-0 for each woman's cloth and 7 Annas for each dungry cloth; the total amount realised being Rs. 2,158-10-0. The reason for the low price obtained was stated to be the fact that the woman's cloths were too short for ordinary use at Kurnool and the dungry cloths too narrow for use in offices. As regards the women's cloths the length seems to have been correct for the locality where the cloths were

made, and a great mistake seems to have been made by the District officers in attempting to sell them in another market where the length was unsuitable. The dungry which was of the size used for cloths by the poorer classes would also in all probability have met with a better sale locally.

70. *Recorded mortality in the affected districts as compared with that of a normal year.*—In the absence of an actual census of the population of the distressed districts, the only means of gauging the loss of population, if any, caused by a period of famine or of severe distress, is by a comparison of the birth and death statistics maintained in each village with those of a normal year. No great degree of accuracy is claimed for those statistics, and indeed the censuses taken from time to time show that they are largely inaccurate. The inaccuracies are due to carelessness on the part of the lowly paid agency by which the statistics are prepared, and result in normal years in the omission from the register of large numbers of births and deaths which undoubtedly occur. An increase in the number of reported deaths may always be expected in a time of famine, when as has been often pointed out, more attention is paid to registration than in ordinary years, and no certain inference that scarcity and high prices are increasing the mortality can be drawn from the reported figures unless they show a death-rate undoubtedly in excess of that to be expected in ordinary times. Much improvement is being effected from year to year in the registration of vital statistics, but the matter is one of extreme importance, for it is very largely on these returns that Government must rely in judging from month to month of the sufficiency or otherwise of the measures adopted for the relief of distress in the seasons of famine which experience shows will recur at not infrequent intervals in some portion of the Presidency. The subjoined statement shows the deaths reported in each month of the years 1891 and 1892 in each of the distressed districts compared with the average number of deaths reported monthly during the five years ending December 1890 which is shown as "normal:—"

Months.	Coimbatore.			Salem.			North Arcot.		
	Normal.	1891.	1892.	Normal.	1891.	1892.	Normal.	1891.	1892.
1	2	3	4	5	6	7	8	9	10
January ..	2,945	3,117	4,531	3,665	3,562	5,063	4,465	4,511	5,770
February ..	2,476	2,835	2,939	2,806	2,757	2,974	3,325	3,155	3,597
March ..	2,343	2,648	3,229	2,540	2,566	2,802	2,973	2,797	3,704
April ..	2,276	3,047	3,315	2,549	2,672	2,532	2,621	2,475	2,872
May ..	2,533	2,899	3,167	3,152	2,759	2,981	3,073	2,697	3,364
June ..	2,500	2,487	2,716	2,627	2,566	2,784	2,581	2,938	3,104
July ..	2,547	3,088	2,894	2,722	2,967	2,802	2,834	3,979	2,923
August ..	2,453	3,702	2,777	2,709	3,164	2,867	3,092	4,527	3,039
September ..	2,357	3,514	2,582	2,673	2,679	2,966	3,138	3,763	3,103
October ..	2,495	3,423	2,723	2,837	3,587	2,810	3,214	3,863	3,110
November ..	2,673	5,578	2,585	3,270	5,057	2,807	3,381	5,244	3,198
December ..	3,515	6,814	3,060	3,956	6,134	3,000	4,242	7,148	3,178
Total ..	31,113	43,152	36,518	35,506	40,470	36,388	38,829	47,934	40,362

27.200 79.92
 62.226 79.570
 71.012 76.858
 77.658 88.296
 50.346 58.521
 38.710 54.290
 51.218 59.100
 28.674 31.000

Months.	Chingleput.			Nellore.			Cuddapah.		
	Normal.	1891.	1892.	Normal.	1891.	1892.	Normal.	1891.	1892.
	11	12	13	14	15	16	17	18	19
January ..	2,633	2,671	4,173	1,859	1,922	2,658	2,369	2,037	2,332
February ..	2,047	1,739	2,542	1,446	1,636	2,672	1,865	1,733	1,780
March ..	1,873	1,711	1,900	1,561	1,596	2,635	1,995	1,487	2,027
April ..	1,731	1,619	1,465	1,360	1,712	2,316	2,103	1,548	2,511
May ..	1,935	1,661	2,025	1,647	1,763	2,271	2,102	1,663	2,141
June ..	1,835	2,031	1,663	1,516	2,175	1,968	1,594	1,811	1,750
July ..	2,019	2,224	1,720	1,605	1,995	2,295	1,902	3,178	2,860
August ..	2,177	2,844	2,177	1,719	2,719	3,291	2,042	3,788	3,517
September ..	2,116	3,587	2,350	1,746	2,446	2,130	2,242	2,913	3,159
October ..	2,103	3,343	2,190	1,566	2,244	2,150	2,339	2,462	2,716
November ..	2,204	4,247	2,047	1,598	2,418	2,434	2,428	3,211	2,998
December ..	2,500	5,055	2,137	1,767	2,360	2,432	2,628	2,707	2,870
Total ..	25,173	32,132	26,339	19,390	25,038	29,252	25,609	28,538	30,661

Months.	Anantapur.			Bellary.			Kurnool.		
	Normal.	1891.	1892.	Normal.	1891.	1892.	Normal.	1891.	1892.
	20	21	22	23	24	25	26	27	28
January ..	1,123	1,307	874	1,430	1,638	1,365	1,631	1,677	1,576
February ..	926	1,146	819	1,274	1,403	1,376	1,445	1,295	1,429
March ..	1,119	1,043	1,574	1,565	1,398	2,900	1,583	1,424	2,551
April ..	1,290	1,054	1,336	1,884	1,604	2,378	1,777	1,739	2,360
May ..	1,303	1,261	986	1,714	1,865	1,694	1,694	1,919	2,094
June ..	1,210	1,982	912	1,817	2,012	1,895	1,430	1,699	1,713
July ..	1,291	2,838	1,413	1,905	2,846	2,730	1,604	2,633	3,114
August ..	1,259	2,624	1,803	1,763	3,029	3,086	1,669	3,359	4,097
September ..	1,154	1,401	1,425	1,579	2,457	2,311	1,666	4,977	2,630
October ..	1,198	1,104	1,114	1,630	1,885	1,799	1,639	1,602	2,106
November ..	1,219	886	1,032	1,500	1,697	1,759	1,730	1,554	2,394
December ..	1,254	934	1,133	1,560	1,566	1,786	1,503	1,503	2,337
Total ..	14,337	17,560	14,427	19,627	23,400	24,979	19,786	22,381	28,701

71. In the districts of Coimbatore, Salem, North Arcot, Chingleput and Nellore, in portions of which districts much distress was experienced in the year 1891, the total deaths reported for 1891 were 188,726 as compared with 150,011, the average deaths reported during the five years ending December 1890, an increase of 38,715, or 25.8 per cent. The death-rate, however, was not high, being in no district more than 28.3 per mille of the population as shown in the margin. In the six districts in which severe distress was felt in 1892, namely, Salem, Nellore, Cuddapah, Anantapur, Bellary and Kurnool, the deaths reported during the year were 164,408 as compared with 134,255, the average of the five years ending December 1890, showing an increase of 30,153 or 22.5 per cent. The deaths reported in the same districts during 1876, though distress had commenced to be felt severely only towards the end of that year, were 194,257, of which no less than 59,745 were due to cholera.

Districts.	Death-rate reported per mille in 1891.
Coimbatore ..	21.5
Salem ..	20.6
North Arcot ..	22.0
Chingleput ..	28.3
Nellore ..	17.1

72. Much of the excess mortality in the past two years was due to cholera, but though cholera is an almost invariable accompaniment of famine, it was by no means confined to the distressed districts and was indeed more severely felt during 1892 in the Gódvári district than in any other district of the Presidency, though the Gódvári district, half of which is watered by the river of the same name, had excellent harvests in the year, and at no time suffered from agricultural distress. The cholera

Districts.	Deaths from cholera.		
	1891.	1892.	Average of five years ending 1890.
Coimbatore	8,063	2,007	1,730
Salem	5,256	3,543	1,454
North Arcot	6,737	3,107	2,122
Chingleput	4,702	1,913	832
Nellore	1,216	7,151	323
Cuddapah	6,231	3,268	1,544
Anantapur	4,282	719	435
Bellary	2,542	1,791	933
Kurnool	3,147	4,365	195

as a whole was in 1891 98,733 and 79,033 in 1892 as compared with 42,152, the average for the Presidency during the five years ending 1890. In no distressed district was the cholera mortality comparable in any way to that which prevailed in Ganjam in 1889 and carried off 14,042.

73. Considering the general prevalence of cholera, the health and freedom from disease of the labourers on works and of the destitute poor and the children fed in kitchens was exceptionally good. The reports from Chingleput show that not a single death occurred in the kitchens, and it is believed that similar immunity was experienced in the North Arcot district as well as in Salem, Bellary, Anantapur and Nellore. As regards the affected tracts in Kurnool, the Deputy Collector writes—

"The general health of the inmates of all the kitchens was on the whole very good. In the Cumbam division the Special Hospital Assistants visited each kitchen twice a week. In the Markapur kitchen cholera broke out in the latter part of April 1892, but fortunately there were not many deaths."

74. Regarding the condition of those on works, there is similar testimony to their general good health, though at certain periods of the distress there was a deterioration in condition due to local causes which were rectified as soon as discovered, one important cause of a deterioration in condition being the institution of the minimum wage on certain works in Kurnool which resulted in a rapid falling off both in work and in earnings, the labourers contenting themselves with the minimum wage for doing next to nothing instead of exerting themselves to earn a better wage by better work. The best way found in this case to improve the condition of the labourers was to abolish the minimum wage.

In regard to the condition of workers in Cuddapah, Mr. Wolfe-Murray says—

"I may say that no deaths occurred from starvation owing mainly to matters being dealt with in good time. Far different was my experience during the tail of last famine in Vizagapatam in 1878, when I had several small famine camps under my charge for a few months, and where the verandahs used to be speckled with the dead regularly every morning."

And Mr. Atkinson, the Sub-Collector, writes—

“The health of the famine labourers was invariably good. Two medical subordinates were during the months from February to July attached to the works; but, as it fortunately turned out, their posts were mere sinecures. Beyond a few simple cases of fever, dysentery and bowel-complaints, sore-eyes and accidents, there were never any patients. During the whole course of the famine operations only 3 deaths were reported among the coolies—one, that of a woman who was accidentally knocked down by a stone roller, receiving such injuries as resulted in death; another of a little child who fell into a well and was drowned; and the third of a man who was certified to have died of indigestion.

"This immunity from sickness and mortality is the more remarkable because the season was in other parts of the sub-division decidedly unhealthy. There was a good deal of sporadic cholera, which in Píler became severely epidemic at the end of May. In the Váyalspá taluk and parts of Báysachóti there was unusually severe fever, upon which I have reported in my letter, Dis. No. 2902, dated 8th July 1892."

In the letter referred to Mr. Atkinson gave very satisfactory reasons to show that the exceptionally severe fever was not due to privation.

As regards the Bellary labourers, Mr. Sewell, the Collector, states—

"To secure certain information regarding the health of the coolies and to ascertain whether they were falling off in strength under the famine wage, I instituted a system of selected families. In every gang on every work two or three typical families were chosen and their condition reported on periodically by the inspecting officers.

"Medical officers were also attached to large works and, in the case of others, arrangements were made for their occasional inspection. The District Medical officer himself took a lively interest in the matter, frequently inspected the works and communicated to me his remarks and suggestions. There was no epidemic or outbreak of disease of any kind, though at one time the numbers on works were close on twenty thousand."

M.R.Ry. Ram Dass Naidu, the Deputy Collector in charge of the Cumbum and Markapur taluks of Kurnool, writes—

"The coolies on the works kept excellent health except in the month of February, when, owing probably to 'inefficient supervision and excessive tasking,' there was a slight deterioration in the condition of the coolies at Dupad and Dornál. It is also believed that the introduction of 'minimum wage' at Markapur slightly demoralized the coolies there in March 1892, but they improved soon and at the time of the close of the works they looked none the worse for the distress they had undergone.

"The works were singularly free from cholera until June 1892 when gradually it spread thereto and caused slight mortality. Special arrangements were made to have the work spots swept clean, to disinfect them as often as necessary by the free burning of sulphur and tar and to segregate the labourers coming from infected villages. Four extra Hospital Assistants were at work at this time. The District Surgeon inspected the coolies twice, once in March 1892 and a second time in April 1892. I must emphasize the fact that within my knowledge not one

leaving this subject, I must emphasize the fact that, within my knowledge, not one case of death from actual starvation occurred during the prevalence of the distress. I did not even come across any of those specimens of humanity whom we can call 'resultants of prolonged hunger.' "

75. It cannot be expected that a period of very high prices will not tell on the health and strength of the people, but the Commissioner thinks that, judging from the condition of those who came to the works, which were free to all who were willing to work, and to the kitchens which were open to those of the destitute who were unable to work, there was no mortality due to absolute want.

76. *Activity of the grain trade.*—A note on the great activity of the grain trade by Mr. Benson, Deputy Director of Agriculture, forms appendix V of this report. The table attached to paragraph 6 of the note, which shows the net results of the grain trade of the Presidency for each statistical block for the eight half-years ending with September 1892, is given below:—

District or block.	Direction.	Net results of the grain trade during the half-years ending							
		1889.		1890.		1891.		1892.	
		March.	Septem-ber.	March.	Septem-ber.	March.	Septem-ber.	March.	Septem-ber.
Ganjam	Imports ..	1,661	4,140	1,040	2,555	13,659	16,336	5,837	680
	Exports ..	..	..	..	..	..	..	..	..
Vizagapatam	Imports ..	13,527	4,880	2,344	633	1,088	1,590	1,165	5,406
	Exports ..	..	..	..	..	..	..	..	..
Gódsvari	Exports ..	25,000	21,610	25,881	27,018	23,853	21,435	14,061	13,466
Kistna	Exports ..	6,860	11,531	21,376	19,847	8,783	16,053	12,934	17,988
Ceded Districts and Kurnool ..	Imports ..	..	1,232	..	..	..	..	34,052	20,980
	Exports ..	6,629	..	4,159	5,807	10,901	16,596	..	..
Nellore	Imports ..	498	..	211	..	2,797	1,470	1,454	2,172
	Exports ..	..	908	..	578	..	..	..	..
Chingleput and North Arcot ..	Imports ..	..	..	..	..	..	7,875	18,316	5,933
	Exports ..	49,045	48,443	20,494	23,603	17,883	..	..	..
Madras	Imports ..	22,901	17,625	32,854	26,073	36,810	48,350	51,146	26,068
South Arcot, Tanjavur and Trichinopoly	Exports ..	56,055	45,384	41,139	29,301	66,101	56,151	86,650	60,448
Madura and Tinnevely	Imports ..	15,470	12,167	31,901	59,103	70,925	68,786	59,624	48,230
Salem, Coimbatore and Malabar ..	Imports ..	54,775	59,728	87,204	72,180	154,048	104,222	115,729	60,019
South Canara	Exports ..	23,294	6,670	19,624	5,862	16,280	4,641	14,641	4,089
Presidency Total ..	Imports ..	..	..	20,811	42,152	106,032	97,901	147,363	72,137
	Exports ..	48,051	34,864	..	..	..	..	..	..

It shows that for the Presidency as a whole there was during the two years ending March 1892 an enormously increased import of grain from other parts of India. In ordinary years any import of grain is more than counterbalanced by the exports, the excess of exports of grain over imports amounting in 1889-90 to 14,053 tons. In 1890-91 this net export was changed into a net import of 118,184 tons, and in 1891-92 into a net import of 245,264 tons. In addition to the imports from abroad there were of course large and abnormal movements of home-grown grain within the Presidency, the districts in which the season had been fair exporting their surplus to those where the crops had failed. The grouping of districts into railway blocks, adopted for simplifying the preparation of the trade returns, renders it difficult to gauge the effect of the recent failure of rains in particular districts, the affected districts being in many cases grouped with others that were not affected at all or affected very slightly.

77. The Ganjam district is grouped by itself. It suffered from famine in 1889 when its net imports were by sea—for it has no railway—5,801 tons. It had not sufficiently recovered in 1890 to admit of its making any large exports, but in 1891 it managed to export very nearly 30,000 tons net. It suffered again from bad seasons in 1892, and though it was not found necessary, as it was at one time feared it would be, to introduce measures of famine relief into the district, its net export of grain dropped to 6,500 tons.

78. The Ceded districts and Kurnool, which together form one group for trade statistical purposes, enjoyed a very fair season in 1890, and did not despair of a good season in 1891 till nearly half the year was over. During the two years ending September 1891, these districts exported, net, to the affected tracts of the Presidency no less than 37,500 tons. In September 1891, it began to be realised that the early rains had failed to a disastrous extent; the exporters set to work to import and, in the year ending September 1892, no less than 55,000 tons were imported.

In the Chingleput and North Arcot block, the trade returns of the five half-years between 1st October 1888 and 31st March 1891 showed a regular net export of grain ranging between 49,045 tons in the first half-year, the highest half-yearly figure in the series, to 17,883, the lowest figure. The failure of rains dealt with in the report changed this export trade into an import trade, and in the year ending March 1892, which comprised nearly the whole period of severe distress, the net import of grain was slightly over 26,000 tons. Madras, the sea-port of this block, usually draws a large portion of its supplies from inland, but from the beginning of 1891 these fell off, and towards the end of the year grain imported by sea was being sent inland from the port in considerable quantities.

79. The block made up of the Salem, Coimbatore and Malabar districts during each half-year prior to that ending in September 1890 imported on the average about 71,000 tons of grain, net; in the next six months these imports more than doubled, and, during the year ending in March 1892, the net imports amounted to 220,000 tons. A very large proportion of these imports came by sea into Malabar.

The two Southern districts, Madura and Tinnevely, which are grouped together for statistical purposes, showed in the twelve months ending in September 1889 a net import of 27,637 tons of grain. In the next twelve months the net imports rose to 91,000 tons, and in the year following to 139,711 tons; whilst in the year ending in September 1892 the net imports were still 107,854 tons.

The remaining districts in the southern portion of the Presidency—South Arcot, Tanjore and Trichinopoly—were able, during the years 1891 and 1892, to increase their net exports largely, and much of these were sent to the neighbouring districts where the failure of crop had caused deficiency of supply. The increased net export was from 101,439 tons in 1889 and 70,430 tons in 1890 to 122,262 tons in 1891 and to 147,098 tons in 1892.

80. The very high prices which prevailed in the distressed areas in the latter part of 1891 and for the first six months of 1892, notwithstanding the activity of the grain trade, seem to show that there had been by the end of 1891 a very serious depletion of the stocks of grain in the Presidency. Had the early rains of 1892 failed over any large area in the Presidency, an enormously increased development of the grain trade would probably have been needed to prevent a general rise of prices to the level of the prices of 1876.

81. *Efforts made for the protection of cattle during the drought.*—The sufferings to which the cattle in the affected districts would be exposed during the drought from the almost complete failure of pasture, the drying up of the drinking ponds and the deficient outturn of the straw of the fading crops became evident at an early period of the distress. The drying up of the ponds could not be remedied, but the provision of water for cattle as for human beings was, as far as possible, assured by the numerous loans granted to the ryots at favorable rates for the digging of irrigation wells. Among the measures taken for the protection of cattle were the throwing open of the forest reserves to free-grazing or to grazing at favorable rates; the permission to cut grass in and remove it from the forests; the cutting and stacking of grass in the forest reserves at the expense of Government for sale to the ryots, and in certain cases the transport of hay so cut to fixed centres in the affected tracts for sale by auction. Endeavours were also widely made to induce the ryots to make use as cattle food of the prickly-pear (*Opuntia sp.*) which is obtainable in large quantities in most districts and which is not greatly affected by a want of rain; innumerable illustrated leaflets printed in the vernaculars and showing the manner in which the leaf should be prepared being distributed in the affected districts. The different measures taken are recorded in the reports of each district and are briefly noted below.

82. In the Chingleput district all the reserves on the plains were ordered to be thrown open from 10th June 1891 to the end of August to all cattle at a nominal fee of 6 pies for each buffalo and 3 pies for each bullock. Permission was also given to the ryots to cut and carry grass from the reserved forests free of charge. No statistics are available to show how far these privileges were availed of, excepting that the receipts under grazing fees during 1891-92 were only Rs. 909 against Rs. 2,337 in the previous year.

83. In North Arcot the reserves in the Wandiwash taluk were thrown open to cattle in July 1891. The concession was largely availed of by the ryots, but for want of rain there was but little pasture available in the taluk reserves. The general failure of the grasses in the portions of the Eastern Ghâts running through the Kálahasti zemindari, the other affected tract in the North Arcot district, was pointedly brought to notice by Mr. LeFanu, who wrote as follows from Kálahasti in July:—“Cattle are dying. I have seen them dead in the fields and others too weak to rise; this too in a richly wooded country where grazing is free, a fact which gives ground for reflection in reference to our forest reserves. It is a fact that these great forests of the Eastern Ghâts contain no grass.” In September, the almost complete failure of pasture compelled the ryots to feed their cattle on the leaves of trees and palmyras, and permission was then accorded to them to take leaves to a very large extent from poramboke and avenue trees. This state of things continued till the season improved in October. In December 1891, when distress threatened in another part of the district not previously affected—the Punganúru zemindari—the Collector was authorized to cut and stack in the vicinity of the forest reserves such quantities of grass as might be deemed advisable for sale to ryots during the hot weather (March and April) of 1892, and in January 1892, with a view to give work to the poor in the zemindari, grass-cutting was begun in several places and 276½ tons of hay were collected. It was found impossible to sell this grass in the early months at a reasonable price and an early improvement of the season deprived it of all value. It was therefore given away, Rs. 353 having been spent on it.

84. In Coimbatore great scarcity of fodder was experienced throughout the district in 1891, and in portions of the Bhavani and Kollegal taluks in 1892. At an early date the Collector offered free grazing in the more remote forests, but was compelled to

decline to throw open to absolutely free grazing the forests then being grazed over by cattle for which permits had already been taken out owing to the insufficiency of the supply of grass in the forests. The cattle, however, for whom permits had been obtained, were granted a free extension for three months in the Palladam and Udumalpet taluks in 1891 and in Bhavani in 1892. Free grass-cutting in the reserve was allowed to all graziers and some hundreds of cart-loads were thus removed.

85. In Salem the grazing of cattle and sheep (not goats) free of charge in the reserved forests during the prevalence of scarcity in the taluks of Salem, Namakkal, Tiruchengodu and Uttankarai was permitted from 20th August 1891. To the same end a notification was issued permitting villagers to cut and remove grass free of charge from all reserves, except those already felled over, and when pasture became very scarce towards the latter part of the year 1891-92, graziers were allowed to cut small branches of trees for fodder for cattle in reserves open to grazing. Arrangements were also made to cut and stack hay by departmental labour for supply to needy ryots later on in the hot weather at cost price. Very little was however, accomplished in this direction before the rains came in 1892. A few cart-loads were removed by the villagers in Atur, Uttankarai and Tirupattūr, and about 46 cart-loads were cut and stored by the Forest Department in the Salem west range. No grass was available in other taluks. In May 1892, the season improved and cutting grass in the reserves departmentally was stopped.

86. In the Cuddapah district lands generally closed to grazing were opened to grazing on a moderate fee, and free grazing was permitted in one reserved forest and in unreserved lands generally. A proposal of the Collector to collect and store a certain amount of fodder grass in a few convenient places and at the same time to impress on the ryots the necessity of following the example was sanctioned in December 1891. Hay was stacked and stored at 14 depôts at a cost of Rs. 2,774, but the experiment did not prove a success. There was little demand for the hay and only a small quantity was sold realizing Rs. 478. In the Cuddapah taluk villagers were allowed to cut leaves in the jungles for fodder on payment of a reduced rate of 3 pies a head-load. Some slight success was met with in the Badvel and Sidhout taluks in introducing the use of prickly-pear as fodder. Several ryots purchased the instrument required for preparing the leaf for food, but, owing to the drought, it was stated to be difficult to find the plant with sufficient moisture in it, and the longer the drought the more shrivelled and parched the leaf became and it was stated to have a strong tendency to scour the cattle eating it.

87. In Anantapur free grass-cutting was allowed in the forests in all distressed localities, but no alteration was made in the rates for grazing in the jungles.

88. In Bellary the want of pasture made itself felt early in 1891, and from the setting in of the hot weather great difficulty was felt by cattle-owners, fodder becoming dearer from month to month. Large quantities of grass were cut on the Sandūr Hill and taken to different parts of the district, these jungles and those in Kurnool affording almost the only instances throughout the famine of forests being utilised to any considerable extent for the growth of grass to be cut and sold as hay in distant localities. The grass from the Sandūr Hills sold on the spot at three times the ordinary rates was carried chiefly to the four western taluks of the district, to the Bellary taluk and to parts of the Rayadrug taluk; owing to the long distance it was not conveyed in large quantities to the Alūr and Adōni taluks. During December 1891, 4,000 cart-loads of grass were cut from the Sandūr Hills by the ryots themselves which gave work to some 1,000 coolies a day on the average. The demand was reported to be increasing and 2,052 cart-loads were reported during the week ending 16th January 1892, and high charges were paid for cutting grass. To stimulate the grantees to cut the grass while still green, State loans were disbursed for "stacking Sandūr grass" by lump sums. The Rajah of Sandūr and the Forest Department realized about Rs. 2,500 and 9,300, respectively, by the sale of hill grass, no charges being incurred in either case as the grass was cut and removed by the persons who took out licenses. But for the Sandūr supply, a considerable number of the surviving cattle would have succumbed and agricultural operations been very much retarded in consequence. With a view to relieve the scarcity of fodder in the Alūr taluk, trial consignments of forest grass from

the Nallamalas and of paddy straw from the Kistna delta were sent to Maddikera, a railway station on the eastern boundary of the taluk. Three waggon-loads of forest grass weighing 2½ tons were sent from Chelama to Maddikera at a total cost of Rs. 72-12-8, the railway charges alone being Rs. 51-15-0. Two of the three waggon-loads weighing 1·27 tons were sold for Rs. 35-10-0, the cost price being Rs. 42-14-8. This selling price was considered high in itself. The third truck-load of grass was 1 ton 3 cwt. (nearly) and cost Rs. 29-13-7 delivered, but as there was very little demand for the grass at this price, attempts to sell it by public auction were made and though the sale was postponed several times for want of bidders, the hay had finally to be sold for Rs. 6-4-0 only, a sum far less than that realised for an equal amount of Sandūr hay. From Guntūr, a consignment of 1½ ton of paddy straw was sent to Maddikera at a cost delivered of Rs. 53-5-4 per ton, of which Rs. 34 was for railway charges, the minimum charge on a 3-ton waggon. The cost thus came to the prohibitive rate of 42 lb. per rupee. The large increase over the price at which it was hoped to be possible to deliver it, viz., Rs. 32-5-4 per ton, or about 70 lb. per rupee, being due mainly to the great rise in the price of paddy straw in the Kistna delta owing to the failure of crops and pasture in the adjoining district of Nellore. To land it, however, at Maddikera at the lower price given above, it would have been necessary to press it and no presses were available at Bozwada. Under these circumstances the attempt to import straw into the Bellary district from the Kistna delta was abandoned. Rupees 15 was offered for the straw but not accepted, and it was finally sold, after the season had improved, for Rs. 7-8-0 to avoid further loss.

89. In Kurnool, until the rains of 1892 began, there was a universal dearth of pasturage, while fodder was available only for the valuable cattle. The ryots were allowed to cut and remove cart-loads or head-loads of grass free of charge in the forests, and they availed themselves of this concession largely. Thousands of cart-loads appear to have been taken by them from the Sirvel forests for Koilkuntla and from the Nandyāl

Place.	Tons.	Cost.	Receipts.
Dornai	24	Rs. 317 11 0	Rs. 100 0 0
Digumetta	20	158 11 0	175 0 0
Chelama	248	1,370 0 0	155 0 0
Venkatapuram ..	419	2,798 0 0	186 0 0
Total	711	4,644 6 0	..

forests for Pattikonda, Nandyāl, Cumbum and Markapur. The Forest Department cut and stored hay at several places for sale to the amounts shown in the margin at an average cost of Rs. 6-8-6 per ton or 343 lb. per rupee. Except, however, the 20 tons of hay stacked at Digumetta and small amounts elsewhere which were sold, the ryots did not show themselves willing to purchase the grass.

An experiment was made in transporting some of the hay to Bellary where fodder was extremely scarce, but the results, which are noted under Bellary district, were unsatisfactory. A waggon-load of the Chelama hay was also taken to Markapur and sold there by auction for Rs. 16. There was no demand for the remainder of the hay. In the Cumbum and Markapur taluks demonstrations of the method of using prickly-pear leaves as fodder were conducted by the Revenue officers and Stock Inspectors on famine duty; the latter taking with them, wherever they went, cows trained to eat prickly-pear. The experiments, however, seem to have had but little result. A few cattle were kept alive on prickly-pear with a modicum of grass in a small enclosure in the neighbourhood of the Markapur famine kitchen, but few ryots seem to have profited by the example, and there is reason to fear that the nutritious powers of the plant are of but little value. On the whole the attempts made to induce the ryots to adopt prickly-pear as a fodder were, in the Commissioner's opinion, a failure, though the greatest credit is due to numbers of officers who did their best by example as well as by precept to show the ryots the uses of the fodder.

90. In Nellore owing to the depletion of the stock of fodder in the northern taluks, the District Forest-officer was directed to cut and stack hay in villages near the Veligondas in Udayagiri taluk for sale to ryots during the hot weather, as the ryots themselves would not do so. Sixty-three and a half tons of hay were cut and stacked near Boggu Venkatapuram, of which 2½ tons were sold to the ryots for Rs. 22-8-0. The rest remained unsold when the rains set in.

91. *Cattle mortality.*—Notwithstanding the measures taken for the preservation of cattle there can be no doubt that great losses have been experienced in the stock in the distressed districts. Such a result, however, is practically inevitable when there is a dearth of fodder owing to the failure of rain, so long as innumerable cattle are allowed to live in ordinary years solely on what can be picked up on the village grazing-grounds, the owners being unable to afford to keep them alive by purchased fodder. In an average year these cattle manage to get through the dry season by the aid of the little grass obtainable by the road-sides and on the village grazing-grounds. In times of dearth, however, they must succumb. They are not worth the expenditure necessary to keep them alive. It should be borne in mind too that in times of famine when man himself is suffering as well as the cattle from a scarcity of food, an unusual number of cattle are slaughtered to meet this want, and that the reduction in the number of cattle is not therefore wholly a loss. No record of the losses from starvation and thirst is available, but so far as the records of the two most recent censuses show them the losses from all causes together are exhibited below. It is only, however, of recent years that much attention has been given to these censuses, and it is possible that in some respects, and especially as regards the number of young stock returned, the latest censuses are more complete than the earlier ones :—

Districts.	Number of horned cattle.				Number of horned cattle.			
	Tilling.	Breeding.	Young.	Total.	Tilling.	Breeding.	Young.	Total.
1	2	3	4	5	6	7	8	9
<i>In May 1890.</i>								
Nellore	172,136	260,166	175,402	607,704	170,207	242,375	197,659	610,241
Cuddapah	238,874	326,220	333,330	898,424	226,135	267,676	301,355	795,066
Kurnool	178,483	226,786	221,209	626,478	175,231	214,787	218,988	608,986
<i>In October 1890.</i>								
Bellary	235,165	196,206	223,676	655,046	215,870	146,837	163,516	515,223
Anantapur	184,837	207,655	210,111	602,603	181,568	177,064	180,870	539,502
North Arcot	299,682	273,376	253,214	826,272	288,846	291,997	314,500	725,343
Chingleput	193,083	142,298	83,218	418,699	198,369	138,504	124,860	461,683
Salem	268,098	479,214	349,967	1,097,279	189,931	136,603	132,559	459,093
Coimbatore	357,378	506,483	370,020	1,233,881	238,248	399,678	369,892	907,818
				6,964	347,694	439,817	318,780	1,106,291

Districts.	Loss or gain between the censuses.				Remarks.		
	Tilling.	Breeding.	Young.	Total.			
	10	11	12	13			
Of May 1890 and 1892.							
Nellore	— 1,929	— 17,791	+	22,257	+	2,537	Excluding Pullampet
Cuddapah	— 12,739	— 58,544	—	32,075	—	103,358	
Kurnool	— 3,252	— 11,999	—	7,241	—	22,492	
Of October 1890 and 1892.							
Bellary	— 19,295	— 50,368	—	70,160	—	139,823	Excluding Wallajah
Anantapur	— 3,271	— 80,590	—	29,441	—	63,302	
North Arcot	— 10,736	— 51,379	—	38,712	—	100,827	
Chingleput	{ + 5,176	— 3,734	+	41,642	+	43,084	Comparative of 1891 and 1892.
	— 3,152	— 5,605	+	48,832	+	40,075	
Salem	— 29,850	— 79,636	—	80,075	—	189,561	
Coimbatore	— 9,684	— 66,666	—	51,240	—	127,590	

* Census of October 1891.

92. In the three districts first mentioned, the annual census is taken in May ; and in May 1892, owing to the continuance of the drought, many cattle may have been on distant grazing-grounds, and so not enumerated. Still the record shows a very large decrease in the tilling and breeding cattle both in Cuddapah and Kurnool.

In the remaining districts the annual census is taken in October every year. Both in Bellary and Anantapur the loss of cattle was very great, but fell chiefly on the breeding and young stock, which showed, in some taluks, a number in 1892 smaller by one-fourth or one-third than two years before. In Bellary also there was a general loss of 8 per cent. of the tilling cattle.

In North Arcot and Chingleput, which felt the effects of the drought in 1891 to its full extent, the losses were especially heavy in the former district, where there was a decrease of nearly 20 per cent. in the number of breeding and young stock, the losses having been heavier even in the eastern taluks of the district. In Chingleput, there were considerable losses also in the northern and central taluks ; but, owing to defects in the earlier returns, especially in regard to the number of young stock, the results for the other taluks are doubtful.

In Salem and Coimbatore, the losses during the two years were also very large, and occurred, as elsewhere, chiefly amongst the breeding animals, whilst a large decrease is shown in the young stock. In Salem, the taluks which suffered most were Dharmapuri, Uttankarai, Salem and Tiruchengodu ; and in Coimbatore, those of Kollegal, Bhavani, Palladam and Karur.

93. Altogether in the nine districts alluded to, the gross decrease amongst horned cattle during the two years amounted to over 700,000 head ; whilst, if allowance be made for improvements in the registration of young stock, which an examination of the returns shows must have occurred in some taluks, the gross loss must have been larger. These figures do not include any losses in the large zemindaries of Nellore and North Arcot where they were certainly large. It is satisfactory to find that notwithstanding the certain large loss of cattle there was during the past agricultural year, ending 30th June last, no decrease in the area brought under cultivation compared with the average in any of the nine districts with the exception of the Coimbatore district where a decrease of 105,930 acres in dry land cultivated is owing to the specially bad season experienced last year in the southern taluks. The increase in dry and wet cultivation together in the remaining districts ranges from 21,984 acres in Chingleput to 384,763 acres in Kurnool, and in the whole eight districts amounts to 990,888 acres or 9.25 per cent. in excess of the average.

94. *Cost of relief measures.*—The expenditure incurred by the State by the opening of relief works, the grant of gratuitous relief and the remission of assessment caused by the failure of the seasons in excess of the average remissions is shown below :—

	RS.
Cost of works undertaken for the relief of distress	16,53,178
Cost of gratuitous relief	64,978
Charges of special establishments not debited to "famine relief." ..	1,15,983
Remissions of land revenue in excess of those of a normal year—	
In 1890-91	10,83,467
In 1891-92	29,82,670
Total	40,66,137
	59,00,276 *

In addition to the remissions of revenue particularised above, suspension of collections for a period generally of one year were allowed in large numbers of instances in 1890-91 and in 1891-92, while unusually large advances were made in the distressed

* In Kurnool, Rs. 8,556 were advanced for the relief of weavers, of which Rs. 2,159 were recovered by the sale of cloths made by them.

tracts under the Agriculturists' Loans Act and the Land Improvement Loans Act. The advances under the Loans Acts were mainly for the construction or repair of wells, or for the purchase of cattle, or of fodder for cattle, or of seed-grain, and in the affected districts, amounted during 1891-92 to Rs. 15,52,842 and in 1892-93 to Rs. 20,55,154; the advances made in each year in the Presidency as a whole amounting to Rs. 16,85,665 and Rupees 22,75,006, respectively, as compared with an average of Rs. 2,07,494 in the three previous years as noted in the margin

95. The different items of expenditure in connection with the famine will be noticed in order :—

Cost of works Rs. 16,53,177.—Particulars of the expenditure on works in each district are given below :—

Districts.	Roads.	Irrigation.				Miscellaneous.	Special establishment charges.	Total.
		By Public Works Department.		By Revenue Department.				
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Coimbatore ..	74,420 3 5	1,113 10 0	3,701 3 7	..	..	1,274 13 2	75,696 0 7	
Salem ..	1,10,370 4 10	50,976 7 6	11,238 13 11	..	..	3,448 13 0	1,15,633 15 5	
North Arcot ..	62,300 9 0	96,807 1 8	83,642 11 9	..	..	19,843 4 4	1,40,592 3 4	
Chingleput ..	13,136 12 8	9,260 3 11	55,067 4 11	..	..	3,430 8 1	1,07,916 13 3	
Nellore ..	1,88,241 3 6	67,604 2 0	30,918 14 11	..	..	15,389 12 4	3,04,234 3 4	
Cuddapah ..	61,868 15 5	6,800 2 7	..	..	..	27,723 15 1	1,85,593 9 11	
Anantapur ..	3,647 12 0	19,157 4 11	..	..	..	10,444 12 1	30,131 12 7	
Bellary ..	1,66,595 13 5	..	..	..	..	15,497 2 7	2,01,650 4 11	
Karnool ..	2,12,483 11 11	1,57,726 4 9	8,839 0 0	..	..	24,066 2 6	4,03,098 11 8	
Total ..	8,82,865 6 2	3,99,746 5 4	1,92,906 1 1	56,592 1 2	1,21,068 14 2	16,53,177 11 1		

* Water-supply works only.

	Nellore.†		Cuddapah.‡		Anantapur.†	
	RS.	A. P.	RS.	A. P.	RS.	A. P.
Water-supply works ..	23,122	2 7	1,831	7 5	110	11 1
Forest fencing ..	1,186	0 0	4,857	15 9	5,188	16 10
Prickly-pear ..	2,027	7 1	959	3 4	..	..
Total ..	36,345	9 8	7,648	10 6	5,249	4 11

A preference was everywhere given to irrigation works, where such could be found suitable, for giving employment to all in need, but the absence of those works in the distressed tracts in Coimbatore, Salem, Nellore and Bellary and their insufficiency in Kurnool and elsewhere rendered the taking up of road repairs compulsory.

The expenditure on roads which amounted to Rs. 8,82,865, as shown above, constituted 53 per cent. of the total expenditure on works. The expenditure on irrigation works amounted to Rs. 5,92,651, or 36 per cent. of the total expenditure, while Rs. 56,592 was spent on miscellaneous works, Rs. 42,423 of the amount being incurred on works for the improvement of the drinking water-supply. The difficulties of obtaining drinking water for man and beast, which at certain periods of the distress gave rise to very grave anxiety, were very largely mitigated and relieved by the wells numbering many thousands which were dug for irrigation purposes from advances made under the Loans Acts.

96. A statement is printed in the appendix which gives the normal value, or value at normal rates, of the different descriptions of work carried out in each district.

The following abstract shows the normal value as compared with the actual cost of road works, large and small irrigation works and miscellaneous works.

Class of works.	Actual cost.	Normal value.	Excess cost.	Cost of works for which normal value not reported.	Total expenditure on all works.
	RS.	RS.	RS.	RS.	RS.
Roads ..	8,82,865	5,42,315	3,40,550	..	8,82,865
Large irrigation ..	3,48,769	2,65,921	82,848	50,976	3,99,745
Minor do ..	1,50,750	1,48,356	2,394	42,156	1,92,906
Miscellaneous ..	50,292	44,660	5,632	6,300	56,592
Total ..	14,32,676	10,01,252	4,31,424	99,432	..
Establishment ..	..	..	..	..	1,21,069
Grand Total ..	..	..	..	..	16,53,177

It is necessary, however, to point out that the fact that expenditure on a particular work has exceeded the normal does not of necessity point to slackness of administration, or to undue leniency in tasking. In the great majority of cases in the past two years the Commissioner is convinced that the work done was all that could reasonably be expected from the workers who in general worked well and to the full extent of their ability. The excess cost over the normal is in the main attributable to the fact that the employment of cattle and carts for moving materials was prohibited, and also largely to the great rise in prices which, while proportionately increasing the cost of labour, left the work turned out by the labourer the same. In future under the system which fixes the wage of the famine labour at the equivalent in money of a fixed quantity of grain, the cost of relief of labourers when grain is selling at 8 seers the rupee will be twice as great as when grain is selling at 16 seers the rupee. Under the scale of wages prevailing in Madras during the past two years, which was based on the grant to the labourer of the equivalent of a certain amount of grain plus a fixed sum of money, the difference in the rate of wages in the case quoted above would not have been so large, but would still have been very considerable. At 8 seers per rupee the wages of a man, woman and child paid at 3rd-class rates would have been Rs. 4-7 or more than 50 per cent. in excess of the amount payable if prices had stood at 16 seers per rupee. The employment of cattle and carts was prohibited as involving an unnecessary addition to the cost of relief. It was necessary to spend, as already shown, the sum of Rs. 15,32,108 in the payment of wages to men, women and children for the relief of distress, but it was not necessary to spend any further sum, and no further sum was allowed to be spent, though such extra expenditure—the amount of which, however, it would be difficult to calculate—might, and doubtless would, have largely increased the value of the work turned out as compared with the cost.

97. *Gratuitous Relief, Rs. 64,978.*—The total expenditure in each district during 1891-92 and 1892-93 on gratuitous relief is shown in the subjoined statement :—

Districts.	Purchase of food in bazaars.	Petty establish- ment.	Sundries.	Total.
	In 1891-92.			
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Cuddapah	57 5 4	55 2 5	14 3 2	126 11 11
Anantapur .. .. .	.. .. .	38 8 8	35 0 0	63 8 8
Chingleput	10,478 2 0	1,349 14 2	1,987 14 6	13,815 14 5
North Arcot	23,236 3 8	2,789 5 4	1,835 6 5	27,860 15 5
Salem	1,418 3 9	276 5 1	186 7 10	1,880 0 8
Coimbatore	3,495 4 7	482 5 9	1,258 10 2	5,236 4 6
Total in 1891-92 ..	38,685 4 4	4,681 9 5	5,316 10 1	48,983 7 10

* Includes Rs. 114 money doles.

Districts.	Purchase of food in bazaars.	Petty establishment.	Sundries.	Total.
In 1892-93.				
Nellore	1,377 8 0	275 13 6	247 0 6	1,900 6 0
Bellary	320 0 9	305 3 0	194 9 1	819 12 10
Cuddapah	243 13 4	65 13 11	60 15 1	370 10 4
Anantapur	1,581 7 11	582 15 1	455 5 6	2,619 12 6
Kurnool	4,535 14 3	1,108 8 6	1,022 12 7	6,667 3 4
North Arcot	232 13 10	38 9 7	190 6 3	460 13 8
Salem	2,633 3 8	259 10 8	263 9 3	3,155 7 7
Total in 1892-93 ..	10,924 13 9	2,636 10 3	2,437 10 2	15,994 2 3
Grand Total ..	48,610 2 1	7,618 3 8	7,749 4 4	64,977 10 1

* Includes Rs. 84-6-1 money doles.

The expenditure was greatest in North Arcot where it amounted to Rs. 28,322 or nearly half of the total expenditure incurred on gratuitous relief throughout the Presidency. It was also considerable in Chingleput where it amounted to Rs. 13,816. In Kurnool it was under Rs. 7,000, in Coimbatore and Salem a little over Rs. 5,000 each, while in the remaining districts it was very trifling. An attempt has been already made (paragraph 55) to explain why the resort to gratuitous relief was so limited on the part of the affected population. Work was given to all who were capable of working at all, and the preference for work, which was so generally and so markedly manifested everywhere, was encouraged to the utmost possible extent. In North Arcot and Chingleput the kitchens met a manifest want as is evidenced by the quotation given in paragraph 5 of the Collector's report from the letter of Dr. Walker who was specially deputed by Government to inspect the relief kitchens in the affected tracts in North Arcot. In the other districts experience showed that they were not so necessary. It is however in the Commissioner's opinion of great importance that kitchens should be opened contemporaneously with large works to meet a possible necessity. Sickness may at any time drive a family to seek gratuitous relief, and the experiences of the last two years give satisfactory evidence that this form of relief will not be abused.

A mould similar to that used in making bricks was introduced by Mr. LeFanu in North Arcot for measuring the ration of grain boiled to a thick consistency. It was found most useful and was introduced eventually into Chingleput, Bellary, Kurnool, Anantapur and Nellore. The measure supplies the want alluded to in paragraph 16 of the report of Mr. Sturrock, Collector of Coimbatore, and will be prescribed in the code for use in all cases where the grain is cooked in the form of a stiff porridge. In other cases the Collector of the district will be required at the commencement of operations to prescribe the form of measure to be used in each kitchen.

98. *Remissions.*—The remissions granted in the distressed districts in faslis 1300 and 1301 or the agricultural years ending 30th June 1891 and 30th June 1892 are shown below:—

Districts.	Fasli 1300.			Fasli 1301.		
	Dry.	Wet.	Total.	Dry.	Wet.	Total.
Tinnevely	Rs. 83,245	Rs. 3,91,803	Rs. 4,75,048	Rs. ..	Rs. ..	Rs. ..
Coimbatore	..	55,902	55,902	..	..	..
Salem	..	36,375	36,375	849	1,01,008	1,01,857
North Arcot	..	75,462	75,462	..	4,12,611	4,12,611
Chingleput	..	3,36,407	3,36,407	..	4,52,033	4,52,033
Nellore	..	1,93,090	1,93,090	1,70,550	6,52,100	8,20,650
Cuddapah	..	1,49,001	1,49,001	..	2,34,908	2,34,908
Anantapur	..	..	..	1,17,271	1,97,226	2,34,597
Bellary	..	..	..	6,49,551	42,221	6,91,772
Kurnool	..	..	..	95,812	91,867	1,87,679
Total ..	83,245	12,38,040	13,21,285	10,34,033	2,313,074	32,46,107

They amounted to a total for the two years of Rs. 45,67,395, being in excess of two years' average remissions by Rs. 40,66,137. Remissions on unirrigated land, which in this Presidency are granted only "in very exceptional years or under very exceptional circumstances," were allowed in the first of the two years in the Tinnevely district only and amounted to Rs. 83,245. In the second of the two years they amounted to the large sum of Rs. 10,34,033 and were granted in five districts, the largest remission Rs. 6,49,551 being allowed in the Bellary district where, as stated in paragraph 15, no less than 417,500 acres of land in excess of the average were left entirely unsown owing to the deficiency of rain. A remission of the full dry assessment was also granted in the affected taluks on crops, the yield of which was not in excess of one-eighth of an average crop. In general the crops in question were not found worth the reaping.

The remissions on irrigated land amounted in fasli 1300 (1890-91) to Rs. 12,38,040 in seven districts, and in fasli 1301 (1891-92) to Rs. 22,12,074 in eight districts. They were granted under the ordinary rules, and were specially high in 1892 in North Arcot, Chingleput and Nellore in parts of the distress where relief works were not in progress. They were the result of the specially bad seasons experienced in the districts concerned.

99. *Modifications necessary in the Famine Code.*—Proposals will be separately submitted for a recasting of the Famine Code in view to giving increased clearness as to its requirements; but the only important modifications, which the working of the Code during the last two years or during the famine in Ganjam in 1889 has suggested or has shown to be necessary, are those in connection with the rules for the granting of gratuitous relief; those determining the agency by which relief works shall be supervised; and those in regard to the wage and to the classification of labourers on relief works. One other modification, small in itself but of very great importance, is the substitution of binding rules for the conduct of relief works, with prescribed forms for nominal rolls, payment vouchers, records of outturn of work, &c., in lieu of the "Hints for the execution of Relief Works" which form appendix A of the Madras Famine Code and to which a note at the head of the rules shows that "rigid adherence is not expected." The experience of the past period of distress and the Commissioner's own experience throughout the great famine in Kurnool has convinced him that it is possible to form a code of rules for the management of most of the operations of relief, which can be followed absolutely under nearly all circumstances, and that to give officers merely "hints" is to leave them free to adopt a variety of systems, each of which is almost certain to be less suitable than the one which Government can now prescribe, if only owing to the haste in which on the outbreak of distress it must be drawn up, and to the possible ignorance of the officer as to the requirements. The Commissioner is satisfied that the existence of rules and standard forms will be of enormous convenience to all officers entrusted with the opening of relief works. The Commissioner would, of course, have power to modify any rule of mere procedure found inapplicable to peculiar circumstances.

100. *Gratuitous relief.*—The question as to which form of gratuitous relief was most suitable was considered in connection with the late famine in Ganjam in which gratuitous relief was resorted to on an unusually large scale; the different systems considered being relief by (1) a money-dole, or (2) a grain-dole, or (3) by the distribution of cooked food. The Collector of Ganjam condemned money-doles altogether, and considered that they should be abolished, gratuitous relief being confined to the distribution of raw grain to caste people and people unable from old age or sickness to leave their homes, and of cooked food to non-caste people. The Board considered that this proposal involved hardship, and although it saw no objection to requiring that willingness to accept cooked food should be used as a test to distinguish the really needy, in cases where the acceptance of cooked food would not be contrary to real caste scruples, it thought that where need was undoubted relief should not of necessity take the form of cooked food but might well be given in the form most congenial to the recipient when no extra cost to the State would be involved. It recommended that section 64 of the Madras Famine Code which gave a preference

to money over grain doles should be modified, and that the general rule should be that relief should be given in the shape of grain-doles, money-doles being restricted to very exceptional cases.

101. In its orders reviewing the report on the Ganjām famine, Government expressed the opinion that cooked food is the best form of relief for all who cannot earn wages on relief works, and it went on to observe as follows:—

“As regards the alleged difficulty of adopting it generally on the ground of scruples, the Government does not consider that any such scruples are *bona fide* and should be recognized which do not involve loss of caste by accepting the relief; if the food is cooked by Brahmins in a kitchen to which none but Brahmins have access there is no room for any such scruples. There need be no compulsion. The Government offers cooked food under arrangements which do not affect the caste of the recipient in any way, and if the people refuse to accept the food thus offered, the natural presumption is that they have other means of subsistence. Acceptance of cooked food is the truest and safest test of the need for gratuitous relief, but the objection to relying exclusively on this form of relief is that it would be difficult to work on a large scale if there were widespread distress. When a large proportion of a not very dense population has to be relieved, the organization of adequate distribution of cooked food becomes almost impossible. The Government therefore thinks that some discretion should be given to officers in special cases to substitute grain-dole for cooked food.”

“As between the money-dole and grain-dole system there is not much to choose those who are bent on extortion can levy a contribution on the grain nearly as easily as on the money doles, and grain can be bartered for liquor and other articles, so that the grain system does not really afford any great security that the relief will be properly applied and that the bounty of Government will not be abused, whilst it is somewhat more troublesome to work than the money-dole system, since it generally involves large purchases of grain by Government, carriage, wastage, storage, &c., whereas money is more easily carried about, guarded and counted. Grain-doles, however, possess this advantage over money-doles, namely, that embezzlement of grain is not quite so easy as that of money, while its distribution can be more easily supervised. On the whole, therefore, the Government considers that grain-doles should be maintained and money-doles given up.”

102. But very little further experience in connection with the administration of gratuitous relief has been earned during the past season of distress. It has been found possible everywhere to confine gratuitous relief to the distribution of cooked food, but the numbers of the destitute who have been absolutely unable to work have everywhere been very limited, owing perhaps as much as anything else to the general very good health enjoyed by the labourers on relief works. No serious epidemic has filled the villages with sick and starving, all the needy have been able to live and to do enough to earn a sufficiency on the works. The Commissioner considers that the distribution of cooked food in kitchens or in camps, when camps have to be organized, may be made the chief mode of gratuitous relief, but that it is impossible to rely on it entirely, and that it is necessary to make provision in the Code for the grant of gratuitous relief in the form of grain-doles. The figures in the statement in paragraph 55 show the enormous numbers who may require relief in a season of distress, and though it may be hoped that the country will never again be afflicted with so widespread a famine as that of 1876—78, it is too much to expect that individual districts will not suffer as Guntur in 1833, Ganjām in 1866 and in 1889, or as did numbers of the Madras districts in the year 1866.

103. No provision is made in the Code for the payment of children accompanying their parents to the works who are too young to join the working gangs. In the famine of 1876—78 a sum of $\frac{1}{4}$ anna was paid to the parent for each such child, but similar allowances are not now admissible, this form of relief having been discontinued under the impression that parents kept the money for themselves and did not feed their children properly. The impression was doubtless prevalent to a certain extent among

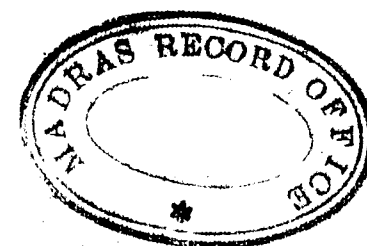
officers who administered relief in 1876—78, but perhaps officers failed to realise the extent to which parents were suffering themselves, and that they were probably suffering to at least as great an extent as the children. During the past famine the Commissioner is glad to say that he remembers no single case where a child had been neglected, and mothers almost invariably insisted on sharing their food with their children rather than let the latter go to the relief houses, though these latter were clean, were not enclosed, were free to the inspection of everybody, and though the cooks were all castemen.

The Commissioner is of opinion that where a sufficient wage is earned by the parents for their own support, their wage may without objection be supplemented by a small additional grant for each child unable to work, if at any time and for any reason this course should seem preferable to feeding the children in kitchens.

104. *Agency by which relief works shall be supervised.*—In its review of the report on the relief operations in Ganjām in 1888—89, the Government expressed the opinion that Civil agency works, by which are meant works carried out under the supervision of non-professional Civil officers, should be abolished on the ground that it was a waste of money to try and work weakly men without proper supervision which Civil officers could not exercise as well as Professional officers. They considered that all works carried on for purposes of relief should be classed as Professional agency, the staff of the Department of Public Works being strengthened for the purpose to such extent as may be necessary. All applicants for work however weakly were to be employed, the task allotted being adjusted to the capacity of each, and full wages being paid to all who work up to the extent of their powers irrespective of the outturn. The labourers were to be roughly classified as at present according to their capacity to perform a full task or only 75 or 50 per cent. thereof. Piece-work was to be retained only for able-bodied labourers placed in the first class. The employment of contractors and middlemen was to be prohibited. The Government considered that the above plan was “best calculated to prevent a waste of money, and that by paying full wages for the best day’s work a man can turn out according to his classification, the strength of the weakly would be soonest restored and the best return obtained for the money spent.”

105. Every effort was made during the past period of distress to utilise Professional agency as distinct from Civil agency to the largest extent possible, the general supervision of road works, on which a very large percentage of those seeking relief were employed, being entrusted to the Engineers of the Local Boards. The number of professional officers is, however, very limited, and it will probably be necessary whenever distress is at all widespread to trust very largely to Civil agency for the supervision of relief works. Wherever labour can be usefully employed on the storing of metal and gravel along existing roads, experience has shown that the supervision of works can be trusted with perfect safety to the Revenue officers, who need but little instruction to enable them to carry out the rules in force for the division of the workers into gangs of a prescribed strength; the preparation of the nominal rolls, the fixing of the task of the gang, the stacking in heaps of uniform prescribed dimensions the work of the day, the measurement and record of the work of the gang and the calculation and regular disbursement of the pay due. For the supervision of work of this kind professional training is not necessary. There were but few large works carried out for the relief of distress which were not visited on several occasions by the Commissioner, and in the great majority of cases the Commissioner was satisfied with the arrangements for allotting, measuring and recording the work of the different gangs on the work and for enforcing a suitable task, and this was the case not less in works carried out under the supervision of the Revenue authorities than in those carried out under Professional agency. For the supervision of irrigation works the services of professional officers are a necessity.

106. *Wages and the classification of labourers.*—The wages prescribed in the Madras Famine Code and which were those enforced wherever the Code was introduced are as shown below, the grain being that which forms the staple food of the district. The weight allowed in the case of ragi was that of the grain freed from the husk and in the case of other dry grains that of the unhusked grain:—



	Men.	Women.	Children.
<i>First class.</i> —The ordinary labourers of the Public Works Department, skilled labourers and those who are accustomed to manual labour of the kind demanded and who have not suffered from famine.	1½ lb. grain + 1½ annas.	1½ lb. grain + 1 anna.	¾ lb. grain + ½ anna.
<i>Second class.</i> —All able-bodied and healthy persons whose strength is not impaired by age and infirmity, who are not accustomed to work of the kind demanded, but who are capable of doing 75 per cent. of the task commonly performed by the labourers of class I at such work.	1½ lb. grain + 1 anna.	1½ lb. grain + ¾ anna.	¾ lb. grain + ½ anna.
<i>Third class.</i> —All others who, though not fit for classes I and II, are yet able to do 50 per cent. of a full day's work of class I.	1½ lb. grain + ¾ anna.	1½ lb. grain + ½ anna.	¾ lb. grain + ½ anna.

107. The propriety of the general classification of labourers adopted in the Famine Codes of the different Provinces was discussed by the Government of India in Resolution, No. 5 F., dated 2nd March 1892, in which it was pointed out that the Codes of some Provinces erred in allowing unnecessarily large wages to be earned by piece-work or otherwise. They showed that it was the object of the Famine Commissioners to restrict the admission on relief works to those who are compelled by necessity to come to them, and argued that this restriction would be frustrated by unlimited piece-work were allowed. They quoted the Famine Commission to show that "some safeguards are essential in the interests of the destitute people no less than of the public treasury to prevent unlimited numbers being attracted to the work and that one of the chief and best tests for this purpose was the demand of labour commensurate in each case with the labourer's powers in return for a wage sufficient for the purposes of maintenance, but not more; that it is not expedient to add to the outlay on relief or to the consumption of food beyond what is essential; and that the object is to be gained by the early completion of any work put in hand; and again that though State employment should be offered promptly, yet care must be taken that the cost to which the community as a whole is put by the employment of persons who want is not more than the case strictly requires."

108. Referring specially to the Madras Presidency, the Government of India pointed out in its letter, dated 17th March 1892, No. 498-44, communicating the resolution referred to above, that the classification of labourers under the Madras Code, somewhat indefinite, and that if the views of many authorities were accepted, class I, which is allowed to earn the maximum wages admissible under the Code, might be made to include the bulk of the agricultural population. In his remarks, when called for by Government on the letter of the Government of India, the Commissioner pointed out that in the Madras Presidency the division of the resorting to relief works into the classes contemplated by the Famine Code had not been followed. In practice the Commissioner observed "it has been found very difficult to enforce any classification of labourers, owing to the unwillingness of famine to be separated. Very few labourers of class I have resorted to the works. The present distress has not been severe enough to touch that class, and the digging of wells, which has been so greatly furthered by State loans, has tended to throw an unusually large amount of lucrative employment into their hands. Those resorting to the works have been labourers of classes II and III and weakly labourers who, under ordinary circumstances, would have formed a separate class of weakly gangs. The disinclination of the weaker members of the families, the nursing mothers, the young children, and the old to separation from their able-bodied relatives has resulted in their being all ganged and classed together. All gangs have been given the class III rate and where the task was executed, the class III pay; but they have been allowed a proportionate increase of work to earn a proportionate increase of pay. It happened therefore, that several class III gangs have earned class II pay, or have earned rates of pay between class III and II rates. An arbitrary division of the people into classes even where it involves separation among families is, of course, defensible when the object is to adjust the task to the individual, but it is unpopular, and where

work can be obtained from gangs where the strong and the weakly are mixed up, it seems unnecessary to forcibly separate the weakly from the strong. It is always possible even now to adjust the task to meet the composition of the gang, and if the proposals to be hereafter made for reducing the wages of classes I and II to a sum very slightly in excess of the class III wage are approved, there will be the less difficulty, inasmuch as the imposition of a perhaps too lenient task will not enable the gang to earn the largely increased sum it could now earn where for a double task a double (or nearly double) rate of pay is admissible."

109. Whatever be the classification adopted, its correctness would be tested and its incorrectness compensated for by the imposition of a suitable task, and the payment of a wage proportioned to the outturn of work. Where large numbers of men, women and children are placed in the first class and paid first-class wages, the Commissioner would be inclined to think that the task exacted was insufficient. Unnecessary difficulties are raised and excessive and unnecessary expenditure is risked, the Commissioner considers, by allowing so large a sum as is allowed under the Madras Code between the wage of a first and that of a third class labourer, and he considers that the determination at which the Government of India has arrived that the wage of the first-class labourer shall be limited to a sum sufficient to maintain himself with a slight margin is correct. In that case it would exceed the third-class wage by a trifle only. As to the classification to be adopted in future, the Commissioner recommended that there should be three classes as follows:—

"Class I—All able-bodied labourers capable of doing 75 per cent. of a full task and to be paid for doing that task 2½ lb., 2 lb. and 1½ to 1¼ lb. for each man, woman and child, but with liberty to earn a further ½ lb. each per man and woman for a full day's ordinary work of a Public Works Department labourer. Class II—Labourers capable of doing 50 per cent. of the full task to be paid the same standard wage as those in class I, but to be allowed to earn up to 2½ lb. for a man and 2¼ lb. for a woman for performing a task equal to 60 per cent. of the full day's ordinary work of a Public Works Department labourer. Class III would be formed of the weakly gangs to whom the standard wage would be paid. They should be given a light task, one which they are capable of performing with a reasonable amount of exertion, but their performance of this light task should be insisted on. They would not be in a position to earn anything above the standard wage."

110. In its order of the 11th August 1892, No. 839, Revenue, the Government accepted in the main the suggestions of the Government of India, and proposed the following classification for labourers on works and the following rates of wages:—

Classification.

- I. Able-bodied labourers accustomed to work of the description provided on the relief works, i.e., generally earthwork or stone-breaking.
- II. Those who are unaccustomed to work of that description, such as artisans.
- III. Weakly labourers capable of performing only a nominal task.

Standard wages—being the money-value of a certain weight of the staple food-grain, husked, or, in the case of ragi, reduced to flour, viz.:—

For a man, 2½ lb.	...	...	...	With the proviso that labourers in Class I may earn the value of an extra half pound for doing half as much again as the prescribed task. No excess wage being allowed in Class II.
" a woman, 2 lb.	...	...	...	
" a child, 1½ to 1¼ lb.	...	...	...	

According to age and condition.

The classification proposed by Government excludes able-bodied persons accustomed to labour of the kind required on professional agency works. Regarding these the Government remarks:—

"As a rule these will be the last to come on relief; they will find employment on sinking and other private work requiring skilled labour and a certain number of ordinary works should be set apart for their employment on piece-work. Paragraph 8 of the resolution of the Government of India above read recognizes the fact that it may in some cases be necessary to set apart a portion of a relief work for employment of skilled labour when the work is of character, or requires to be executed with such urgency, as to demand the employment of ordinary public works labour at full piece-work rates." Such provision will be necessary not for the above reasons, but in order that skilled labourers may have the opportunity of enough to keep themselves and their families in comfort and may not be forced to come on works, where they will be able merely to obtain a bare subsistence for themselves, their dependants being obliged to come on gratuitous relief. It is only fair that work should be provided for skilled labourers also, and that their requirements should not be ignored in the scheme of but paragraph 30 of the Madras Code requires that 'all works which may be in progress in the famine zone will be considered famine works,' so that when a district is declared distressed all the budgeted works in progress must be converted into relief works and piece-work will. The code must be modified in this respect and as it will not generally be possible to set apart a portion of a relief work for piece work labour, the works which are available for relief in the Presidency being generally so small that confusion would result from any attempt to work and piece-work gangs in close proximity to each other; separate works must be provided for skilled labourers on piece-work."

111. The Commissioner fears that the provision of special employment for men may dissipate the strength of the Public Works Department in a time of famine, the supervision of small numbers when all their energies should be devoted to controlling or assisting the Civil Department in controlling the large numbers who in times of pressure are in the habit of resorting to relief works. The Commissioner also pleads for the withdrawal of the restriction against gangs in Class II earning anything more than the standard wage. They are not less entitled to earn it than Class I labourers (the classification proposed by Government is alluded to) if they can earn it, and if they cannot earn it, it is unnecessary to rule that they shall not have it. There should, in the Commissioner's opinion, be in a time of famine no specially favoured classes, and, on the other hand, no specially disfavoured classes.

112. In its resolution already referred to, the Government of India dealt not with the classification of labourers, but with the rates of wages suitable to each. The unsuitability of any great difference between the wages of any one class and other class where the object of the wage is only to ensure subsistence, and where the cost of living of one class does not differ materially from that of the others has already been touched on. The objections in this respect to the old schedule of wages in the Madras Famine Code will be obviated by the acceptance of the rates of wages proposed by the Madras Government, which are stated in paragraph 110 above. The Government of India asked further however that the desirability of allowing a portion of the wage to be estimated in money might be very carefully considered. They pointed out that the schedule of wages in the Madras Famine Code was drawn up in anticipation of a condition of prices which does not now prevail and which in view of the improvement of railway communications, is not likely again to occur. It is undeniable that the money portion of the Madras famine wage for Classes I and II labourers under the code, which is meant to provide for the purchase of condiments only, is excessive, and under Class III the money portion of the wage, which is permitted, is not greatly more than is adequate for the purpose intended, becomes, of course, of little value when prices rise. The allowance is either too much when prices are low or too little when prices are high. The Government of India suggested that, if the reason to believe that the prices of condiments vary *pari passu* with the price of grain, but that if the price of condiments has any recognized tendency to remain more constant than that of food-grains, it would seem desirable to set out a ration in terms of grain and condiments which should be converted with every material change of prices into a new money wage. It was the desire of the Government of India that the wage in different provinces should be calculated on uniform principles and it pointed out that prices "being the same there should be no essential difference at any time between the famine wage of one province and the famine wage of another, or price being different between the famine ration of one province and the famine ration of another. Nor again they urged should there be any material difference between the famine ration of one period and that of another."

113. A consideration of the arguments urged by the Government of India led the Madras Government to the adoption of a wage based wholly on the value of grain. They were of opinion that it would be of great advantage to adopt a simple method of calculating the amount of the money wage and that provided the wage admitted a small fraction being spent on condiments and vegetables it will suffice for all practical purposes.

The unsuitability of a wage based on the value of a certain amount of grain plus a fixed money allowance had been pointed out by the Commissioner on the experience of the past season of distress, the wage so calculated providing a far larger amount of food when prices were cheap than when they were dear, and thus proving most attractive when it should have been least attractive. The value of the famine wage in the Presidency, it was shown, when converted into grain had varied very largely during the 18 months of distress owing to the great rise in prices, the Class I wage of a man, which at the beginning of distress in Chingleput purchased 5.40 lb., being able in Nellore at a later date when prices were 12½ seers per rupee to purchase only 3.93 lb. Similarly the Class III wage of a man, which at 20 seers per rupee would purchase 3.20 lb., would with prices at 12½ seers per rupee purchase only 2.46 lb., and with famine rates and prices at 6 seers per rupee would purchase only 1.83 lb.

114. *Conclusion.*—Great additional labour of a peculiarly anxious nature was imposed upon all officers of Government in the distressed tracts, and the thanks of Government are due to these officers for the manner in which these duties everywhere cheerfully borne were carried out:—

The names of the officers on whom the heaviest work and heaviest responsibilities fell are given below:—

Chingleput	...	Mr. Tremenhoe, Collector.
		" Pinto, Deputy Collector.
		Mr. LeFanu, Collector.
North Arcot	...	" Buckley, Head Assistant Collector.
		" Watson, Engineer, Public Works Department.
		M.R.Ry. Lakshmana Row, Deputy Collector, Wandiwash.
Coimbatore	...	Mr. Sturrock, Collector.
		" Harding, Head Assistant Collector.
		" Stephens, Local Fund Engineer.
Salem	...	Mr. G. Stokes, Collector.
		" E. A. Smith, Deputy Collector.
Bellary	...	Mr. R. Sewell, Collector.
		" J. M. Molnery, Local Fund Engineer.
Kurnool	...	M.R.Ry. S. Venkataramadas Nayudu, Deputy Collector, Cumbum.
		Mr. C. A. Smith, Engineer, Public Works Department.
		Mr. Wolfe-Murray.
Cuddapah	...	" Atkinson.
		" Foord, Public Works Department.
		Mr. C. D. Maclean.
Nellore	...	" Mounsey, Sub-Collector.
		" C. Scott, Local Fund Engineer.

115. The thanks of Government have already been given to Mr. Tremenhoe (L.O., dated 29th October 1891, No. 1022, Revenue), and are also specially due to Mr. LeFanu, Mr. Sturrock and Mr. Atkinson, who have rivalled Mr. Tremenhoe in the successful efforts which they have made to encourage the ryots of their districts to construct wells. The work done in this respect in the distressed districts during the past two years has been already noticed, and the benefits conferred on the people are incalculable.

To Mr. G. Stokes and to Mr. R. Sewell the thanks of Government are specially due for the very careful rules framed for the management of relief works in their districts and for their very careful supervision of the conduct of these works.

To Mr. C. A. Smith, Engineer, Public Works Department, M.R.Ry. Venkata Ramadas Nayudu, Deputy Collector, Cumbum, Mr. Molnery, Local Fund Engineer, Bellary, and Mr. Stephens, Local Fund Engineer, Coimbatore, are due the thanks of Government for their exceptional success in the management of relief works.

116. Among Tahsildars the Commissioner has already brought specially to notice

District.	Taluk.	—
Chingleput ..	Ponnéri ..	M. Arumugam Pillai
Kurnool ..	Markapur ..	K. Rustum Singh.
Bellary ..	Bellary ..	V. Chellapathy Naidu.
Cuddapah ..	Vayalpad ..	S. Pampathi Sastri.
	Râyachoti ..	M. Varadachariu.

the services of the marginally-note officers, which have already been recognized by Government. The post of Tahsildar is one of a peculiarly onerous nature in a time of distress, and the Commissioner is glad to state that all officers of this class worked during the period with energy and devotion.

117. The thanks of the Commissioner are specially due to Mr. C. Benson, Deputy Director of Agriculture, who assumed charge of the duties of Secretary to the Commissioner in the Famine Branch at the beginning of August 1891. ~~Even~~ at a time when the permanent Secretary Mr. Rajaratna Mudaliar, an old and experienced famine officer, was compelled to take leave, broken down by the heavy work and anxiety imposed upon him in the early months of 1891. Mr. Benson continued in charge of the duties till the close of the period of distress. The punctuality with which the monthly famine reports were submitted to the Government of India, and the accuracy and celerity with which all the statistical information bearing on the progress of the famine was collected and embodied from week to week in the reviews of the district famine reports submitted to Government have been acknowledged by the Government of India on more than one occasion and were due very largely to his strenuous exertions.

I.

STATEMENT showing the areas sown in the affected districts during the period of distress as compared with the average for the five years ending 1889-90.

Districts.	Dry cultivation.			Wet cultivation.		
	Average.	1890-91.	1891-92.	Average.	1890-91.	1891-92.
<i>First crop.</i>						
Deccan—	ACS.	ACS.	ACS.	ACS.	ACS.	ACS.
Kurnool	1,786,560	1,799,969	1,707,013	41,910	40,235	32,936
Bellary	1,862,456	2,004,988	1,449,335	42,635	43,250	37,165
Anantapur	1,179,847	1,176,682	1,002,193	88,594	81,414	64,749
Cuddapah	1,380,044	1,302,782	1,325,600	178,430	137,601	126,255
Carnatic—						
Nellore	742,235	794,104	780,121	210,507	204,025	186,827
Chingleput	215,465	223,526	185,636	350,115	336,123	288,870
Central—						
North Arcot	518,093	532,158	470,096	272,444	265,938	240,473
Salem	1,079,040	1,098,003	1,061,503	94,388	91,766	83,178
Coimbatore	2,080,540	1,999,372	2,082,397	90,701	94,928	92,088
South—						
Tinnevely	889,649	863,963	867,921	191,306	184,175	201,349
<i>Second crop.</i>						
Deccan—						
Kurnool	18,666	27,802	31,785	13,538	10,027	4,281
Bellary	6,817	13,299	6,388	7,985	9,287	6,811
Anantapur	23,476	24,025	22,555	26,987	26,620	15,278
Cuddapah	40,113	54,000	45,418	51,934	44,862	38,289
Carnatic—						
Nellore	57,817	68,205	44,773	15,337	15,574	10,695
Chingleput	14,968	24,074	17,415	61,283	67,199	36,969
Central—						
North Arcot	67,789	81,971	90,134	89,906	91,162	62,506
Salem	130,356	143,232	161,348	30,916	33,615	27,689
Coimbatore	161,948	265,837	179,161	26,714	29,096	29,420
South—						
Tinnevely	64,616	104,381	70,002	108,117	94,470	116,592
<i>Total.</i>						
Deccan—						
Kurnool	1,805,226	1,827,771	1,738,798	55,448	50,262	37,217
Bellary	1,868,273	2,018,287	1,455,723	50,620	52,537	43,976
Anantapur	1,203,323	1,200,707	1,024,748	115,581	108,034	80,027
Cuddapah	1,420,157	1,446,782	1,371,218	230,364	182,463	161,544
Carnatic—						
Nellore	800,052	862,309	824,894	225,944	219,599	197,522
Chingleput	230,433	247,600	203,051	411,398	393,322	325,839
Central—						
North Arcot	585,882	614,129	560,290	362,350	357,100	302,979
Salem	1,209,396	1,241,235	1,222,851	125,304	125,381	110,867
Coimbatore	2,242,488	2,265,209	2,261,558	117,415	124,024	121,508
South—						
Tinnevely	951,265	968,344	937,923	299,423	278,646	317,941

II.

STATEMENT showing the prices of staple food-grains in the affected districts during 1891 and 1892, compared with normal rates, and the prices prevailing during the great famine.

		Prices in seers of 80 tolas per rupee during the first six months.											
Districts and taluks.	Years.												
		January.	February.	March.	April.	May.	June.	January.	February.	March.	April.	May.	June.
CUDDAPAH.		Cumbu.						Ragi.					
District average ..	1876 ..	28.0	25.8	21.9	24.5	25.2	24.3	27.7	27.7	27.8	27.6	27.6	26.7
	1877 ..	7.4	7.7	8.2	8.4	8.0	7.6	7.6	9.0	10.0	9.9	8.5	8.6
	Normal ..	30.3	30.2	29.7	29.8	29.8	29.5	33.7	33.5	33.6	34.0	34.8	33.9
	1891 ..	19.9	19.5	19.6	19.8	19.9	19.4	26.0	26.2	27.0	28.4	28.5	27.9
	1876 ..	29.4	29.0	29.0	26.8	27.6	29.0	30.0	30.0	30.0	30.0	30.0	30.0
Râyachôti ..	1877 ..	6.9	7.6	8.8	8.8	8.5	8.0	7.1	8.6	10.7	10.7	9.1	9.1
	Normal ..	31.3	33.4	33.1	30.3	31.6	30.8	35.1	35.0	34.8	34.9	34.7	34.6
	1891 ..	21.8	20.7	19.9	19.9	21.0	19.6	25.5	27.4	27.8	30.0	30.0	30.0
	1876 ..	25.4	21.8	20.3	18.9	18.9	17.4	27.8	21.0	24.0	24.0	21.0	21.0
	1877 ..	6.5	6.5	8.0	8.0	7.6	6.4	6.8	7.9	9.1	9.8	8.3	7.8
Vayalpad ..	Normal ..	31.9	31.1	30.0	30.9	32.2	33.3	40.0	38.8	40.0	39.8	41.6	40.4
	1891 ..	17.4	17.4	17.4	17.4	18.9	18.9	24.0	24.0	24.0	24.0	27.0	28.5
NELLORE.		Cholum.						Ragi.					
District average ..	1876 ..	27.3	27.8	27.1	28.1	27.8	27.5	28.6	28.5	28.8	29.9	29.8	29
	1877 ..	8.0	8.9	9.4	9.4	9.2	9.4	8.1	9.2	10.6	11.2	10.7	10.6
	Normal ..	25.4	25.6	25.7	26.2	26.1	26.1	29.0	29.1	29.7	30.0	30.0	29
	1891 ..	20.9	21.2	21.7	22.6	22.2	22.3	22.4	22.5	23.4	24.3	24.0	23.5
	1876 ..	23.5	23.5	23.5	23.5	24.5	25.2	25.3	25.3	25.3	25.3	25.3	25
Rapur ..	1877 ..	7.6	6.8	7.6	7.6	7.6	7.6	7.9	7.9	7.9	7.9	7.9	7
	Normal ..	24.9	24.8	24.7	24.3	24.7	24.7	27.9	27.8	27.6	27.9	27.9	28
	1891 ..	18.0	18.7	18.0	18.6	16.9	16.8	20.6	21.7	22.1	22.1	20.6	20
	1876 ..	25.0	25.7	24.7	26.9	26.9	29.0	25.5	26.0	27.5	28.2	28.2	28
	1877 ..	7.9	9.6	10.1	10.6	10.1	10.3	7.7	9.8	10.7	11.2	10.6	10
Nellore ..	Normal ..	23.3	24.7	23.9	23.1	23.2	23.9	27.0	27.2	27.4	28.0	27.8	27
	1891 ..	19.3	19.1	20.2	20.6	20.1	20.1	19.9	20.6	21.0	20.1	21.1	21
	1876 ..	26.9	26.9	26.9	26.9	26.9	26.9	25.5	25.5	25.5	25.5	25.5	25
	1877 ..	22.1	20.4	20.2	21.6	21.6	20.2	25.5	25.5	25.5	27.0	26.5	26
	Normal ..	20.2	20.2	20.2	20.2	20.2	20.2	21.0	21.1	21.1	21.1	21.1	21
Gudur ..	1891 ..	20.2	20.2	20.2	20.2	20.2	20.2	21.0	21.1	21.1	21.1	21.1	21
	1876 ..	26.9	26.9	26.9	26.9	26.9	26.9	25.5	25.5	25.5	27.0	26.5	26
	1877 ..	7.7	8.4	10.7	10.1	10.1	10.1	7.2	8.1	10.5	11.0	9.5	10
	1877 ..	22.7	21.8	21.5	21.3	23.8	23.8	29.0	28.4	28.2	28.5	32.6	31
	Normal ..	19.1	21.1	21.2	21.1	21.6	20.9	22.3	23.3	24.0	24.1	23.6	21
Venkatagiri ..	1891 ..	19.1	21.1	21.2	21.1	21.6	20.9	22.3	23.3	24.0	24.1	23.6	21
	Rice.												
	1876 ..	12.0	12.1	12.0	11.8	11.7	11.5	19.9	20.3	18.9	18.3	19.3	19
	1877 ..	7.7	8.9	9.3	9.7	8.8	8.3	9.4	10.1	11.1	10.6	10.0	10
	Normal ..	13.8	14.1	14.1	14.2	14.2	14.0	27.8	27.9	27.6	27.4	27.4	27
1891 ..	10.8	10.7	10.9	11.0	11.0	11.4	22.1	22.1	22.0	22.0	22.4	22	
CHINGLEPUT.		Rice.						Ragi.					
District average ..	1876 ..	15.5	16.4	16.2	16.0	15.9	15.9	22.7	22.3	22.0	22.4	22.6	22
	1877 ..	8.8	9.4	9.6	9.6	9.0	8.4	9.7	10.8	11.2	11.7	10.9	9
	Normal ..	15.7	16.5	16.5	16.7	16.5	16.1	27.6	27.3	27.0	27.2	27.3	27
	1891 ..	11.3	11.7	11.7	11.9	11.4	11.0	20.7	20.6	21.0	20.8	20.7	19
	1876 ..	15.1	17.4	15.1	15.9	15.9	15.9	21.9	21.9	20.6	20.6	21.9	21
Ponnéri ..	1877 ..	8.4	9.7	9.6	9.1	8.5	8.3	8.8	11.0	11.0	11.0	11.0	9
	Normal ..	15.1	16.6	15.7	16.6	17.7	17.4	26.4	27.0	26.6	26.6	26.6	26
	1891 ..	11.7	12.1	12.1	12.1	11.8	11.3	19.8	19.4	21.0	20.4	20.5	19
	1876 ..	14.5	13.6	15.9	14.3	14.3	13.6	21.9	20.6	21.9	21.9	21.9	19
	1877 ..	8.1	9.4	9.8	9.6	9.2	8.3	8.6	10.3	11.3	11.3	11.3	10
Tiruvallūr ..	Normal ..	14.4	15.0	15.1	15.6	15.6	15.3	27.9	27.9	27.9	28.5	28.5	28
	1891 ..	10.4	10.6	10.7	11.7	11.4	11.1	21.9	21.9	21.9	21.9	21.7	19
	1876 ..	12.8	13.6	13.6	14.3	13.6	13.3	19.9	20.2	19.3	20.0	20.9	19
	1877 ..	8.3	9.3	9.3	9.3	8.7	8.7	9.6	11.1	11.0	11.2	10.6	9
	Normal ..	13.5	14.5	14.7	15.0	14.9	14.7	26.1	25.1	25.8	25.3	25.3	24.2
Saidapet ..	1891 ..	11.7	12.1	12.1	11.7	10.9	10.9	21.9	21.9	21.9	21.9	21.9	21
	1876 ..	18.3	18.8	18.8	18.3	18.3	17.4	25.7	25.7	25.1	25.1	25.1	23.1
	1877 ..	10.6	8.7	8.5	8.9	8.9	8.0	12.4	10.3	10.3	11.1	11.1	9
	Normal ..	15.7	16.2	15.8	15.9	14.7	15.3	27.6	27.9	27.2	26.6	27.2	26
	1891 ..	12.2	12.2	12.2	12.2	11.7	11.4	21.4	22.2	22.2	22.2	22.2	21
Conjoeveram ..	1876 ..	17.5	17.5	17.5	16.6	16.6	15.8	22.3	22.3	20.7	22.3	22.3	20
	1877 ..	7.9	9.0	8.8	9.2	8.8	8.3	8.7	10.3	11.1	11.6	10.8	9
	Normal ..	15.1	16.6	16.8	17.2	17.1	16.4	26.9	26.2	26.1	25.9	25.9	25
	1891 ..	10.9	11.9	12.3	12.3	11.7	11.0	19.9	19.9	19.9	19.9	19.9	21
	1876 ..	15.8	18.4	18.4	17.5	17.5	15.8	23.9	23.9	25.4	25.4	25.4	20
Chingleput ..	1877 ..	9.6	9.6	10.6	10.9	9.6	8.8	9.9	12.8	11.9	11.9	11.9	11
	Normal ..	15.9	16.1	16.4	17.2	17.2	17.1	26.0	25.4	26.2	24.5	25.3	25
	1891 ..	11.2	11.2	12.0	12.3	12.2	11.3	20.9	18.8	18.8	19.0	20.5	18
	Madurantakam.												
	1876 ..	15.9	16.1	16.4	17.2	17.2	17.1	26.0	25.4	26.2	24.5	25.3	25
1891 ..	11.2	11.2	12.0	12.3	12.2	11.3	20.9	18.8	18.8	19.0	20.5	18	

II.

Statement showing the prices of staple food-grains in the affected districts during 1891 and 1892, &c.—cont.

Districts and taluks.	Years.	Prices in seers of 30 tolas per rupee during the first six months.												
		January.	February.	March.	April.	May.	June.	January.	February.	March.	April.	May.	June.	
NORTH ARCOT.		Cumbu.						Ragi.						
District average.	1876 ..	21.2	20.6	19.9	18.6	19.2	18.5	22.5	22.4	22.0	21.9	23.1	21.3	
	1877 ..	8.1	8.8	8.7	8.9	8.2	7.7	8.5	9.4	9.7	10.8	9.8	9.1	
	Normal ..	27.6	26.6	26.3	26.4	26.2	25.7	32.4	31.9	31.6	31.5	32.2	31.6	
	1891 ..	20.3	19.2	19.1	19.8	18.8	18.3	23.4	23.1	23.2	24.2	24.4	23.6	
	1876 ..	..	..	..	..	..	..	25.5	27.3	27.3	25.5	27.8	25.5	
Tahasti ..	1877 ..	..	..	..	..	..	..	6.9	7.3	7.3	12.7	12.7	10.2	
	Normal ..	29.6	29.0	28.3	26.3	24.5	28.0	32.8	32.8	33.5	32.0	34.0	33.0	
	1891 ..	16.6	17.0	17.0	17.9	17.5	17.5	20.0	22.2	22.8	22.8	21.8	20.9	
	1876 ..	..	..	..	..	..	..	23.7	21.8	21.8	20.0	20.9	20.8	
	1877 ..	..	..	..	..	..	..	9.1	10.9	11.1	12.2	10.6	10.4	
Wandiwash ..	Normal ..	..	..	..	..	..	..	29.7	28.5	27.5	27.4	27.5	27.7	
	1891 ..	..	..	..	..	..	..	20.9	20.0	21.1	21.8	20.2	19.7	
	SOLIMBATORE.		Cholum.						Cumbu.					
	District average.	1876 ..	20.9	21.2	21.1	20.2	20.3	20.0	24.5	24.1	23.6	23.2	22.5	22.3
		1877 ..	9.2	9.9	10.3	9.6	9.0	8.6	11.4	10.8	10.7	10.2	9.3	8.7
Normal ..		25.1	25.1	25.4	26.0	26.7	25.1	31.5	31.0	30.5	30.1	28.9	28.1	
1891 ..		18.6	18.4	19.4	19.4	18.7	18.1	21.2	20.7	20.9	20.5	19.4	19.0	
1876 ..		21.9	20.2	21.8	21.0	21.4	20.3	24.6	24.6	24.6	24.7	24.6	24.6	
Pollachi ..	1877 ..	8.8	9.0	10.5	9.6	10.0	8.0	12.8	11.2	12.7	12.6	11.6	9.5	
	Normal ..	22.7	22.6	22.8	22.8	22.3	22.7	31.1	30.5	29.9	28.3	27.7	27.6	
	1891 ..	19.1	19.1	19.1	17.8	17.4	17.4	..	..	..	..	..	..	
	1876 ..	28.2	23.2	23.2	23.2	22.2	20.3	26.3	24.5	24.5	24.5	24.5	24.5	
	1877 ..	9.4	9.7	9.7	8.8	8.7	8.8	12.0	10.6	10.6	10.7	9.4	10.4	
Idamalpet ..	Normal ..	21.4	21.8	22.1	22.6	22.2	21.7	26.4	26.8	26.8	26.0	25.0	25.4	
	1891 ..	15.4	15.6	16.6	18.0	18.3	17.7	19.3	19.3	19.3	19.3	19.3	19.0	
	1876 ..	19.2	19.6	19.2	18.8	18.8	18.8	22.9	22.9	21.5	20.7	20.7	20.0	
	1877 ..	10.8	11.6	10.8	10.4	9.9	9.5	11.4	11.2	11.1	10.5	9.7	9.0	
	Normal ..	21.7	21.9	21.9	21.2	20.9	23.0	25.2	24.5	23.9	23.2	23.4	23.5	
Solimbatore ..	1891 ..	18.6	18.2	19.6	19.6	19.1	18.6	21.2	20.7	20.7	20.0	20.7	19.9	
	1876 ..	18.8	20.4	19.6	18.8	18.8	18.8	24.3	24.3	24.6	22.9	22.9	22.9	
	1877 ..	10.3	10.4	9.1	9.6	8.7	8.7	12.7	12.7	12.7	9.9	9.5	9.5	
	Normal ..	20.0	20.2	20.7	20.2	20.2	21.0	29.4	29.6	29.9	29.6	28.7	28.9	
	1891 ..	18.3	18.3	18.9	19.1	19.0	17.8	23.9	23.9	22.7	21.6	20.7	20.7	
Myladram ..	1876 ..	19.3	19.3	23.2	19.3	19.8	21.2	24.5	24.5	26.3	24.5	24.5	21.5	
	1877 ..	7.2	7.2	9.2	9.2	8.7	8.7	12.3	12.3	12.3	10.5	7.9	7.9	
	Normal ..	19.4	18.6	21.1	21.4	21.3	20.7	29.0	28.1	28.0	27.1	27.6	27.3	
	1891 ..	15.9	16.9	19.7	20.0	18.6	18.3	20.6	19.7	20.3	19.6	19.3	17.8	

II.

Statement showing the prices of staple food-grains in the affected districts during 1891 and 1892, &c.—*cont.*

		Prices in seers of 80 tolas per rupee during the second six months.											
Districts and taluks.		Years.	July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.	July.	August.	Septem-ber.	October.	Novem-ber.
NELLORE.			Cholum.					Ragi.					
District aver- age.	1876 ..	..	26.7	24.8	23.8	17.6	12.0	8.7	29.3	26.3	24.9	18.8	13.3
	1877 ..	..	8.0	6.4	6.8	7.2	7.5	8.9	8.5	7.1	6.9	8.0	8.7
	Normal ..	..	26.1	25.7	25.3	25.3	25.4	25.3	30.2	29.9	29.4	29.1	29.2
	1891 ..	..	21.3	20.7	19.7	19.6	18.6	14.0	33.2	32.1	30.6	20.6	20.0
Ongole ..	1876 ..	..	26.2	25.2	26.7	20.8	13.6	9.1	31.6	31.6	31.6	24.6	17.7
	1877 ..	..	7.9	6.0	7.3	6.9	8.3	9.8	8.4	6.5	6.4	8.3	8.7
	Normal ..	..	23.7	23.5	23.5	23.5	24.1	23.3	29.2	29.2	28.6	27.6	26.9
	1891 ..	..	20.1	19.8	19.4	18.9	17.8	12.4	24.7	24.7	24.7	21.4	14.9
Darsi ..	1876 ..	..	26.9	25.2	24.5	22.3	..	..	31.6	27.5	26.4	21.4	14.9
	1877 ..	..	7.9	6.8	7.2	8.2	8.2	8.6	8.2	6.8	7.3	..	8.2
	Normal ..	..	24.3	24.6	23.6	23.7	24.4	24.9	26.4	26.9	26.2	26.7	25.9
	1891 ..	..	21.7	21.7	21.7	21.7	21.3	16.6	23.8	23.8	22.7	22.1	21.9
Podili ..	1876 ..	..	28.4	26.2	23.5	18.5	13.4	9.7	32.5	29.1	25.7	20.1	13.0
	1877 ..	..	8.4	6.7	7.9	8.4	..	7.2	9.6	6.4	7.6	8.6	..
	Normal ..	..	25.8	25.4	25.2	25.1	25.9	25.6	29.5	29.6	29.0	27.9	29.3
	1891 ..	..	22.6	22.0	21.7	21.7	20.8	16.1	27.2	26.0	23.9	23.6	22.8
Kanigiri ..	1876 ..	..	26.9	26.9	23.5	19.3	14.3	10.1	31.6	26.9	23.7	20.8	14.6
	1877 ..	..	7.7	6.5	7.0	7.2	7.7	8.6	8.2	6.7	6.8	8.0	8.9
	Normal ..	..	27.2	26.6	26.3	26.6	26.6	26.2	30.9	30.9	30.1	30.0	30.4
	1891 ..	..	26.4	27.1	24.9	26.2	24.2	18.4	27.7	28.3	25.3	27.0	24.5
Udayagiri ..	1876 ..	..	23.9	22.6	21.3	16.6	10.9	8.8	27.2	24.7	23.0	16.8	11.2
	1877 ..	..	..	..	..	..	..	6.7	6.4	6.6	6.4	6.6	6.6
	Normal ..	..	25.0	24.7	24.5	24.2	24.0	23.7	29.3	29.2	29.0	28.6	28.6
	1891 ..	..	24.4	22.9	20.6	21.1	21.4	18.8	27.2	25.9	24.1	24.2	24.0
Atmakuru ..	1876 ..	..	26.9	25.9	25.0	17.3	10.6	8.6	30.9	27.3	25.5	19.2	10.9
	1877 ..	..	8.6	6.7	..	..	..	..	7.3	..	..	..	..
	Normal ..	..	26.9	26.9	26.6	26.5	26.5	26.9	30.4	30.4	30.0	28.2	28.4
	1891 ..	..	24.4	22.0	21.7	20.8	20.1	16.2	24.7	23.7	22.9	23.0	21.8
Rapur ..	1876 ..	..	26.9	22.3	20.2	16.3	10.2	7.6	28.4	24.2	22.1	18.6	10.7
	1877 ..	..	6.9	..	5.8	5.8	5.8	7.7	7.2	..	7.3	7.5	8.1
	Normal ..	..	24.9	24.8	24.6	24.6	24.0	24.3	28.2	28.2	28.2	28.6	28.6
	1891 ..	..	16.8	16.6	15.7	15.4	15.3	12.0	30.2	19.0	18.6	17.6	17.4
Nellore ..	1876 ..	..	26.9	22.3	21.4	14.6	10.1	7.4	26.8	23.4	22.5	10.6	10.0
	1877 ..	..	7.9	3.8	6.7	7.4	7.0	9.1	8.8	6.8	6.8	7.7	8.4
	Normal ..	..	23.5	23.1	22.9	22.8	22.9	22.7	27.6	27.6	27.0	26.9	26.3
	1891 ..	..	20.0	18.8	17.7	17.0	15.5	11.8	21.1	19.6	18.9	17.3	16.3
Gudur ..	1876 ..	..	26.9	26.9	23.6	..	..	..	25.5	25.5	23.0	..	..
	1877 ..	..	..	21.6	21.6	21.6	21.6	21.6	25.5	25.5	25.5	25.5	25.5
	Normal ..	..	21.6	19.0	17.6	17.4	15.9	13.0	20.2	19.4	17.5	16.8	16.0
	1891 ..	..	24.7	20.2	20.2	13.9	10.2	7.0	25.2	22.1	20.8	16.2	10.7
Venkatagiri ..	1876 ..	..	7.9	6.2	6.2	..	..	..	8.4	7.1	7.1	8.9	9.6
	1877 ..	..	21.4	22.1	22.1	23.8	22.7	21.6	31.6	30.1	30.6	30.3	29.4
	Normal ..	..	19.0	19.0	18.1	19.1	14.8	11.8	21.2	19.4	18.9	17.4	17.1
	1891 ..	..	..	..	..	..	..	..	..	..	..	..	..
CHINGLEPUT.			Rice.										
District aver- age.	1876 ..	..	15.4	14.1	13.9	11.6	9.8	7.9	20.5	21.0	20.1	17.0	13.4
	1877 ..	..	6.5	6.0	6.2	8.4	9.3	9.8	7.8	6.6	6.8	11.8	12.0
	Normal ..	..	15.7	15.4	15.4	15.2	15.3	15.4	26.0	26.1	26.4	27.0	27.0
	1891 ..	..	10.3	10.2	10.1	10.1	10.1	9.6	17.7	17.7	15.6	14.9	14.8
Ponnéri ..	1876 ..	..	15.1	14.3	14.2	12.5	8.3	8.0	19.2	19.2	19.2	17.1	11.7
	1877 ..	..	7.1	6.9	6.6	8.7	9.5	9.7	9.3	7.4	7.8	11.0	12.8
	Normal ..	..	17.1	16.6	16.6	16.1	15.5	15.3	26.9	26.6	26.4	26.1	27.9
	1891 ..	..	10.8	10.6	10.4	10.2	10.4	9.9	17.4	17.1	16.1	14.4	14.8
Tiruvallūr ..	1876 ..	..	12.8	12.8	12.3	10.6	8.3	8.0	18.3	18.8	19.9	16.1	11.0
	1877 ..	..	7.2	6.8	6.4	8.7	9.4	9.8	8.2	7.2	6.3	11.5	13.0
	Normal ..	..	16.0	14.6	14.6	14.4	14.2	14.5	28.2	26.0	26.4	26.0	26.4
	1891 ..	..	10.4	10.2	10.0	9.7	10.4	9.5	17.3	16.4	15.8	14.4	15.2
Saidapet ..	1876 ..	..	11.7	12.8	12.6	10.6	8.5	8.1	19.9	20.9	17.8	14.9	10.6
	1877 ..	..	6.8	6.7	6.4	8.5	8.9	9.1	8.2	7.4	7.7	11.3	11.5
	Normal ..	..	14.3	14.7	14.2	13.9	13.6	14.5	24.8	24.8	24.7	24.5	26.5
	1891 ..	..	10.3	10.6	10.4	10.2	10.4	9.4	19.2	18.8	17.2	16.2	16.9
Gonjeveram ..	1876 ..	..	16.0	16.0	15.5	14.1	10.3	9.8	22.7	22.7	21.2	14.5	11.1
	1877 ..	..	5.9	6.1	6.1	7.5	8.9	9.0	6.8	6.4	6.9	10.7	11.1
	Normal ..	..	14.8	14.5	14.5	15.1	15.3	15.5	28.6	26.0	26.4	26.1	27.9
	1891 ..	..	10.3	10.0	10.0	9.8	10.0	9.4	18.0	18.0	17.1	16.4	16.4
Chingleput ..	1876 ..	..	14.4	14.0	14.0	12.3	8.6	9.0	22.3	22.3	20.7	13.7	13.7
	1877 ..	..	6.1	6.6	6.6	9.2	8.8	9.2	6.6	7.9	7.9	14.3	13.5
	Normal ..	..	15.5	15.4	15.5	15.4	15.1	15.0	24.2	24.5	24.5	24.1	26.1
	1891 ..	..	10.5	10.1	10.1	10.1	10.1	9.7	17.0	17.5	16.1	15.0	15.7
Ma-lurántakam.	1876 ..	..	15.3	15.3	14.9	11.4	10.5	7.4	22.3	22.3	22.3	19.1	19.7
	1877 ..	..	6.6	6.1	6.1	7.9	7.9	7.9	8.0	7.3	7.5	14.2	14.8
	Normal ..	..	16.6	16.0	16.0	16.0	16.0	15.7	25.0	24.6	24.6	27.4	27.4
	1891 ..	..	11.2	10.3	10.3	10.3	10.4	10.3	17.1	17.1	16.1	15.2	15.2

II.

Statement showing the prices of staple food-grains in the affected districts during 1891 and 1892, &c.—*cont.*

		Prices in seers of 80 tolas per rupee during the second six months.											
Districts and taluka.	Years.	Rice.						Ragi.					
		July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.	July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.
MADEAS ..	1876 ..	11.7	11.8	11.2	9.7	8.4	7.1	19.9	19.9	17.6	13.2	10.7	8.1
	1877 ..	7.2	6.5	6.5	8.0	8.8	8.7	8.4	7.9	7.9	11.4	11.9	11.3
	Normal ..	13.8	13.9	13.7	13.3	13.6	13.5	26.7	26.5	26.5	26.8	26.9	27.1
	1891 ..	11.0	10.5	10.3	10.0	9.8	9.1	19.0	18.9	17.4	16.9	16.0	12.5
NORTH ARCOT.													
Cumbu.													
District average	1876 ..	18.3	18.4	18.2	13.5	11.1	8.6	21.5	19.4	18.3	14.6	11.6	8.7
	1877 ..	6.6	7.1	7.1	9.5	10.4	10.5	7.4	6.9	6.9	9.9	10.0	10.1
	Normal ..	25.2	26.1	28.0	28.4	28.6	27.8	30.9	30.9	30.9	31.9	32.1	31.9
	1891 ..	16.4	15.6	14.1	14.3	13.5	11.2	20.6	19.3	17.3	18.9	17.3	13.1
Kalahasti ..	1876 ..	..	..	..	..	..	..	16.9	18.2	20.0	12.2	13.1	8.6
	1877 ..	6.6	6.7	8.2	11.4	9.8	10.5	7.8	6.7	7.6	13.7	10.2	10.9
	Normal ..	31.5	31.5	33.0	31.9	32.9	30.6	33.9	32.8	35.3	34.8	31.5	33.7
	1891 ..	17.0	15.8	14.9	15.8	14.9	10.9	20.4	18.2	17.3	17.3	16.4	12.7
Polur ..	1876 ..	19.3	19.3	24.5	17.9	12.3	9.1	20.0	19.1	20.0	14.7	11.8	9.1
	1877 ..	..	8.8	6.5	10.5	11.0	8.8	6.6	6.4	6.0	9.3	9.7	9.5
	Normal ..	27.6	27.1	30.0	31.1	30.4	27.7	27.7	28.3	29.0	30.4	31.3	30.2
	1891 ..	17.2	14.2	14.4	15.2	14.7	14.4	17.8	16.6	16.6	18.4	16.9	13.5
Wandiwaah ..	1876 ..	..	..	..	..	..	..	20.0	20.0	20.0	19.7	13.7	10.0
	1877 ..	..	..	..	..	..	..	8.6	..	6.6	11.8	13.7	11.1
	Normal ..	..	..	..	..	..	..	26.6	26.9	27.1	27.7	30.0	29.5
	1891 ..	..	..	..	..	..	..	17.3	17.3	15.8	17.3	15.5	13.1
Thanganur ..	1876 ..	..	..	..	..	..	..	19.7	17.0	16.0	11.3	10.5	6.9
	1877 ..	..	..	..	..	..	..	7.1	6.5	6.1	10.1	9.2	9.0
	Normal ..	..	..	..	..	..	..	39.7	39.8	39.3	41.3	42.8	39.7
	1891 ..	..	..	..	..	..	..	25.3	23.5	20.3	21.4	18.6	12.8
SALEM.													
Cumbu.													
District average	1876 ..	19.6	19.4	19.4	15.0	11.9	8.9	20.7	20.1	18.2	14.6	11.3	8.7
	1877 ..	6.6	6.1	6.2	10.7	13.1	13.4	6.6	6.3	6.3	9.1	9.9	11.0
	Normal ..	25.4	26.4	27.3	29.8	30.1	29.9	30.0	29.8	30.4	32.2	32.3	32.4
	1891 ..	19.5	18.1	16.2	16.6	15.8	13.0	22.6	21.4	17.6	20.0	17.7	13.1
Ruchengodu.	1876 ..	17.9	17.1	16.9	16.4	13.5	9.9	19.1	17.5	17.1	15.4	11.9	9.0
	1877 ..	6.8	5.8	6.0	8.6	13.5	13.5	7.3	6.5	6.5	7.7	9.0	9.0
	Normal ..	21.8	22.6	22.4	23.6	24.7	24.8	26.6	25.0	25.7	30.5	27.1	27.9
	1891 ..	18.5	17.8	11.6	14.2	15.4	13.8	19.1	19.8	17.2	17.4	16.6	12.2
Idem	1876 ..	20.0	19.7	21.0	16.8	11.9	8.0	21.5	21.0	19.4	15.9	11.4	8.3
	1877 ..	5.1	5.4	5.2	8.1	9.0	9.0	6.3	6.5	6.0	9.3	10.1	9.9
	Normal ..	22.6	22.8	23.7	23.5	26.1	24.6	28.8	28.5	28.3	29.2	29.9	29.8
	1891 ..	20.4	19.5	18.9	18.0	15.9	14.3	21.9	21.0	12.7	19.2	17.3	13.2
Tharmapuri ..	1876 ..	..	..	..	..	..	..	19.0	18.1	14.6	11.3	9.7	7.7
	1877 ..	..	..	..	..	..	..	6.8	6.0	6.3	9.2	9.7	9.7
	Normal ..	..	..	..	..	..	..	33.8	31.1	31.6	31.9	31.8	31.2
	1891 ..	..	..	..	..	..	..	24.8	21.7	17.0	21.2	19.0	12.8
Ttankarai ..	1876 ..	18.0	17.3	18.0	15.5	11.5	8.4	21.0	19.5	18.0	14.3	11.3	8.5
	1877 ..	6.5	6.8	5.7	11.5	13.7	11.5	6.8	6.0	5.6	8.9	8.5	9.0
	Normal ..	26.9	26.9	26.0	29.2	29.8	31.7	30.7	30.2	30.6	30.9	30.8	31.3
	1891 ..	20.3	17.8	16.2	16.2	16.0	12.6	21.0	19.3	17.6	20.2	18.2	13.3
OIMBATORE.													
Cholam.													
District average	1876 ..	19.2	19.0	16.8	15.6	12.2	8.9	20.7	20.9	20.4	18.9	15.2	11.1
	1877 ..	6.8	7.4	7.1	10.4	11.0	11.1	8.0	8.8	7.5	10.2	12.8	19.7
	Normal ..	24.2	23.8	24.2	24.6	25.1	25.4	28.4	28.1	28.5	28.7	29.5	31.2
	1891 ..	17.2	17.9	15.9	16.5	16.2	13.1	18.2	18.4	16.6	16.2	16.7	16.3
Pollachi ..	1876 ..	18.8	18.6	19.8	18.9	13.6	9.5	21.2	20.7	24.9	22.1	20.9	11.6
	1877 ..	7.2	8.8	9.6	10.4	13.5	12.2	9.2	9.5	10.2	14.5	16.7	23.3
	Normal ..	22.5	22.8	24.8	24.2	24.3	23.1	27.8	27.8	27.4	27.5	29.3	29.3
	1891 ..	15.7	20.1	18.3	18.3	17.9	14.8	..	..	..	..	..	20.7
Udumalpet ..	1876 ..	18.8	20.3	18.6	18.0	10.6	9.2	21.0	21.0	22.8	19.6	17.5	12.3
	1877 ..	8.0	8.4	7.9	9.3	11.0	11.4	9.6	9.8	9.8	10.3	14.7	21.6
	Normal ..	21.7	21.7	21.8	21.6	22.1	22.0	26.1	26.8	26.6	26.3	26.8	27.0
	1891 ..	16.6	17.6	15.8	15.8	16.2	13.6	18.6	19.3	18.7	17.5	18.6	19.1
Coimbatore ..	1876 ..	18.4	19.6	18.3	16.4	12.1	8.1	17.9	19.1	19.1	19.2	15.5	9.5
	1877 ..	7.5	7.3	7.1	12.4	12.6	13.0	..	..	6.4	6.4	17.1	20.2
	Normal ..	21.0	21.1	21.7	22.2	22.5	22.5	23.9	23.9	24.9	23.9	23.5	24.4
	1891 ..	17.7	18.4	16.2	16.6	16.1	12.6	18.1	17.3	17.0	15.6	18.1	16.3
Palladam ..	1876 ..	18.1	19.1	17.4	15.7	12.2	8.7	22.9	25.4	25.4	24.2	18.3	12.7
	1877 ..	6.1	6.5	6.1	8.2	9.1	9.6	9.5	11.5	8.0	10.3	12.7	20.7
	Normal ..	20.3	20.0	20.4	20.7	20.5	19.4	28.5	28.2	28.1	28.6	29.3	30.2
	1891 ..	15.8	17.4	17.0	16.3	15.7	13.0	20.7	21.0	17.2	15.9	16.4	16.6
Dharsapuram ..	1876 ..	18.3	18.3	15.0	13.0	12.5	8.2	23.6	23.6	23.2	19.7	14.4	12.3
	1877 ..	6.3	6.3	5.8	7.1	8.9	8.0	7.9	9.2	7.9	7.9	7.9	16.3
	Normal ..	19.8	19.4	20.5	20.8	20.8	20.0	27.5	28.1	28.6	28.0	27.7	27.7
	1891 ..	16.6	16.4	14.1	15.2	16.0	14.0	18.3	19.3	17.4	16.6	15.4	12.9

II.

Statement showing the prices of staple food-grains in the affected districts during 1891 and 1892, &c.—*cont.*

Districts and taluks.	Years.	Prices in seers of 80 tolas per rupee during the second six months— <i>cont.</i>											
		July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.	July.	August.	Septem-ber.	October.	Novem-ber.	
COIMBATORE— <i>cont.</i>		Cholum— <i>cont.</i>						Cumbu— <i>cont.</i>					
Erode	1876 ..	17.2	17.4	15.7	15.7	13.9	8.7	18.6	20.7	17.6	15.9	14.3	
	1877 ..	5.3	5.2	6.9	9.1	10.5	..	5.6	7.9	6.8	6.8	11.5	
	Normal ..	20.1	20.5	20.9	21.4	22.5	21.7	28.3	23.0	23.9	25.0	35.6	
	1891 ..	18.9	17.4	15.3	15.7	15.8	12.2	17.5	17.5	16.7	16.7	15.9	
	1876 ..	18.8	17.3	14.1	12.6	11.8	8.7	17.9	17.2	17.2	15.9	12.9	
Bhavani	1877 ..	7.9	7.5	6.3	18.8	10.4	10.4	8.6	6.8	5.7	22.9	15.9	
	Normal ..	23.8	23.2	23.6	24.6	25.2	25.4	22.6	22.9	23.1	25.6	25.3	
	1891 ..	17.4	15.7	15.7	17.4	15.7	12.2	18.3	17.5	14.3	15.9	15.9	
KURNOOL.		Cholum.						Ragi.					
District average	1876 ..	24.4	21.5	17.7	9.3	7.9	7.0	26.4	23.0	19.7	10.6	8.0	
	1877 ..	6.2	6.0	6.3	8.2	9.5	10.7	6.4	6.0	6.6	5.8	10.5	
	Normal ..	28.6	29.1	29.2	30.0	31.2	31.0	30.4	30.0	29.2	29.4	30.5	
	1891 ..	26.7	26.1	21.6	21.5	17.1	13.4	27.3	27.4	23.6	21.9	18.9	
	1876 ..	31.6	25.3	19.0	14.2	11.5	7.9	34.5	28.5	24.0	16.9	10.9	
Markapur	1877 ..	8.3	6.7	7.1	8.3	..	10.3	7.9	6.4	7.5	9.0	9.0	
	Normal ..	27.7	27.7	27.5	27.4	27.4	27.9	28.5	28.2	27.5	26.6	26.6	
	1891 ..	..	..	19.0	19.0	18.6	13.0	24.0	24.4	22.6	21.5	21.5	
Cumbum	1876 ..	23.7	19.0	19.0	9.5	10.3	7.9	27.0	21.0	21.0	9.0	9.7	
	1877 ..	6.7	5.9	6.7	7.9	7.1	7.9	7.5	6.0	6.8	9.0	8.3	
	Normal ..	26.2	26.3	25.4	26.5	30.4	28.9	27.6	27.0	26.9	27.1	28.9	
Koilkuntla	1891 ..	21.3	23.1	19.4	20.5	18.2	13.8	24.0	24.0	20.6	20.6	19.6	
	1876 ..	22.9	20.5	19.8	13.8	7.1	7.1	..	..	..	..	..	
	1877 ..	6.3	5.9	5.1	6.3	7.1	11.1	..	..	..	..	..	
Ramallakot	Normal ..	25.6	25.5	25.2	25.2	26.2	27.3	..	..	..	..	..	
	1891 ..	28.4	28.4	23.7	23.7	17.8	12.6	..	..	..	..	..	
	1876 ..	21.7	21.9	16.4	7.5	..	7.2	..	..	..	..	..	
Pattikonda	1877 ..	5.8	5.5	5.8	8.2	7.9	10.3	..	..	..	..	..	
	Normal ..	27.3	26.4	27.3	26.2	27.4	26.4	..	..	..	..	..	
	1891 ..	25.0	22.6	20.9	19.9	13.7	12.0	..	..	..	..	..	
Bellary.	1876 ..	27.3	25.2	18.3	9.8	7.7	8.8	..	..	..	..	..	
	1877 ..	6.9	6.7	7.7	10.3	14.4	12.1	..	..	..	..	..	
	Normal ..	30.6	30.8	31.9	32.8	33.7	33.7	..	..	..	..	..	
Bellary.	1891 ..	26.3	25.4	19.1	21.6	17.6	14.4	..	..	..	..	..	
	1876 ..	22.0	20.9	16.2	10.2	7.1	7.4	..	..	..	..	..	
	1877 ..	5.8	5.6	6.1	8.7	10.9	11.4	..	..	..	..	..	
Adoni	Normal ..	29.7	30.2	30.8	31.3	32.0	32.3	..	..	..	..	..	
	1891 ..	26.4	26.1	22.7	21.9	17.1	14.2	..	..	..	..	..	
	1876 ..	24.7	23.4	16.0	11.1	7.2	8.2	..	..	..	..	..	
Alor	1877 ..	6.4	6.2	6.7	9.8	11.0	11.1	..	..	..	..	..	
	Normal ..	26.4	25.7	29.1	27.1	31.1	29.1	..	..	..	..	..	
	1891 ..	23.2	23.4	20.3	19.1	15.7	13.9	..	..	..	..	..	
Bellary	1876 ..	23.7	21.1	16.7	10.8	6.7	6.9	..	..	..	..	..	
	1877 ..	5.7	5.4	5.7	7.0	7.7	8.2	..	..	..	..	..	
	Normal ..	26.3	27.5	28.6	29.9	29.8	29.6	..	..	..	..	..	
Rayadrug	1891 ..	27.4	27.6	25.0	22.0	18.6	13.3	..	..	..	..	..	
	1876 ..	21.6	20.3	15.7	9.3	6.9	7.7	..	..	..	..	..	
	1877 ..	6.2	5.9	6.2	8.8	7.7	8.2	..	..	..	..	..	
ANANTAPUR.	Normal ..	26.6	27.2	27.5	27.7	28.5	29.3	..	..	..	..	..	
	1891 ..	27.9	23.6	20.4	20.9	16.7	13.7	..	..	..	..	..	
	1876 ..	20.6	18.8	15.5	10.3	6.5	7.2	..	..	..	..	..	
ANANTAPUR.	1877 ..	6.2	6.2	7.2	10.3	12.1	15.5	..	..	..	..	..	
	Normal ..	28.6	30.3	29.3	29.7	30.9	33.4	..	..	..	..	..	
	1891 ..	25.0	26.8	20.9	21.6	17.8	13.4	..	..	..	..	..	
District average	1876 ..	23.2	20.2	14.8	10.6	7.9	7.5	..	..	..	..	..	
	1877 ..	6.2	6.1	6.5	9.4	10.6	10.3	..	..	..	..	..	
	Normal ..	31.1	31.3	31.0	31.7	32.7	32.6	..	..	..	..	..	
	1891 ..	27.7	26.0	22.4	21.0	16.6	12.4	..	..	..	..	..	
	1876 ..	25.2	21.6	16.5	11.3	8.0	7.2	..	..	..	..	..	
Dharmavaram.	1877 ..	6.2	6.2	6.4	10.0	10.3	10.6	..	..	..	..	..	
	Normal ..	29.6	28.8	28.8	29.7	30.9	32.2	..	..	..	..	..	
	1891 ..	26.8	26.5	22.3	20.5	18.4	11.4	..	..	..	..	..	
Anantapur	1876 ..	25.5	20.7	16.0	11.5	8.8	8.0	..	..	..	..	..	
	1877 ..	6.2	6.4	6.7	10.4	11.3	11.1	..	..	..	..	..	
	Normal ..	27.7	28.1	28.6	31.5	31.6	32.4	..	..	..	..	..	
Gooty	1891 ..	25.2	25.2	22.7	20.8	16.9	13.5	..	..	..	..	..	
	1876 ..	25.0	23.2	18.0	10.8	7.7	8.2	..	..	..	..	..	
	1877 ..	6.2	6.6	6.7	10.0	11.8	11.3	..	..	..	..	..	
Tadpatri	Normal ..	26.8	28.9	30.0	30.2	31.4	33.2	..	..	..	..	..	
	1891 ..	25.8	25.8	20.6	26.3	16.0	13.4	..	..	..	..	..	
	1876 ..	22.7	22.4	18.5	10.6	8.2	8.0	..	..	..	..	..	
Tadpatri	1877 ..	7.0	6.7	6.2	8.5	10.8	12.4	..	..	..	..	..	
	Normal ..	24.9	26.3	26.0	26.1	26.9	27.3	..	..	..	..	..	
	1891 ..	23.7	23.3	19.3	20.5	15.5	12.6	..	..	..	..	..	

II.

Statement showing the prices of staple food-grains in the affected districts during 1891 and 1892, &c.—*cont.*

Districts and taluks.	Years.	Prices in seers of 80 tolas per rupee during the second six months— <i>cont.</i>											
		July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.	July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.
CUDDAPAH.		<i>Cholum.</i>						<i>Ragi.</i>					
District average	1876 ..	21.9	20.2	17.1	11.8	8.7	7.2	22.7	21.3	17.2	12.0	9.2	7.4
	1877 ..	6.6	6.3	6.7	9.0	10.4	11.5	6.8	6.4	6.8	9.1	10.4	12.1
	Normal ..	29.0	28.9	29.0	29.6	30.0	30.4	33.1	32.5	32.5	33.0	33.6	33.9
	1891 ..	23.5	20.7	18.8	17.8	16.4	12.7	25.9	23.1	20.8	19.5	17.9	14.0
	1876 ..	23.7	22.1	19.8	13.4	8.9	7.1	25.9	24.0	20.6	13.1	9.4	7.7
Badvel	1877 ..	6.6	6.4	6.4	8.1	10.1	8.9	7.1	6.2	6.6	8.0	8.7	10.1
	Normal ..	25.7	25.8	25.2	24.7	25.7	26.3	28.4	28.2	27.9	27.5	27.3	27.0
Siddhout	1891 ..	22.1	20.7	19.5	18.2	17.4	12.5	24.0	23.6	21.8	21.2	19.1	13.1
	1876 ..	20.5	19.0	17.8	13.0	9.1	7.5	24.0	22.5	18.5	14.6	9.0	8.8
	1877 ..	7.0	6.4	6.3	7.5	8.7	9.5	7.6	6.8	6.8	7.5	8.3	9.0
	Normal ..	23.1	23.1	22.8	23.4	24.0	22.8	29.1	29.1	28.2	28.2	27.3	27.3
1891 ..	18.2	18.2	17.0	15.8	15.4	12.2	24.0	24.0	21.8	19.5	18.0	14.3	
		<i>Cumbe.</i>											
District average	1876 ..	21.1	9.17	17.0	11.6	9.0	7.4	..	..	..	..	..	..
	1877 ..	6.3	6.7	7.6	10.7	12.9	12.8	..	..	..	..	..	..
	Normal ..	29.0	28.1	28.4	30.0	31.1	31.0	..	..	..	..	..	..
	1891 ..	18.6	17.3	16.0	16.2	15.9	13.0	..	..	..	..	..	..
	1876 ..	23.2	18.1	15.6	12.0	9.4	8.7	24.0	18.5	16.1	12.8	9.4	7.5
Rayachoti	1877 ..	6.9	6.5	7.3	13.8	17.0	13.9	7.6	6.7	7.1	11.1	14.8	14.4
	Normal ..	30.9	30.9	30.2	32.0	34.0	34.5	34.4	34.0	33.8	35.2	35.2	36.2
Kadiri	1891 ..	19.0	17.4	15.2	16.7	17.4	14.5	27.8	21.0	20.3	19.5	19.5	15.0
	1876 ..	23.9	22.5	15.2	12.3	8.0	6.5	24.8	23.3	15.8	12.8	9.2	7.1
	1877 ..	5.8	5.7	6.8	11.2	18.1	15.3	6.0	6.2	7.3	11.3	14.4	13.4
	Normal ..	32.0	32.3	32.2	33.1	33.4	36.8	34.5	31.8	35.3	31.6	37.1	38.3
Madanapalle	1891 ..	23.2	21.8	17.4	15.2	16.0	13.1	31.9	27.0	22.8	18.6	20.0	15.0
	1876 ..	16.7	17.4	13.1	12.0	9.8	6.5	18.8	18.8	13.1	11.3	10.1	6.8
	1877 ..	6.2	6.2	6.2	10.2	14.5	14.5	6.0	6.0	6.4	10.1	12.0	12.0
	Normal ..	31.3	30.7	31.3	34.1	36.5	34.7	40.9	40.8	40.6	44.6	45.4	44.2
Vayalpad	1891 ..	17.6	14.9	13.9	14.5	13.4	12.5	27.9	23.4	22.1	21.0	18.4	13.1
	1876 ..	16.0	16.7	13.1	8.0	10.2	5.4	16.5	17.6	13.5	8.3	9.8	6.0
	1877 ..	5.1	..	6.5	10.2	14.5	13.1	6.0	5.6	6.4	9.0	10.5	9.7
	Normal ..	32.2	29.8	31.3	32.6	32.6	34.2	46.0	37.2	39.0	39.8	40.4	38.4
1891 ..	16.6	13.5	13.5	14.2	15.1	16.2	25.4	21.6	19.7	19.1	18.4	14.4	

II.

Statement showing the prices of staple food-grains in the affected districts during 1891 and 1892, &c.—*cont.*

		Prices in seers of 80 tolas per rupee during the last nine months.									
Districts and stations.		Years.	January.	February.	March.	April.	May.	June.	July.	August.	September.
NELLORE.			Cholum.								
		1877	8.0	8.9	9.4	9.4	9.2	9.4	8.0	6.4	6.8
District average	Normal	25.4	25.6	25.7	26.2	26.1	26.1	26.1	25.7	25.3	25.3
		1892	13.0	12.8	13.3	13.5	13.5	13.4	13.9	14.5	16.2
Ongole	1877	8.8	10.1	11.1	11.3	10.4	10.5	7.9	6.0	7.3	7.3
	Normal	23.5	22.2	22.8	24.0	23.6	23.4	23.7	23.5	23.5	23.5
		1892	12.7	14.2	14.4	14.1	14.4	14.4	14.4	15.1	21.6
Darsi	1877	7.7	10.1	9.4	9.4	9.6	9.8	7.9	6.8	7.2	7.2
	Normal	24.5	24.2	24.2	25.6	25.5	25.1	24.3	24.6	23.6	23.6
		1892	14.0	13.6	13.6	13.6	13.6	13.6	13.6	13.6	14.6
Podili	1877	8.4	9.7	8.4	8.4	8.4	9.7	8.4	6.7	7.9	7.9
	Normal	25.9	25.0	24.2	25.1	25.5	26.1	25.8	25.4	25.2	25.2
		1892	13.8	13.3	13.1	12.7	12.7	12.7	14.1	17.1	17.1
Kanigiri	1877	10.1	9.3	8.4	8.4	8.4	8.4	7.7	6.8	7.0	7.0
	Normal	26.5	26.8	26.6	28.3	27.6	26.6	27.2	26.5	26.3	26.3
		1892	15.3	13.7	14.5	13.5	12.7	12.7	12.7	12.7	15.7
Udayagiri	1877	6.7	7.0	8.0	8.4	8.0	8.2	...	...	...	...
	Normal	23.6	23.5	23.6	21.2	24.5	24.9	25.0	24.7	24.5	24.5
		1892	12.7	12.7	13.3	14.4	14.5	14.5	15.0	15.4	15.4
Atmakuru	1877	7.7	7.7	7.7	9.1	9.6	9.8	8.6	6.7	...	...
	Normal	26.3	26.5	26.8	27.1	27.1	27.1	26.9	26.6	26.6	26.6
		1892	14.5	14.5	11.1	13.6	13.6	14.0	14.8	15.4	17.5
			Ragi.								
		1877	8.1	9.2	10.6	11.2	10.7	10.6	8.5	7.1	7.9
District average	Normal	29.1	29.0	29.1	29.7	30.0	29.8	30.2	29.9	29.4	29.4
		1892	13.6	13.8	14.0	14.4	14.5	14.4	15.3	16.0	17.3
Ongole	1877	10.0	10.7	13.4	12.6	11.4	12.0	8.4	6.5	6.4	6.4
	Normal	26.1	26.8	27.3	28.5	30.0	30.0	29.2	29.2	28.5	28.5
		1892	12.7	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
Darsi	1877	8.1	10.4	11.8	11.0	11.3	11.4	8.2	6.8	7.3	7.3
	Normal	26.1	25.6	25.3	27.2	27.1	26.4	26.9	26.9	26.9	26.9
		1892	14.9	13.6	13.6	13.6	13.6	14.5	15.3	16.0	16.0
Podili	1877	7.9	11.1	11.1	11.9	11.9	10.7	9.6	6.4	7.3	7.3
	Normal	29.0	28.2	27.7	29.3	21.3	28.5	29.5	29.5	29.0	29.0
		1892	13.7	13.6	13.6	13.6	13.6	13.6	14.5	18.7	18.7
Kanigiri	1877	9.0	9.2	9.6	10.3	10.3	10.3	8.2	6.7	6.8	6.8
	Normal	30.1	29.9	29.5	31.4	30.1	30.6	30.9	30.9	30.1	30.1
		1892	13.6	13.7	14.9	14.0	15.1	13.6	13.6	13.6	16.5
Udayagiri	1877	7.1	7.6	9.1	10.1	9.5	8.6	6.7	6.4	6.6	6.6
	Normal	26.7	26.5	26.4	28.5	29.9	29.7	29.4	29.2	29.0	29.0
		1892	14.1	15.1	15.3	15.3	15.3	16.2	17.4	17.0	18.5
Atmakuru	1877	8.2	8.2	8.2	9.6	10.0	10.0	...	7.8	...	...
	Normal	28.5	28.3	28.6	30.4	30.4	30.4	30.4	30.4	30.0	30.0
		1892	15.5	15.3	14.5	13.6	13.6	14.3	16.6	17.3	19.9
KURNOOL.			Cholum.								
		1877	7.1	8.1	8.6	8.3	7.3	7.0	6.2	6.0	6.4
District average	Normal	30.6	30.1	29.8	29.8	29.1	28.6	28.6	29.1	29.2	29.2
		1892	13.0	14.5	14.6	14.9	14.9	14.4	18.8	16.7	10.1
Mārkāpur	1877	7.9	7.9	8.7	9.1	9.1	9.1	8.3	6.7	7.1	7.1
	Normal	29.0	28.4	27.9	27.7	26.2	27.7	27.7	27.7	27.5	27.5
		1892	12.8	12.8	12.8	14.5	15.7	13.8	14.2	14.6	17.4
Cumbum	1877	7.5	8.8	7.9	8.3	7.9	7.9	6.7	5.9	6.7	6.7
	Normal	26.7	26.9	27.0	26.1	25.8	24.1	26.2	26.3	25.4	25.4
		1892	12.6	12.6	12.6	12.6	12.6	13.4	14.6	15.7	18.0
Koilkuntla	1877	7.1	7.5	8.7	8.3	7.1	7.1	6.8	5.9	5.1	5.1
	Normal	27.3	28.7	29.1	27.2	26.9	26.5	25.6	25.5	25.1	25.1
		1892	12.6	14.2	14.2	14.2	13.1	13.4	16.2	17.4	20.1
Ramallakot	1877	6.9	8.2	8.2	7.8	7.5	6.5	4.6	6.5	6.2	6.2
	Normal	26.6	26.7	28.0	28.2	25.2	26.7	27.3	26.4	27.3	27.3
		1892	14.4	15.1	15.1	15.5	15.6	15.1	16.4	16.4	19.9
Patālikonda	1877	8.8	8.7	9.5	8.8	8.2	7.7	6.9	6.7	7.7	7.7
	Normal	31.3	31.8	31.0	29.6	27.0	28.0	30.6	30.8	31.9	31.9
		1892	14.7	15.1	15.5	15.2	16.0	15.3	16.9	17.8	19.8
			Ragi.								
		1877	7.7	8.5	8.6	9.1	8.0	7.4	6.4	5.3	6.6
District average	Normal	31.1	31.4	30.9	30.2	30.5	31.1	30.4	30.0	29.2	29.2
		1892	13.1	13.6	14.5	14.5	15.2	15.1	15.7	16.5	17.4
Mārkāpur	1877	7.5	7.6	9.0	9.0	10.5	10.5	7.9	6.4	7.5	7.5
	Normal	27.0	26.4	26.1	28.2	27.9	28.5	28.5	28.2	27.6	27.6
		1892	12.8	12.8	12.7	13.6	15.9	14.6	15.2	16.0	17.6
Cumbum	1877	7.5	9.8	9.0	9.0	9.0	9.0	7.5	6.0	6.8	6.8
	Normal	28.1	27.9	27.6	27.8	26.1	27.6	27.6	27.9	26.9	26.9
		1892	12.0	12.4	12.8	13.5	13.5	14.3	15.0	16.5	17.6

II.

Statement showing the prices of staple food grains in the affected districts during 1891 and 1892, &c.—*cont.*

Districts and stations.		Years.	Prices in seers of 80 tolas per rupee during the last nine months— <i>cont.</i>								
			January.	February.	March.	April.	May.	June.	July.	August.	September.
BELLARY.			Cholum.								
District average	1877	.. .. .	7.7	8.1	8.8	8.3	7.5	6.5	5.8	5.6	6.1
	Normal	.. .. .	32.1	31.7	31.0	31.5	31.0	29.9	29.6	30.2	30.7
	1892	.. .. .	14.4	15.3	15.2	15.3	15.3	14.9	16.3	19.2	22.9
Adōni	1877	.. .. .	8.2	8.8	10.1	9.3	8.2	7.5	6.4	6.2	6.7
	Normal	.. .. .	28.0	29.5	26.3	26.4	25.5	26.0	26.4	25.7	29.1
	1892	.. .. .	14.4	14.9	15.2	14.4	14.9	14.3	16.5	16.7	18.0
Alār	1877	.. .. .	7.2	7.7	8.8	8.9	7.7	7.0	5.7	5.4	5.7
	Normal	.. .. .	27.3	28.5	30.0	27.8	28.3	27.5	26.3	27.5	28.6
	1892	.. .. .	13.4	14.9	15.3	14.3	14.7	14.1	15.1	16.2	19.2
Bellary	1877	.. .. .	8.2	8.5	9.3	9.0	8.2	7.5	6.2	5.9	6.2
	Normal	.. .. .	28.7	28.3	27.6	28.3	28.5	27.6	26.6	27.2	27.5
	1892	.. .. .	14.7	15.4	15.2	14.7	15.4	14.2	15.1	17.4	21.1
Rayadrug	1877	.. .. .	7.2	8.2	9.3	7.7	8.2	6.4	6.2	6.2	7.2
	Normal	.. .. .	32.7	32.9	31.6	30.9	29.3	28.6	28.6	30.3	29.3
	1892	.. .. .	14.6	14.7	15.2	16.2	15.2	15.5	16.4	19.2	23.0
ANANTAPUR.			Cholum.								
District average ..	1877	.. .. .	7.8	8.7	9.5	9.0	7.9	7.2	6.2	6.1	6.6
	Normal	.. .. .	32.4	31.7	31.5	32.4	33.0	32.2	31.1	31.1	31.2
	1892	.. .. .	13.6	14.2	14.8	15.2	16.1	15.7	18.5	19.5	20.8
Dharmavaram	1877	.. .. .	7.0	8.2	10.6	9.3	8.0	7.2	6.2	6.2	6.4
	Normal	.. .. .	31.7	30.9	30.2	28.9	30.6	29.2	29.6	28.8	28.8
	1892	.. .. .	12.6	13.9	14.1	14.9	16.5	15.8	18.3	19.2	20.2
Anantapur	1877	.. .. .	8.0	9.5	9.5	9.3	8.2	7.7	6.2	6.4	6.7
	Normal	.. .. .	32.8	30.7	31.1	28.7	28.7	28.3	27.7	28.1	28.6
	1892	.. .. .	13.4	13.9	13.9	13.8	15.8	14.9	17.0	16.9	17.5
Gooty	1877	.. .. .	8.2	9.0	9.5	9.0	8.2	7.2	6.2	6.7	6.7
	Normal	.. .. .	32.9	31.7	31.4	27.5	27.8	26.5	26.8	28.9	30.0
	1892	.. .. .	13.4	13.9	14.8	14.2	13.7	13.7	15.7	16.7	19.6
Tadpatri	1877	.. .. .	8.2	8.8	9.8	9.3	8.5	8.0	7.0	6.7	6.2
	Normal	.. .. .	28.0	27.6	27.6	25.9	26.5	26.3	21.9	26.3	26.0
	1892	.. .. .	14.5	14.4	15.5	13.4	14.4	14.4	16.2	19.6	18.2
CUDDAPAH.			Cholum.								
District average	1877	.. .. .	6.0	8.5	9.5	9.3	8.6	8.3	6.6	6.3	6.7
	Normal	.. .. .	30.5	30.6	30.1	29.9	30.3	30.2	29.0	28.9	29.0
	1892	.. .. .	12.9	13.3	13.6	13.6	14.1	14.0	14.6	15.8	17.0
Bādvēl	1877	.. .. .	6.7	8.5	10.0	9.5	8.5	8.5	6.6	5.9	6.4
	Normal	.. .. .	25.8	25.3	25.8	25.6	25.8	25.8	25.7	25.8	25.2
	1892	.. .. .	12.4	13.3	12.8	12.9	13.2	13.0	13.6	15.0	15.4
Sidhout	1877	.. .. .	7.9	9.1	10.7	9.5	9.1	9.1	7.0	6.4	6.3
	Normal	.. .. .	22.1	22.2	22.8	22.9	22.4	23.2	23.1	23.1	22.8
	1892	.. .. .	11.9	12.6	12.6	12.6	12.6	12.6	13.4	14.2	15.8
			Cumbu.								
District average	1877	.. .. .	7.4	7.7	8.2	8.4	8.0	7.6	6.3	6.7	7.6
	Normal	.. .. .	30.3	30.2	29.7	29.8	29.8	29.5	29.0	28.1	28.4
	1892	.. .. .	12.6	12.7	12.4	12.4	12.6	12.5	13.1	13.5	15.7
Māyachōti	1877	.. .. .	6.9	7.6	8.8	8.5	8.5	8.0	6.9	6.5	7.3
	Normal	.. .. .	34.3	33.4	33.1	30.3	31.6	30.8	30.9	30.9	30.2
	1892	.. .. .	13.1	13.4	13.4	13.4	14.5	14.5	14.5	14.5	17.4
Kadiri	1877	.. .. .	6.2	6.5	8.0	8.7	7.1	7.1	5.8	5.7	6.8
	Normal	.. .. .	35.8	33.9	33.5	32.3	31.7	31.3	32.0	32.3	32.3
	1892	.. .. .	14.1	13.1	13.1	13.1	13.1	13.1	15.2	15.1	17.0
Madanapalle	1877	.. .. .	6.5	6.2	6.2	7.3	7.3	6.2	6.2	6.2	6.2
	Normal	.. .. .	34.6	32.5	32.7	32.0	31.6	30.7	31.3	30.7	31.3
	1892	.. .. .	11.6	11.2	11.6	11.6	11.6	11.6	11.6	12.0	14.0
Vayalpad	1877	.. .. .	6.5	6.5	8.0	8.0	7.6	6.4	5.1	..	6.5
	Normal	.. .. .	31.9	31.1	30.0	30.9	32.2	33.3	32.2	29.8	31.8
	1892	.. .. .	12.4	12.0	10.9	12.3	12.3	12.2	12.2	12.2	12.7

II.

Statement showing the prices of staple food-grains in the affected districts during 1891 and 1892, &c.—*cont.*

Districts and stations.		Years.		Prices in seers of 80 tolas per rupee during the last nine months— <i>cont.</i>								
				January.	February.	March.	April.	May.	June.	July.	August.	September.
CUDDAPAH— <i>cont.</i>				<i>Ragi.</i>								
District average	1877	..	..	7.6	9.0	10.0	9.9	8.6	5.6	6.8	6.4	6.8
	Normal	..	..	33.7	33.5	33.6	31.0	34.3	33.9	33.1	32.5	32.6
Bádval	1892	..	..	14.1	14.6	14.8	15.6	16.3	16.3	17.7	19.0	20.0
	Normal	..	..	7.3	8.3	9.1	9.4	8.4	8.6	7.1	6.2	6.6
Sidhout	1877	..	..	26.8	26.4	27.3	27.5	28.9	28.5	28.4	28.2	27.9
	Normal	..	..	13.3	14.3	13.5	13.5	14.3	15.8	17.8	18.0	17.6
Ráyachóti	1892	..	..	7.9	9.4	11.3	11.3	9.4	9.5	7.6	6.8	6.8
	Normal	..	..	27.3	27.3	27.0	28.3	29.1	29.1	29.1	29.1	28.2
Kadiri	1877	..	..	13.6	13.6	13.5	13.5	15.0	15.0	16.5	18.8	18.8
	Normal	..	..	7.1	8.6	10.7	10.7	9.1	9.1	7.6	6.8	7.1
Madanapalle	1892	..	..	35.1	35.0	34.8	34.9	34.7	34.5	34.4	34.0	33.8
	Normal	..	..	15.0	14.3	14.3	15.4	15.8	15.2	17.3	18.4	20.0
Vayalpad	1877	..	..	6.6	7.5	8.3	9.0	7.3	7.4	6.0	6.2	7.3
	Normal	..	..	37.2	35.3	35.7	35.0	34.8	34.5	34.5	34.8	35.3
District average	1892	..	..	14.9	14.6	15.8	15.8	16.5	16.5	16.6	17.6	21.0
	Normal	..	..	8.3	8.3	9.0	9.0	7.5	6.8	6.0	6.0	6.4
District average	1877	..	..	42.9	41.6	41.4	39.6	41.3	41.3	40.9	40.8	40.6
	Normal	..	..	13.9	14.3	15.0	17.3	17.3	17.2	18.9	22.5	23.2
District average	1892	..	..	6.8	7.9	9.1	9.5	8.3	7.8	6.0	5.6	6.4
	Normal	..	..	40.0	38.8	40.0	39.8	41.6	40.0	40.0	37.2	39.0
District average	1892	..	..	13.5	13.8	13.8	15.8	15.8	16.5	16.8	18.8	18.8
	Normal	..	..	..	..	..	..	..	..	..	..	..
NORTH ARCOT.				<i>Ragi.</i>								
District average	1877	..	..	8.5	9.4	9.7	10.8	9.8	9.1	7.4	6.9	6.9
	Normal	..	..	32.4	31.9	31.6	31.5	32.2	31.6	30.9	30.9	30.9
Pungantru	1892	..	..	13.2	13.0	13.4	14.2	15.2	15.3	16.3	17.6	19.0
	Normal	..	..	7.7	8.2	8.2	9.7	8.4	7.3	7.1	6.5	6.1
District average	1877	..	..	40.5	41.0	40.4	40.3	41.0	40.7	39.7	39.8	39.3
	Normal	..	..	13.4	13.4	13.4	15.1	15.1	16.8	19.0	20.2	22.7
District average	1892	..	..	..	..	..	..	..	..	..	..	..
	Normal	..	..	..	..	..	..	..	..	..	..	..
SALEM.				<i>Cumbu.</i>								
District average	1877	..	..	8.1	8.8	8.2	8.6	7.8	7.6	6.5	6.0	6.2
	Normal	..	..	28.8	28.3	26.9	26.3	26.3	25.9	25.4	25.5	27.3
Tiruchengódu	1892	..	..	13.0	13.2	13.2	13.0	12.7	12.7	15.1	19.5	21.3
	Normal	..	..	9.4	10.1	9.4	9.4	8.8	8.1	6.8	5.8	6.0
District average	1877	..	..	24.0	22.9	23.7	21.4	21.1	25.3	21.8	22.6	22.4
	Normal	..	..	13.2	14.0	13.1	13.0	12.2	12.2	19.0	20.2	21.2
District average	1892	..	..	..	..	..	..	..	..	..	..	..
	Normal	..	..	..	..	..	..	..	..	..	..	..
COIMBATORE.				<i>Ragi.</i>								
District average	1877	..	..	8.4	9.4	9.0	9.0	8.5	8.3	6.6	6.2	6.3
	Normal	..	..	31.8	31.4	31.4	32.0	32.3	31.6	30.0	29.8	30.4
Tiruchengódu	1892	..	..	13.6	14.0	14.6	15.0	15.9	16.1	17.8	19.5	20.9
	Normal	..	..	8.2	9.8	9.6	9.8	9.8	9.8	7.3	6.5	6.5
District average	1877	..	..	26.8	26.1	26.6	27.8	27.3	27.0	26.6	26.0	25.7
	Normal	..	..	12.1	11.8	11.8	12.6	12.6	12.9	15.2	17.6	19.6
District average	1892	..	..	..	..	..	..	..	..	..	..	..
	Normal	..	..	..	..	..	..	..	..	..	..	..
COIMBATORE.				<i>Cholum.</i>								
District average	1877	..	..	9.2	9.9	10.3	9.6	9.0	8.6	6.8	7.4	7.1
	Normal	..	..	25.1	25.1	25.4	26.0	25.7	25.1	24.2	23.8	24.2
Bhavani	1892	..	..	13.6	14.7	15.0	14.8	14.5	14.3	13.5	16.0	16.7
	Normal	..	..	9.0	9.4	9.4	9.3	8.2	7.9	7.9	7.6	6.7
District average	1877	..	..	25.6	26.5	25.5	24.9	25.1	24.5	23.8	23.2	23.6
	Normal	..	..	12.2	12.2	12.2	12.2	10.6	13.1	13.9	13.9	13.9
District average	1892	..	..	..	..	..	..	..	..	..	..	..
	Normal	..	..	..	..	..	..	..	..	..	..	..
COIMBATORE.				<i>Cumbu.</i>								
District average	1877	..	..	11.4	10.8	10.7	10.2	9.3	8.7	8.1	8.5	7.5
	Normal	..	..	31.5	31.0	30.5	30.1	28.9	29.1	28.4	28.1	28.6
Bhavani	1892	..	..	17.1	17.5	16.4	15.7	15.7	15.5	15.3	17.7	19.3
	Normal	..	..	10.0	10.0	10.0	8.9	8.6	8.6	8.6	6.8	5.7
District average	1877	..	..	25.7	25.1	24.7	24.0	23.6	23.1	22.6	22.9	23.1
	Normal	..	..	15.9	15.9	15.6	15.1	14.3	12.7	15.9	19.1	19.1

III.

STATEMENT showing the average total numbers of persons relieved in the Presidency during each month of 1891 and 1892.

Districts.	1891.											
	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
<i>On works.</i>												
Tinnevely	..	253	1,639	1,312	768	729	524	..	..	..	..	
Coimbatore	..	240	370	208	423	1,620	3,373	6,912	4,298	3,986	2,885	
Salem	..	..	..	..	..	..	..	..	7,393	4,167	3,821	
North Arcot	155	1,736	3,312	6,367	7,208	6,571	8,499	10,248	10,408	5,287	2,856	
Chingleput	928	4,449	4,662	6,312	8,055	7,157	7,289	7,289	7,899	5,747	3,571	
Nellore	..	..	..	..	..	398	2,562	3,885	3,916	1,030	1,153	
Cuddapah	..	..	..	170	325	159	897	1,385	744	259	..	
Kurnool	..	..	..	..	..	..	..	..	..	1,351	2,179	
Bellary	..	..	..	..	..	..	..	..	..	..	1,839	
Anantapur	..	..	..	..	..	..	..	..	..	..	354	
Total	1,083	6,678	9,983	14,899	16,779	16,634	22,750	29,719	34,658	21,827	18,698	
<i>Gratuitously.</i>												
Coimbatore	..	..	..	..	..	..	..	465	875	782	401	
Salem	..	..	..	..	..	..	..	..	182	239	308	
North Arcot	..	26	760	1,102	1,355	1,794	2,994	4,374	3,339	2,197	1,455	
Chingleput	..	..	..	122	208	540	1,752	2,107	1,950	905	133	
Cuddapah	..	..	..	..	..	..	7	14	4	..	..	
Kurnool	..	..	..	..	..	..	..	..	..	..	..	
Total	..	26	760	1,224	1,563	2,334	4,753	6,960	6,350	4,123	2,364	
Grand Total	1,083	6,704	10,743	16,123	18,342	18,968	27,503	36,679	41,008	25,950	21,062	
1892.												
Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.			
<i>On works.</i>												
Coimbatore	..	..	..	..	..	..	..	..	..	..	..	
Salem	4,473	4,543	2,679	542	704	647	278	..	..	..	..	
North Arcot	736	87	161	4,079	5,887	6,652	4,273	695	..	..	..	
Chingleput	236	..	..	690	1,514	1,798	471	..	..	..	..	
Nellore	5,841	3,753	5,688	6,544	11,107	22,744	16,723	2,846	..	..	..	
Cuddapah	2,997	3,513	5,094	9,095	11,959	11,402	5,680	2,383	..	..	..	
Kurnool	6,956	13,020	20,263	24,421	28,647	25,100	17,094	10,141	2,339	..	..	
Bellary	5,586	6,035	7,297	9,138	12,806	18,010	10,730	5,429	661	..	..	
Anantapur	515	487	910	1,159	1,211	1,234	141	..	..	..	..	
Total	27,340	31,438	42,092	66,668	73,835	87,587	55,390	21,494	3,197	..	..	
<i>Gratuitously.</i>												
Coimbatore	68	..	..	..	..	..	..	..	..	..	..	
Salem	292	250	234	211	204	173	112	58	..	..	..	
North Arcot	356	..	30	60	52	45	17	..	..	..	..	
Nellore	..	..	..	..	..	..	..	..	..	..	..	
Cuddapah	..	..	..	..	..	..	..	..	..	..	..	
Kurnool	332	412	438	454	487	582	449	335	123	..	..	
Bellary	..	..	..	..	..	..	..	..	..	..	..	
Anantapur	278	571	240	146	131	60	20	..	..	..	..	
Total	1,301	1,333	985	916	1,071	1,094	873	548	130	..	..	
Grand Total	28,641	32,671	43,077	57,584	74,906	88,681	56,263	22,042	3,327	..	..	

III-A.

STATEMENT showing the average number of persons relieved on works in each district during each month of the years 1891 and 1892.

Months.	Tinnevely.	Coimbatore.							Total.
		Pollachi.	Erode.	Coimbatore.	Palladam.	Dharmapuri.	Udumalpet.	Bhavani.	
March 1891	253	240	..	..	..	..	..	..	440
April	1,639	370	..	..	..	..	..	..	370
May	1,342	208	..	..	..	..	..	..	208
June	768	423	..	..	..	..	..	..	423
July	729	616	..	589	213	172	..	..	1,620
August	524	1,021	..	290	609	1,374	19	..	3,313
September	..	528	320	68	1,009	3,197	902	..	6,912
October	..	501	522	..	942	1,091	775	464	4,298
November	..	265	280	..	1,235	819	739	648	3,986
December	..	70	183	..	699	923	445	665	2,886
January 1892	..	..	..	..	..	..	..	..	..
February	..	..	..	..	..	..	..	..	..
March	..	..	..	..	..	..	..	549	549
April	..	..	..	..	..	..	..	704	704
May	..	..	..	..	..	..	..	647	647
June	..	..	..	..	..	..	..	378	378
July	..	..	..	..	..	..	..	..	..

Months.	Salem.				North Arcot.				Total.
	Tiruchengod.	Salem.	Dharmapuri.	Udangiri.	Kallahasti.	Pollur.	Wandiwash.	Punguadu.	
February 1891	..	..	..	..	..	..	165	..	165
March	..	..	..	..	..	..	1,354	..	1,354
April	..	..	..	..	..	..	2,377	..	2,377
May	..	..	..	..	..	..	2,039	..	2,039
June	..	..	..	..	..	..	1,151	..	1,151
July	..	..	..	..	..	..	1,612	..	1,612
August	..	..	..	..	..	..	2,270	..	2,270
September	..	..	..	..	..	..	4,398	270	4,668
October	5,004	1,307	471	611	7,393	4,111	2,003	4,294	10,408
November	3,447	633	187	..	4,167	8,004	1,512	771	6,287
December	3,821	..	..	..	3,821	1,831	654	371	2,858
January 1892	4,473	..	..	..	4,473	515	58	183	736
February	4,543	..	..	..	4,543	..	..	87	87
March	2,679	..	..	..	2,679	..	..	161	161
April	4,979	..	..	..	4,979	..	..	690	690
May	5,887	..	..	..	5,887	..	..	1,514	1,514
June	6,652	..	..	..	6,652	..	..	1,798	1,798
July	4,273	..	..	..	4,273	..	..	471	471
August	695	..	..	..	695	..	..	..	..

Months.	Chingleput.						Nellore.	
	Madurantakam.	Conjeevaram.	Chingleput.	Saidapet.	Tiravallur.	Ponnai.	Polur.	Venktagiri.
February 1891	..	..	..	76	185	667	928	..
March	352	518	649	413	1,193	1,324	4,449	..
April	715	418	1,152	148	1,164	1,065	4,663	..
May	1,198	768	1,341	898	726	1,492	6,813	..
June	1,191	460	2,236	675	1,810	1,683	8,055	..
July	1,153	626	1,908	466	1,512	1,134	7,157	..
August	1,285	1,252	1,853	407	826	2,092	7,515	427
September	1,419	803	1,508	688	1,763	1,108	7,299	684
October	1,200	1,408	2,066	903	1,275	1,047	7,899	539
November	975	898	1,083	492	1,094	1,205	5,747	..
December	472	794	659	252	623	771	3,571	..
January 1892	20	37	30	14	9	126	236	..

* This includes 389 coolies employed in Local Fund works for which no talukwar details are available.

III-A.

Statement showing the average number of persons relieved on works in each district during each month of the years 1891 and 1892—cont.

Months.	Nellore—cont.								Total.
	Guddur.	Nellore.	Rapur.	Atmakur.	Udayagiri.	Kanigiri.	Darsi and Podili.	Ongole.	
July 1891	35	..	150	150	..	..	..	..	398
August	918	123	367	640	..	..	..	..	2,502
September	437	215	429	2,076	..	..	..	..	3,885
October	409	229	1,932	719	..	..	..	..	3,916
November	242	143	442	187	..	..	..	..	1,030
December	505	..	491	157	..	..	..	..	1,153
January 1892	..	..	..	332	1,573	147	1,615	395	5,841
February	..	..	..	76	371	1,518	1,760	28	3,753
March	..	..	..	220	1,377	1,431	2,505	155	5,688
April	..	..	..	105	1,522	1,346	3,608	65	6,644
May	..	..	..	131	3,116	..	7,281	579	11,107
June	..	..	..	196	5,354	272	14,759	2,163	22,744
July	..	..	..	..	4,683	360	10,535	1,145	16,723
August	..	..	..	..	444	268	1,991	143	2,846

Months.	Cuddapah.							Total.
	Vayalpad.	Madanapalle.	Kadiri.	Rayachoti.	Cuddapah.	Sidhout.	Badvel.	
May 1891	..	..	..	170	..	..	..	170
June	..	..	..	325	..	..	..	325
July	..	..	..	159	..	..	..	159
August	..	..	..	397	..	..	..	397
September	..	..	..	1,385	..	..	..	1,385
October	..	..	..	744	..	..	..	744
November	..	..	..	259	..	..	..	259
December	..	..	..	..	..	..	..	..
January 1892	502	632	..	948	..	269	646	2,997
February	126	651	36	1,418	..	300	979	3,513
March	146	622	658	1,796	..	132	1,710	3,941
April	548	897	689	2,871	..	562	3,518	5,095
May	601	1,781	92	3,555	167	511	5,106	11,959
June	933	1,367	58	3,581	115	369	5,936	11,402
July	611	416	3	1,833	43	90	2,684	5,680
August	78	41	..	776	..	..	1,488	2,382
September	..	..	..	257	..	..	..	257

Months.	Kurnool.							Bellary.	
	Markapur.	Cumbum.	Koilkuntla.	Nandyal.	Nandikotkur.	Ramalakot.	Patikonda.	Adoni.	Aldr.
November 1891	977	374	..	..	..	..	..	..	..
December	1,448	377	..	..	..	..	..	..	..
January 1892	4,353	2,091	39	..	..	354	..	606	831
February	6,185	4,636	465	..	39	434	..	2,408	1,651
March	8,010	8,399	1,705	123	548	1,159	278	13,020	2,013
April	8,326	10,942	2,615	189	442	1,339	319	20,269	2,562
May	8,179	12,709	4,057	68	616	1,818	618	24,421	3,633
June	7,622	10,800	3,694	..	162	1,300	1,300	28,617	4,294
July	5,811	8,486	1,771	..	106	1,249	1,573	25,100	4,275
August	4,853	4,359	779	..	..	..	712	17,094	1,189
September	1,213	1,126	..	..	..	..	150	10,141	..
October	..	..	..	..	..	..	..	..	454

* This figure includes 691 coolies employed in Kandakur and 1,088 employed in Kavalu.
† 50 coolies employed in Sirvel in April and 18 in May not included.

III-A.

Statement showing the average number of persons relieved on works in each district during each month of the years 1891 and 1892—cont.

Months.	Bellary—cont.				Anantapur.			
	Hospet.	Bellary.	Rayadurg.	Total.	Dharma- varam.	Anantapur.	Tadpatri.	Total.
December 1891	173	125	102	1,839	394	..	..	394
January 1892	447	1,058	21	5,586	515	..	..	515
February	108	1,131	116	6,035	487	..	..	487
March	81	1,311	420	7,297	421	169	320	910
April	74	1,764	250	9,138	317	372	470	1,159
May	..	2,749	..	12,808	140	415	604	1,211
June	..	3,198	..	18,010	102	628	..	1,234
July	..	2,719	..	10,730	1	140	..	141
August	..	1,225	..	5,429	..	..	..	..
September	..	147	..	601	..	..	..	..

* 12 coolies employed in Hadgalli not included.

STATEMENT showing the average number of persons relieved gratuitously at kitchens in each month during the years 1891 and 1892.

Months.	Coimbatore.				Salem.		North Arcot.			
	Pollachi.	Udamalpet.	Palladam.	Dharmapuram.	Tiruchengodu.	Salem.	Wandiwash.	Kalahasti.	Tadpatri.	Punganur.
March 1891	..	..	..	..	..	..	26	141	..	..
April	..	..	..	..	..	..	616	386	..	1,102
May	..	..	..	..	..	..	716	607	..	1,355
June	..	..	..	..	..	..	748	607	..	1,355
July	..	..	..	..	..	..	771	1,023	..	1,794
August	..	..	..	..	..	..	1,094	1,900	..	2,994
September	..	..	..	..	..	..	1,722	2,024	..	4,374
October	..	..	..	..	..	..	1,356	1,842	..	3,339
November	..	..	..	..	..	..	568	1,518	..	2,197
December	..	..	..	..	..	..	181	132	..	356
January 1892	..	..	..	..	..	..	..	..	..	..
February	..	..	..	..	..	..	..	..	..	..
March	..	..	..	..	..	..	..	..	..	..
April	..	..	..	..	..	..	..	..	..	..
May	..	..	..	..	..	..	..	..	..	..
June	..	..	..	..	..	..	..	..	..	..
July	..	..	..	..	..	..	..	..	..	..
August	..	..	..	..	..	..	..	..	..	..
September	..	..	..	..	..	..	..	..	..	..
October	..	..	..	..	..	..	..	..	..	..
November	..	..	..	..	..	..	..	..	..	..
December	..	..	..	..	..	..	..	..	..	..
January 1892	..	..	..	..	..	..	..	..	..	..
February	..	..	..	..	..	..	..	..	..	..
March	..	..	..	..	..	..	..	..	..	..
April	..	..	..	..	..	..	..	..	..	..
May	..	..	..	..	..	..	..	..	..	..
June	..	..	..	..	..	..	..	..	..	..
July	..	..	..	..	..	..	..	..	..	..
August	..	..	..	..	..	..	..	..	..	..

Months.	Chingleput.						Oodlupah.			
	Maduranta- kam.	Conjeevaram.	Chingleput.	Saidpet.	Tiruvallur.	Ponnéri.	Rayachoti.	Vayalpad.	Bedel.	Total.
May 1891	..	..	17	25	42	38	192	..	..	..
June	..	..	42	44	92	30	208	..	..	..
July	..	..	141	72	132	56	540	..	..	..
August	..	..	332	214	878	405	1,752	..	..	..
September	..	..	393	190	473	827	2,107	..	..	..
October	..	..	358	183	298	519	1,950	..	..	..
November	..	..	139	90	103	348	906	..	..	..
December	..	..	38	25	29	133	..	..	..	..
January 1892	..	..	..	..	..	..	..	..	..	..
February	..	..	..	..	..	..	..	..	..	..
March	..	..	..	..	..	..	..	..	..	..
April	..	..	..	..	..	..	..	..	..	..
May	..	..	..	..	..	..	..	..	..	..
June	..	..	..	..	..	..	..	..	..	..
July	..	..	..	..	..	..	..	..	..	..
August	..	..	..	..	..	..	..	..	..	..

III-B.

Statement showing the average number of persons relieved gratuitously at kitchens in each month during the years 1891 and 1892—cont.

Months.	Nellore.				Kurnool.			
	Udayagiri.	Kanigiri.	Darsi and Podili.	Total.	Markapur.	Cumbum.	Kolkuntla.	Total.
December 1891	..	..	..	..	..	67	..	67
January 1892	..	..	..	..	84	243	..	332
February	..	..	..	..	131	281	..	412
March	..	..	..	..	178	251	9	438
April	..	..	..	..	185	249	20	454
May	..	95	..	95	152	264	71	487
June	17	94	..	111	203	284	95	582
July	6	126	44	175	184	255	10	449
August	2	75	45	122	170	165	..	335
September	..	3	4	7	72	51	..	123

Months.	Bellary.				Anantapur.			
	Adoni.	Alur.	Bellary.	Total.	Dharma- varam.	Gooty.	Anantapur.	Tadpatri.
January 1892	..	..	..	..	..	120	..	158
February	..	..	..	..	65	322	..	184
March	21	16	..	37	61	93	4	82
April	13	16	..	29	33	67	13	43
May	13	13	3	29	29	32	30	40
June	13	18	11	42	26	..	21	13
July	19	23	3	45	12	..	8	..
August	..	31	..	31	..	..	..	..
September	..	..	..	..	..	..	..	..

STATEMENT showing the average total number of persons relieved in each month during the years 1891 and 1892.

Months.	Coimbatore.							
	Tinnevely.	Pollachi.	Erode.	Coimbatore.	Palladam.	Dharmapuram.	Udamalpet.	Blavani.
March 1891	..	..	..	..	..	..	..	..
April	253	240	..	..	..	..	..	..
May	1,639	370	..	..	..	..	..	..
June	1,342	208	..	..	..	..	..	..
July	768	423	..	..	..	..	..	..
August	729	646	..	..	..	..	..	..
September	524	1,021	..	589	213	172	..	1,820
October	..	578	320	290	609	1,374	19	3,313
November	..	598	522	56	1,948	3,197	1,278	7,377
December	..	362	280	..	974	1,432	1,183	4,64
January 1892	..	115	183	..	1,235	1,130	1,113	5,173
February	..	..	..	..	699	1,183	541	4,768
March	..	..	..	..	..	..	63	3,286
April	..	..	..	..	..	..	..	63
May	..	..	..	..	..	..	..	..
June	..	..	..	..	..	..	..	..
July	..	..	..	..	..	..	..	..

III-c.

Statement showing the average total number of persons relieved in each month during the years 1891 and 1892—cont.

Months.	Salem.					North Arcot.				
	Tiruchengod.	Salem.	Dharmapuri.	Utankarai.	Total.	Kalabasti.	Pilori.	Wandiwash.	Pungasur.	Total.
February 1891	..	..	..	..	..	..	..	165	..	165
March	..	..	..	..	..	352	..	1,410	..	1,762
April	..	..	..	..	..	1,079	..	2,998	..	4,077
May	..	..	..	..	..	2,425	..	5,044	..	7,469
June	..	..	..	..	..	2,788	..	5,805	..	8,593
July	..	..	..	..	..	2,635	..	6,730	..	9,365
August	..	..	..	..	..	6,170	..	6,324	..	12,494
September	..	..	..	..	..	7,022	298	7,302	..	14,622
October	5,080	1,413	471	611	7,575	5,953	2,150	6,644	..	14,747
November	3,576	643	187	..	4,406	4,522	1,023	1,339	..	7,484
December	3,987	142	..	..	4,129	2,890	771	830	..	4,311
January 1892	4,654	111	..	..	4,765	647	101	844	..	1,092
February	4,702	91	..	..	4,793	..	..	..	87	87
March	2,828	85	..	..	2,913	..	..	..	191	191
April	5,100	90	..	..	5,190	..	..	..	780	780
May	6,999	92	..	..	6,091	..	..	..	1,866	1,866
June	6,760	65	..	..	6,825	..	..	..	1,843	1,843
July	4,385	..	..	..	4,385	..	..	..	488	488
August	753	..	..	..	753	..	..	..	..	..

Months.	Chingleput.							Nellore.	
	Madurantakam.	Conjeevaram.	Chingleput.	Saidpet.	Tiruvallur.	Pontari.	Total.	Pdhr.	Venkatagiri.
February 1891	..	..	..	70	185	667	928	..	..
March	352	518	649	413	1,194	1,824	4,449	..	..
April	715	418	1,152	148	1,164	1,065	4,662	..	..
May	1,198	768	1,358	923	768	1,530	6,924	..	..
June	1,191	460	2,278	719	1,902	1,713	8,263	..	..
July	1,292	626	2,107	538	1,644	1,490	7,691	43	37
August	1,695	1,265	2,185	621	1,004	2,497	9,267	437	64
September	1,904	842	1,901	878	2,236	1,635	9,398	864	28
October	1,770	1,430	2,424	1,036	1,573	1,566	9,849	869	16
November	1,200	898	1,222	582	1,197	1,553	6,643	..	..
December	513	794	659	290	618	800	3,764	..	..
January 1892	20	37	30	14	9	126	286	..	..

Months.	Nellore—cont.							
	Gudhr.	Nellore.	Rapur.	Atmakdr.	Udayagiri.	Kanigiri.	Darsi and Pedili.	Total.
July 1891	35	..	150	150	..	..	..	395
August	918	..	367	640	..	..	..	2,525
September	437	..	429	2,076	..	..	..	3,942
October	409	2	32	719	..	..	..	3,916
November	242	14	442	187	..	..	..	1,030
December	505	..	401	157	..	..	..	1,163
January 1892	..	..	..	332	1,573	147	1,615	3,647
February	..	..	..	76	371	1,518	1,765	3,733
March	..	..	..	210	1,377	1,431	2,504	5,688
April	..	..	..	105	1,622	1,346	3,406	6,444
May	..	..	..	131	3,116	95	7,281	11,203
June	..	..	..	196	6,371	366	14,759	21,665
July	..	..	..	..	4,688	486	10,679	15,853
August	..	..	..	..	446	343	2,036	3,825
September	..	..	..	..	..	..	..	..

III-c.

Statement showing the average total number of persons relieved in each month during the years 1891 and 1892—cont.

Months.	Cuddapah.							
	Vayalpad.	Madanapalle.	Kadiri.	Rayachoti.	Cuddapah.	Sidhout.	Badvel.	Total.
May 1891	..	..	..	170	..	..	..	170
June	..	..	..	325	..	..	..	325
July	..	..	..	159	..	..	..	159
August	..	..	..	404	..	..	..	404
September	..	..	..	1,399	..	..	..	1,399
October	..	..	..	748	..	..	..	748
November	..	..	..	259	..	..	..	259
December	..	..	..	..	..	..	..	..
January 1892	502	632	..	948	..	269	646	2,997
February	126	654	36	1,418	..	300	979	3,513
March	146	622	658	1,796	..	132	1,746	5,100
April	548	897	669	2,871	..	562	3,564	9,111
May	717	1,781	92	3,555	167	541	5,179	12,032
June	997	1,307	68	3,584	115	369	5,053	11,483
July	650	416	3	1,833	43	90	2,700	5,736
August	78	41	..	776	..	..	1,490	2,385
September	..	..	..	266	..	..	..	267

Months.	Kurnool.							Bellary.	
	Marapur.	Cumbun.	Koilkuntla.	Nandyal.	Nandikotkur.	Ramallakot.	Pattikonda.	Total.	Admi.
November 1891	977	374	..	..	..	..	..	1,351	..
December	1,448	444	..	..	..	354	..	2,246	608
January 1892	4,437	2,339	39	..	39	434	..	7,288	831
February	6,366	4,917	465	..	495	661	..	13,432	2,408
March	8,188	8,650	1,714	123	548	1,159	278	24,875	2,667
April	8,511	11,191	2,635	139	442	1,338	319	29,701	2,944
May	8,306	12,973	4,128	68	616	1,818	618	24,875	3,421
June	7,825	11,084	3,789	..	162	1,249	1,573	29,109	3,776
July	5,995	8,741	1,781	..	106	208	712	17,543	4,288
August	5,023	4,524	770	..	..	..	150	17,543	1,208
September	1,285	1,177	..	..	..	..	..	10,476	..
								2,462	454

Months.	Bellary—cont.				Anantapur.			
	Hospet.	Bellary.	Rayadurg.	Total.	Dharmavaram.	Gooty.	Anantapur.	Total.
December 1891	173	125	102	1,839	394	..	..	394
January 1892	447	1,058	21	5,586	515	120	..	793
February	108	1,131	116	6,035	552	322	..	1,181
March	81	1,311	420	7,334	482	93	173	402
April	74	1,764	259	9,167	350	57	385	513
May	..	2,752	..	12,835	169	32	445	696
June	..	3,209	..	18,052	128	..	649	617
July	..	2,722	..	10,775	13	..	148	..
August	..	1,225	..	5,460	..	..	..	161
September	..	147	..	601	..	..	..	..

* This figure excludes 12 coolies employed in Hadgalli taluk.

IV.
Abstract Statement of Expenditure on relief works in each district during 1891-92.

Districts.	Class of work.	Expenditure.						Normal value of works in column 5.	Excess cost of works in column 6.	
		Actual.	Cost of works.		For which value of work done not reported.	For which value of work done reported.	6			7
			4	5						
1	2	3	4	5	6	7	8	9		
Coimbatore	Roads by Local Fund	Rs. A. P. 74,420 3 5	Rs. A. P. 1,274 13 2	Rs. A. P. 74,420 3 5	Rs. A. P. 74,050 6 10	Rs. A. P. 369 12 7	Rs. A. P. 369 12 7	Rs. A. P. 369 12 7		
	Establishment	1,274 13 2	..	..	..	..	..	..		
	District, Total ..	75,695 0 7	1,274 13 2	74,420 3 5	74,050 6 10	369 12 7	369 12 7	369 12 7		
	Irrigation by Public Works Department	1,113 10 0	..	1,113 10 0	1,113 10 0	1,113 10 0	1,113 10 0	1,113 10 0		
	Minor Irrigation	3,701 3 7	769 14 11	3,701 3 7	2,400 11 8	1,300 7 11	1,300 7 11	1,300 7 11		
	Establishment	769 14 11	..	..	..	..	..	..		
	Total ..	5,584 12 6	769 14 11	4,814 13 7	3,614 5 8	1,300 7 11	1,300 7 11	1,300 7 11		
	Roads	1,10,370 4 10	2,678 14 1	1,10,370 4 10	71,070 15 11	39,299 4 11	39,299 4 11	39,299 4 11		
	Establishment	2,678 14 1	..	..	..	..	..	..		
	District, Total ..	1,18,633 15 5	3,448 13 0	1,16,183 2 6	74,585 5 7	40,599 12 10	40,599 12 10	40,599 12 10		
North Arcot	Irrigation by Public Works Department	50,976 7 6	50,976 7 6	..	..	..	..	..		
	Establishment	19,843 4 4	19,843 4 4	..	..	..	..	..		
	Minor Irrigation	11,238 13 11	11,238 13 11	..	..	..	..	..		
	Total ..	82,058 9 9	82,058 9 9	..	..	..	..	..		
	Roads	52,300 9 0	6,299 15 7	52,300 9 0	36,144 3 6	16,156 5 6	16,156 5 6	16,156 5 6		
	Miscellaneous	6,299 15 7	..	..	..	..	..	..		
	District, Total ..	1,40,659 3 4	88,359 9 4	57,300 9 0	36,144 3 6	16,156 5 6	16,156 5 6	16,156 5 6		
	Irrigation by Public Works Department	96,897 1 8	3,436 3 1	96,897 1 8	96,897 1 8	..	..	..		
	Establishment	3,436 3 1	..	..	..	..	..	..		
	Minor Irrigation	82,043 11 2	..	82,043 11 2	82,043 11 2	..	..	..		
Chingleput	Total ..	1,82,890 0 6	3,436 3 1	1,80,453 13 5	1,80,453 13 5	..	..	..		
	Roads	13,126 13 8	..	13,126 13 8	13,126 13 8	..	..	..		
Chingleput	District, Total ..	1,97,016 13 3	3,436 3 1	1,93,580 10 1	1,93,580 10 1	..	..	..		

Abstract Statement of Expenditure on relief works, &c.—cont.

Districts.	Class of work.	Expenditure.					Normal value of works in column 5.	Excess cost of works in column 6.
		Actual.	Cost of works.		For which value of work done not reported.	For which value of work done reported.		
			4	5					6	7
1	2	3	4	5	6	7		
Nellore	Irrigation by Public Works Department	Rs. A. P. 9,260 3 11	Rs. A. P. 4,516 13 11	Rs. A. P. 9,260 3 11	Rs. A. P. 5,081 3 3	Rs. A. P. 4,179 0 8		
	Establishment	4,516 13 11	..	..	..	..		
	Minor Irrigation	55,067 4 11	1,893 2 4	55,067 4 11	53,973 7 4	1,093 13 8		
	Establishment	1,893 2 4	..	..	..	..		
	Roads ..	70,737 9 1	6,410 0 3	64,327 8 10	59,054 10 6	6,272 14 4		
	Establishment	1,88,241 3 6	8,929 12 1	1,88,241 3 6	58,278 8 9	129,962 10 9		
	Miscellaneous	36,345 9 8	..	36,345 9 8	35,792 1 8	553 8 0		
	District, Total	3,04,254 2 4	15,339 12 4	2,88,914 6 0	1,53,125 4 11	135,789 1 1		
	Irrigation by Public Works Department	Rs. A. P. 57,604 2 0	Rs. A. P. 14,938 6 10	Rs. A. P. 57,604 2 0	Rs. A. P. 42,956 2 11	Rs. A. P. 14,647 15 1		
	Establishment	14,938 6 10	30,916 14 11	..	..	..		
Minor Irrigation	30,916 14 11	..	..	..	..			
Cuddapah	Roads ..	1,03,459 7 9	45,855 5 9	57,604 2 0	42,956 2 11	14,647 15 1		
	Establishment	61,668 15 5	12,785 8 3	81,668 15 5	34,523 4 2	27,145 11 3		
	Miscellaneous	12,785 8 3	..	7,648 10 6	6,021 3 4	1,627 7 2		
	District, Total	1,85,562 9 11	58,640 14 0	1,26,921 11 11	83,500 10 5	43,421 1 6		
	Irrigation by Public Works Department	Rs. A. P. 6,800 2 7	Rs. A. P. 10,444 12 1	Rs. A. P. 6,800 2 7	Rs. A. P. 2,939 11 1	Rs. A. P. 3,860 7 6		
	Establishment	10,444 12 1	..	..	..	..		
	Roads ..	17,244 14 8	10,444 12 1	6,800 2 7	2,939 11 1	3,860 7 6		
	Miscellaneous	3,647 12 0	..	3,647 12 0	3,647 12 0	..		
	District, Total	5,249 4 11	..	5,249 4 11	1,798 9 3	3,450 11 8		
	Irrigation by Public Works Department	Rs. A. P. 26,141 15 7	Rs. A. P. 10,444 12 1	Rs. A. P. 15,697 3 6	Rs. A. P. 8,386 0 4	Rs. A. P. 7,311 8 2		
Establishment	10,444 12 1	..	..	..	..			
Bellary	Roads ..	19,457 4 11	9,898 11 8	19,457 4 11	10,158 13 7	9,298 7 4		
	Establishment	9,898 11 8	..	..	..	..		
	District, Total	29,356 0 7	9,898 11 8	19,457 4 11	10,158 13 7	9,298 7 4		

Abstract Statement of Expenditure on relief works, &c.—cont.

Districts.	Class of work.	Expenditure.					Normal value of works in column 5.	Excess cost of works in column 6.
		Actual.	Cost of works.		For which value of work done, reported.	For which value of work done, reported.		
			For which value of work done, reported.	For which value of work done, reported.				
1	2	3	4	5	6	7		
Bellary—cont	Roads ..	RS. A. P. 1,66,595 13 5	RS. A. P. 5,598 6 11	RS. A. P. 1,66,595 13 5	RS. A. P. 1,04,977 9 4	RS. A. P. 61,618 4 1		
	Establishment ..	5,598 6 11	..	..	..	..		
	District, Total ..	2,01,550 4 11	15,497 2 7	1,86,053 2 4	1,15,136 6 11	70,916 11 5		
	Irrigation by Public Works Department ..	1,57,726 4 9	24,066 2 6	1,57,726 4 9	1,06,864 0 3	50,862 4 6		
	Establishment ..	24,066 2 6	..	..	8,339 0 0	..		
Kurnool	Minor Irrigation ..	8,339 0 0	..	8,339 0 0	8,339 0 0	..		
	District, Total ..	1,90,131 7 3	24,066 2 6	1,66,065 4 9	1,15,203 0 3	50,862 4 6		
	Roads ..	2,12,483 11 11	..	2,12,483 11 11	1,46,486 11 11	65,998 0 0		
	Miscellaneous ..	1,018 8 6	..	1,048 8 6	1,948 8 6	..		
	District, Total ..	4,03,663 11 8	24,065 2 6	3,79,597 9 2	2,62,737 4 8	1,16,860 4 6		
	Grand Total ..	16,53,177 11 11	2,20,501 2 1	14,32,676 9 10	10,01,252 5 3	4,31,424 4 7		

V.

NOTE on the grain trade of the famine period.

The general activity of the grain trade of the last two years so far as it is carried by rail may be gauged from the comparative table given on the margin showing the total volume carried by rail during the last five years. It will be seen that during 1889-90 over 23,000 tons more grain was carried than in the previous year and that further increases of 32,500 and 73,600 tons took place in the two succeeding years, respectively. Details of how this trade affected different parts of the Presidency are shown in the following table:—

Year.	Foreign.		Internal.	Total.
	Imports.	Exports.		
	TONS.	TONS.	TONS.	TONS.
1887-88 ..	54,466	17,418	187,266	259,150
1888-89 ..	47,051	29,112	229,030	305,193
1889-90 ..	69,081	32,565	226,554	328,200
1890-91 ..	110,095	16,764	233,939	360,798
1891-92 ..	134,283	29,858	270,315	434,456

Year.	Nature of trade.	Kistna.	Ceded Districts and Kurnool.	Nellore.	Chingleput and North Arcot.	Madras (port).	South Arcot, Tanjore and Trichinopoly including ports.
1	2	3	4	5	6	7	8
1887-88 ..	Imports	TONS. No record.	TONS. 12,201	TONS. 356	TONS. 14,213	TONS. 55,831	TONS. 40,197
	Exports	Do.	12,729	241	74,405	10,183	80,747
	Net .. { Imports ..	No record.	..	115	..	46,448	..
	Exports ..	Do.	528	..	60,192	..	40,550
1888-89 ..	Imports	..	10,458	931	9,864	53,620	49,078
	Exports	5	19,831	1,463	103,380	15,386	80,958
	Net .. { Imports ..	..	..	..	..	38,234	..
	Exports ..	5	9,373	523	93,516	..	81,880
1889-90 ..	Imports	524	11,001	904	92,641	56,091	57,388
	Exports	18,067	13,930	1,749	91,481	15,491	78,298
	Net .. { Imports ..	17,543	2,929	845	68,840	39,600	..
	Exports ..	..	..	..	..	..	81,010
1890-91 ..	Imports	3,960	8,935	3,577	23,481	50,423	46,460
	Exports	5,448	25,643	1,310	64,947	17,190	101,704
	Net .. { Imports ..	..	..	2,287	..	33,233	..
	Exports ..	1,488	16,708	..	41,466	..	54,944
1891-92 ..	Imports	2,387	49,133	5,267	67,823	38,422	41,507
	Exports	8,830	31,076	3,195	31,631	35,181	147,954
	Net .. { Imports ..	..	17,457	2,072	26,192	3,241	..
	Exports ..	6,443	..	..	..	..	106,447

Year.	Nature of trade.	Madura and Tinnevely including port.	Salem, Coimbatore and Malabar including port.	Total of Presidency				Total.
		9	10	Mysore.	Nizam's territory.	Bombay.	Or pro c	1.
1887-88 ..	Imports	TONS. 62,679	TONS. 55,656	TONS. 41,305	TONS. 5,280	TONS. 7,732	..	TONS. 54,486
	Exports	14,237	12,142	9,661	1,280	6,465	..	17,118
	Net Imports ..	48,342	43,413	31,644	4,000	1,267	..	37,048
1888-89 ..	Imports	56,800	95,335	36,152	4,581	6,333	..	47,951
	Exports	11,909	25,224	11,158	6,970	10,984	..	29,113
	Net .. { Imports ..	44,891	70,111	24,974	..	..	2	17,739
	Exports ..	..	..	..	2,386	4,651	..	..
1889-90 ..	Imports	51,593	90,693	54,643	8,931	5,407	100	69,081
	Exports	13,930	26,173	11,027	20,267	1,270	1	32,566
	Net .. { Imports ..	37,663	70,520	43,616	..	4,137	99	36,516
	Exports ..	..	..	..	11,338	..	..	..
1890-91 ..	Imports	107,427	99,391	89,501	16,295	4,287	12	130,096
	Exports	12,053	22,408	10,081	4,969	1,713	1	18,764
	Net Imports ..	95,374	76,983	79,420	11,326	2,574	11	98,999
1891-92 ..	Imports	97,912	112,146	68,159	47,457	15,843	2,824	134
	Exports	11,658	30,047	27,997	1,398	456	7	37
	Net Imports ..	86,254	82,099	40,162	46,059	15,387	2,817	104

2. As regards the sea-borne grain trade, the figures for the last two years show a corresponding increase. They are as noted on the margin. The imports from beyond India may be disregarded, as in no year did they much exceed 200 tons. The imports into the Presidency from Indian ports were in 1891-92 about double the usual amount and these came chiefly from beyond the Presidency as is shown by the comparative steadiness of the exports coastwise. There was also a great curtailment of the exports of grain abroad. Details of the results of this trade as it affected different parts of the Presidency are shown in the next table.

Year.	Imports.	Exports.		Total.
		Foreign.	Coastwise.	
1887-88 ..	TONS. 162,104	TONS. 86,390	TONS. 64,145	TONS. 312,639
1888-89 ..	136,826	95,694	92,928	325,448
1889-90 ..	152,331	99,276	106,030	356,637
1890-91 ..	258,817	84,438	119,975	463,230
1891-92 ..	316,629	68,582	108,391	493,552

Year.	Nature of trade.	Ganjam.	Vizagapatam.	Godavari.	Kistna.	Nellore.	Madras.
1	2	3	3	4	5	6	7
1887-88 ..	Imports	TONS. 98	TONS. 4,980	TONS. 449	TONS. 445	TONS. 165	TONS. 16,004
	Exports	6,386	80	12,817	15,928	278	2,395
	Net .. { Imports ..	6,288	4,900	12,368	15,483	113	13,609
	Exports ..						
1888-89 ..	Imports	1,966	16,421	20	74	519	13,137
	Exports	2,412	89	37,335	15,077	316	5,171
	Net .. { Imports ..	476	16,332	27,315	15,003	203	6,966
	Exports ..						
1889-90 ..	Imports	4,893	9,157	35	269	208	13,006
	Exports	1,793	1,934	47,526	15,637	181	7,160
	Net .. { Imports ..	3,100	7,223	47,491	15,333	57	10,840
	Exports ..						
1890-91 ..	Imports	28	331	391	104	235	31,532
	Exports	16,243	2,051	51,784	27,251	280	1,878
	Net .. { Imports ..	16,215	1,720	51,373	27,150	45	29,654
	Exports ..						
1891-92 ..	Imports	2	1,848	132	279	974	96,710
	Exports	22,176	2,273	35,628	22,825	121	455
	Net .. { Imports ..	22,174	425	35,496	22,546	853	96,255
	Exports ..						

Year.	Nature of trade.	South Arcot.	Tanjore.	Madura.	Tinnevely.	Malabar.	South Canara.	Presidency total.
		8	9	10	11	12	13	14
1887-88 ..	Imports	TONS. 16	TONS. 9,143	TONS. 4,401	TONS. 16,950	TONS. 106,942	TONS. 2,511	TONS. 162,104
	Exports	11,120	93,507	1,689	4,573	6,286	25,476	150,535
	Net .. { Imports ..	11,104	84,364	2,712	12,377	100,656	22,965	11,569
	Exports ..							
1888-89 ..	Imports	1,056	6,552	4,521	11,558	72,222	3,316	136,826
	Exports	12,007	66,092	2,185	5,221	10,200	31,106	166,623
	Net .. { Imports ..	10,951	59,540	2,336	6,337	69,19	27,790	51,796
	Exports ..							
1889-90 ..	Imports	4,674	12,569	6,693	7,130	85,648	4,864	152,331
	Exports	10,909	72,079	4,413	6,223	10,324	29,157	204,306
	Net .. { Imports ..	6,235	59,519	5,480	907	75,324	24,293	51,975
	Exports ..							
1890-91 ..	Imports	5,815	16,690	21,354	20,756	158,235	3,946	258,817
	Exports	5,707	57,357	1,363	5,391	9,357	25,738	204,413
	Net .. { Imports ..	108	40,667	19,991	15,365	148,878	2,708	54,404
	Exports ..							
1891-92 ..	Imports	2,747	10,128	14,479	84,204	145,268	3,758	314,639
	Exports	3,959	51,277	2,531	3,995	8,643	23,040	179,923
	Net .. { Imports ..	1,212	35,149	11,948	30,209	136,625	1,708	139,706
	Exports ..							

3. In 1888-89 the rail-borne trade in grain between different parts of the Presidency was far greater than in the preceding year, the increase occurring chiefly in the imports into the Salem, Coimbatore and Malabar block, chiefly from the adjoining districts to the east; Chingleput and North Arcot in that year exporting about 33,000 tons net more than in the previous year. There was also a material increase in the imports into the South Arcot, Tanjore and Trichinopoly block. The following year was marked by a great increase in the imports from Mysore and from Hyderabad, though in the case of the latter province there was against this a very much larger export than in

years. During the latter half of the year the Salem, Coimbatore and Malabar, the Madura and Tinnevely and the Madras blocks greatly increased their imports, whilst from Chingleput and North Arcot, the net exports decreased largely as these districts imported heavily, the balance of the total grain trade both by sea and by rail stood against the Presidency. It was in this year, 1889-90, that the initial failure of crops in the Carnatic and Southern districts occurred, and the result was shown in the following year when the net imports into the two southern districts during the first half of the year were between four and five times as large as in either half of the year ending September 1889, and in the second half of the year increased still more. During the second half of this year, 1890-91, the imports into the Salem, Coimbatore and Malabar block were double what they had been before, whilst the net exports from Chingleput and North Arcot diminished to a comparatively small figure. On the other hand, the net exports from the Ceded districts and Kurnool increased largely. In this year there was a great development of the imports, chiefly ragi, from Mysore, whilst from Hyderabad also a very brisk trade sprang up.

4. The very active import trade which sprang during the latter half of 1890, has continued ever since on a large scale and during the whole period, the southern districts have been importing very large though latterly decreasing quantities of grain by rail and by sea. Owing to the increase of their imports and restriction of exports from Chingleput and North Arcot early in 1891, the June quarter of that year was the last during which these districts were able to show a net export of grain, whilst the total trade for the half-year ending September 1891 was one of net imports into that block. Consequently, the supplies of grain received at Madras from the interior fell off rapidly and the town had to depend more and more on imports by sea. The demands of the Salem, Coimbatore and Malabar block were at their maximum during the half-year ending March 1891, but were chiefly met by enormous imports by sea into Malabar, and they continued to be very large for the whole of the following twelve months.

5. Up to September 1891, the Ceded Districts and Kurnool had maintained a net export trade to other parts of the Presidency. During the half-year ending with that month, the imports from Mysore also were on an unprecedented scale, but later on they fell off, and that province began to draw considerable quantities of rice from Madras. When this occurred, however, large supplies of cholam and cumbu began to pour in from Hyderabad and Bombay, and so the gross imports were very large. At about this time the exports from the Deccan districts stopped and during the latter half of the year 1891-92, these districts showed a net import far larger than the total net exports of the preceding 18 months. This phase continued up to September last, and during the twelve months then ended, these districts imported 55,000 tons of grain over and above what they exported during the same period. Chingleput and North Arcot were forced, during 1892, to increase their imports and to further curtail their exports largely, so that instead of showing a net export they showed a considerable net import, and this feature continued up to the end of September last. Madras continued to receive far less grain than usual from the interior, and until quite recently, during the latest half-year referred to, the increase in the supplies sent inland from the port was so great as to greatly reduce the balance standing against the town. Towards the end of 1891, the South Arcot, Tanjore and Trichinopoly block increased its exports by rail by nearly 50 per cent., and large exports are still being made from that block, whilst the total net exports both by rail and by sea have been very large. Although Madura and Tinnevely were able to get along with less imported grain in the latter portion of the period alluded to, their imports continued large, and during the six months ending September last, the net imports into that block were considerably smaller than they were in the corresponding period of the previous year. The Salem, Coimbatore and Malabar block also towards the end of the year 1891-92 and since has been able to get along with much smaller imports than before.

6. Particulars of the trade referred to above are given in the appendix for each grain dealt with, and the following abstracts show the net results of the grain trade, during each quarter during the period of distress and for each half-year from 1889 up to September 1892 :-

STATEMENT showing the net quarterly results of the grain-trade from October 1890 to September 1892.

Districts.	Nature of trade.	Net trade during the quarter ending															
		December 1890.		March 1891.		June 1891.		September 1891.		December 1891.		March 1892.		June 1892.		September 1892.	
		Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
Ganjam	Sea-borne ..	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.	
	..	1,896	..	11,763	..	11,093	..	5,243	..	2,651	..	3,187	..	659	..	21	
	Vinagapatam ..	309	..	779	..	765	..	826	..	268	..	1,424	..	1,600	..	..	
	Godavari	9,293	..	14,560	..	13,140	..	8,295	..	9,282	..	4,779	..	6,075	..	8,391	
Kistna	Sea-borne ..	4,898	..	4,636	..	6,742	..	10,152	..	2,585	..	3,066	..	4,188	..	8,131	
	..	1,003	..	250	..	304	..	636	..	4,845	..	2,438	..	4,600	..	1,069	
	Rail-borne ..	3,895	..	4,886	..	6,438	..	9,616	..	7,439	..	5,504	..	8,788	..	9,200	
	Total ..	6,239	..	4,661	..	2,911	..	13,686	..	23,327	..	10,727	..	14,922	..	6,068	
Ceded Districts and Kar-nool.	Sea-borne ..	1,384	..	1,303	..	119	..	122	..	314	..	854	..	344	..	..	
	..	1,384	..	1,414	..	99	..	1,413	..	314	..	1,769	..	1,514	..	658	
	Rail-borne ..	13,189	..	4,694	..	6,451	..	13,337	..	8,285	..	10,031	..	2,512	..	2,120	
	Total ..	6,506	..	12,408	..	16,453	..	21,517	..	17,708	..	40,587	..	13,543	..	12,956	
Chingleput and North Arcot.	Sea-borne ..	11,163	..	7,731	..	7,300	..	2,531	..	6,052	..	1,078	..	2,299	..	..	
	..	16,669	..	30,139	..	24,283	..	24,068	..	11,656	..	39,459	..	11,244	..	..	
	Rail-borne ..	11,796	..	11,863	..	6,748	..	10,144	..	8,289	..	11,191	..	7,387	..	10,233	
	Total ..	26,427	..	16,603	..	14,506	..	25,062	..	40,979	..	26,210	..	16,163	..	26,687	
South Arcot, Tanjore and Trichinopoly including Pondicherry and Nagapatam.	Sea-borne ..	38,223	..	27,578	..	20,984	..	35,196	..	49,248	..	37,401	..	23,630	..	36,220	
	..	6,285	..	9,775	..	14,769	..	9,640	..	14,663	..	3,086	..	10,268	..	5,176	
	Rail-borne ..	33,326	..	21,531	..	16,782	..	27,697	..	28,445	..	13,430	..	10,129	..	22,637	
	Total ..	39,621	..	31,206	..	31,551	..	37,337	..	43,108	..	16,516	..	20,397	..	27,813	
Madura and Minnerully including Tuticorin.	Sea-borne ..	24,190	..	22,282	..	26,476	..	2,654	..	22,672	..	73,848	..	33,816	..	1,659	
	..	23,940	..	18,376	..	23,111	..	39,782	..	16,129	..	4,076	..	12,089	..	12,426	
	Rail-borne ..	48,480	..	40,618	..	61,486	..	42,637	..	37,801	..	77,928	..	44,895	..	14,124	
	Total ..	..	..	8,421	..	4,564	..	..	..	47	..	6,269	..	..	..	..	
South Canara	Sea-borne ..	4,221	..	54,108	..	26,764	..	817	..	26,739	..	99,176	..	33,869	..	3,906	
	..	34,971	..	25,643	..	25,385	..	44,901	..	26,996	..	9,455	..	18,041	..	19,693	
	Rail-borne ..	29,292	..	76,838	..	53,139	..	44,774	..	46,739	..	86,429	..	54,909	..	16,257	
	Total ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Presidency Total ..	Sea-borne ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	Rail-borne ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	

Net results of grain-trade during the half-years ending

District or Block.	Direction.	1889.		1890.		1891.		1892.	
		March.	September.	March.	September.	March.	September.	March.	September.
		TONS.	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.
Ganjam	Imports ..	1,661	4,149	1,040	2,555	13,659	16,336	..	..
.. ..	Exports ..	..	..	..	..	..	..	680	..
Vinagapatam	Imports ..	13,527	4,860	2,244	633	1,088	1,690	1,166	5,406
.. ..	Exports ..	..	..	..	..	..	..	..	..
Godavari	Imports ..	26,000	21,610	24,381	27,018	23,853	21,435	14,061	13,466
.. ..	Exports ..	6,869	11,531	21,276	19,847	8,783	16,053	12,934	17,988
Kistna	Imports ..	..	1,232	4,169	5,807	10,901	16,596	..	..
.. ..	Exports ..	498	..	211	578	2,797	1,470	1,464	2,172
Ceded Districts and Kurnool	Imports ..	..	..	..	..	..	..	..	..
.. ..	Exports ..	..	..	..	..	..	..	..	..
Nellore	Imports ..	..	..	..	..	..	..	..	..
.. ..	Exports ..	..	..	..	..	..	..	..	..
Chingleput and North Arcot	Imports ..	49,045	43,443	20,494	23,603	17,883	..	18,316	5,933
.. ..	Exports ..	22,901	17,625	32,854	26,073	26,810	48,350	51,146	26,068
Madras	Imports ..	56,055	45,384	41,129	29,301	66,101	56,151	86,650	60,448
.. ..	Exports ..	15,470	12,167	31,901	59,103	70,925	68,786	59,624	48,230
South Arcot, Tanjore and Trichinopoly	Imports ..	64,775	59,728	87,204	72,180	154,048	104,222	115,729	60,019
.. ..	Exports ..	23,294	6,670	19,624	5,862	16,780	4,841	14,641	4,089
Salem, Coimbatore and Malabar	Imports ..	..	..	..	..	..	..	..	..
.. ..	Exports ..	..	..	..	..	..	..	..	..
South Canara	Imports ..	..	..	..	..	..	..	..	..
.. ..	Exports ..	..	..	..	..	..	..	..	..
Presidency Total	Imports ..	48,051	34,864	20,811	42,152	106,032	97,901	147,383	72,137
.. ..	Exports ..	..	..	..	..	..	..	..	..
Official year	Imports ..	..	14,063	..	148,184	..	245,264	..	..
.. ..	Exports ..	..	..	..	..	..	..	..	..

30th January 1893.

(Signed) C. BENSON, M.R.A.C.,
Deputy Director of Agriculture.

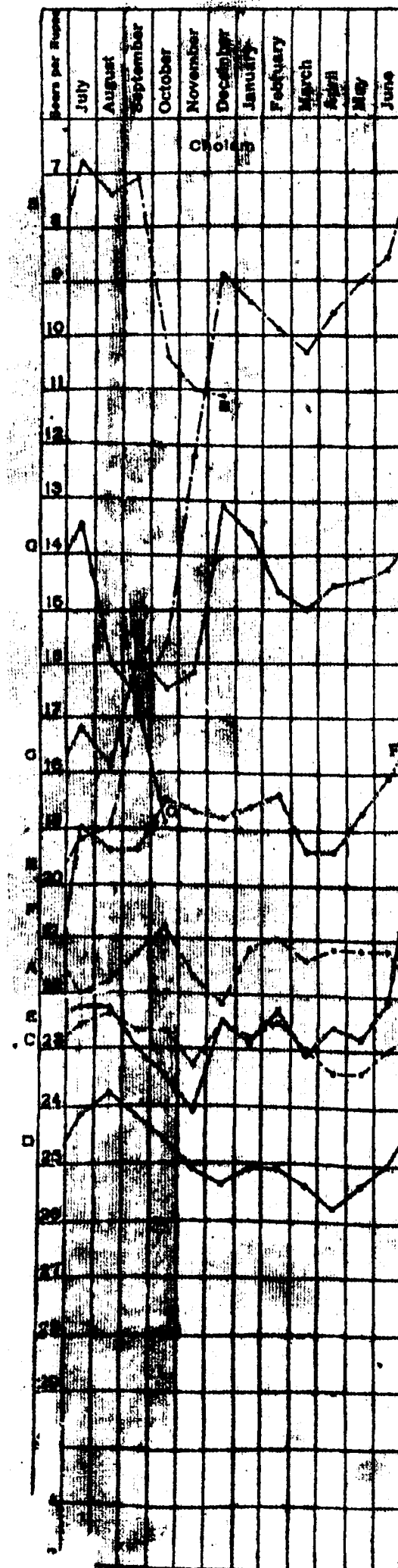
V-A
Statement showing the net grain-trade (sea-borne and rail-borne) for a series of half years from October 1888 to September 1892.

Grains.	During the half-year ending	Ganjam.	Vizagapatnam.	Godavari.	Kistna.	Ceded Districts and Kurnool.	Nellore.	Chingleput and North Arcot.	Madras.	South Arcot, Tanjore and Trincomopoly.	Madura and Tinnevely.	Salem, Coimbatore and Malabar.	South Canara.	Presidency Total.
		TONS.	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.	TONS.
Wheat ..	March 1889	..	4	..	..	1,269	13	210	1,134	202	130	566	132	3,654
	September "	4	3	2	15	1,440	9	260	1,106	210	102	633	86	4,823
	March 1890	..	..	1	9	1,572	27	260	1,325	205	179	607	111	4,178
	September "	1	3	1	10	1,095	27	307	1,129	160	169	1,144	99	3,787
	March 1891	..	3	6	75	845	32	237	1,160	214	123	959	116	3,784
Paddy ..	September "	..	..	..	47	635	9	238	1,010	291	169	681	126	3,090
	March 1892	1	83	2	9	1,285	..	71	854	240	112	778	132	3,640
	September "	10	69	47	61	634	14	121	744	192	139	497	120	2,648
	March 1889	316	11,146	9,203	4,489	244	357	8,918	1,086	20,634	9,026	8,924	8,056	20,888
	September "	1,653	3,519	6,176	1,935	466	219	6,591	1,427	9,222	6,681	13,816	1,437	18,336
Rice ..	March 1890	..	..	..	5,710	1,120	87	2,014	4,076	11,793	17,704	33,699	7,837	58,436
	September "	..	199	11,894	13,124	1,789	68	3,293	812	11,324	30,876	22,652	1,211	32,438
	March 1891	163	100	13,537	7,527	344	190	4,420	3,297	34,673	44,097	53,922	7,708	140,129
	September "	2,287	13	8,611	12,455	799	320	941	5,948	30,197	43,363	21,353	794	140,129
	March 1892	209	887	1,722	4,713	1,693	597	10,307	4,732	57,880	42,938	48,348	5,301	39,636
Rice ..	September "	..	3,263	5,170	10,751	428	741	3,793	3,919	32,386	28,106	18,277	660	9,874
	March 1889	1,430	1,556	11,453	699	2,991	84	41,799	13,267	40,902	7,298	49,056	15,944	41,226
	September "	1,421	223	8,916	4,903	1,816	102	43,915	8,878	43,344	6,590	36,976	6,337	56,553
	March 1890	444	562	11,294	13,400	701	44	29,818	18,855	40,507	9,082	47,784	13,142	38,328
	September "	1,816	91	8,067	5,401	606	132	26,814	13,814	39,863	13,492	20,975	5,051	18,438
Rice ..	March 1891	11,121	172	5,683	1,302	722	26	21,413	20,557	33,827	12,184	71,622	9,768	21,783
	September "	11,493	171	1,270	1,270	3,035	561	13,120	27,204	34,109	13,380	29,678	4,660	2,062
	March 1892	3,949	734	6,412	3,571	10,943	41	4,800	12,149	31,961	12,419	42,603	11,000	39,001
	September "	536	1,453	4,463	3,571	2,858	30	7,720	12,149	31,939	9,311	16,930	4,203	7,229
	March 1889	..	..	..	..	5,975	3	863	364	61	97	716	..	1,229
Chelum and cumbu.	September "	..	81	..	24	354	2	126	224	86	132	662	..	206
	March 1890	..	..	..	6	800	38	816	224	447	350	613	..	955
	September "	..	..	..	1,631	3,190	12	214	380	56	2,224	349	1	18
	March 1891	..	..	..	1,245	9,719	12	214	433	59	3,243	6,284	..	2,175
	September "	..	8	..	1,066	14,751	2,375	3,385	1,370	937	720	21,456	..	18,177
Chelum and cumbu.	March 1892	..	34	..	389	13,495	75	3,464	261	246	404	9,793	..	98,125
	September "	..	292	..	746	12,618	512	1,266	3	38	443	10,467	..	26,193
	March 1889	362	84	4,105	1,631	1,079	160	3,087	6,145	2,644	..	4,924	700	3,952
	September "	138	128	4,105	1,631	1,079	160	3,087	6,145	2,644	..	4,924	700	3,952
	March 1890	473	1,046	2,002	3,041	3,041	44	4,012	6,317	2,927	1,248	2,808	79	2,457
Gram and pulses..	September "	..	733	9,08	1,147	1,312	366	2,372	5,165	3,125	5,672	1,168	1,176	6,985
	March 1891	2,382	869	4,245	1,204	1,614	176	2,726	6,311	3,648	5,960	4,921	1,068	12,976
	September "	2,412	1,364	4,245	1,204	1,614	176	2,726	6,311	3,648	5,960	4,921	1,068	12,976
	March 1892	1,256	1,364	4,245	1,204	1,614	176	2,726	6,311	3,648	5,960	4,921	1,068	12,976
	September "	146	236	3,288	2,768	4,505	49	1,201	7,561	4,636	7,263	6,481	666	21,298

Statement showing the net grain-trade (sea-borne and rail-borne) for a series of half-years from October 1888 to September 1892—*cont.*

Grains.	During the half-year ending	Ganjām.	Vizaga- patam.	Gôdvāri.	Kistna.	Ceded Districts, and Kurnool.	Nellore.	Chingle- put and North Arcot.	Madras.	South Arcot, Tanjore and Trin- comopoly.	Madras and Tin- nevely.	Salem, Cotiba- tore and Malabar.	South Canara.	Presidency Total.
Other grains	March 1889	177	745	103	51	283	375	762	905	1,570	866	11,430	127	13,486
	September "	1,176	1,000	1,011	674	573	97	859	1,005	2,969	—	10,560	65	15,137
	March 1890	61	177	65	11	69	213	7,058	4,058	6,322	1,484	8,866	69	28,181
	September "	17	..	259	204	605	37	3,644	4,782	8,835	6,782	15,606	24	38,511
	March 1891	3	4	354	29	781	1,155	5,587	5,052	145	6,318	17,640	2	33,475
	September "	144	4	388	24	2,657	289	13,369	6,259	2,009	2,000	24,168	108	44,985
	March 1892	424	97	519	397	126	214	7,880	3,003	1,833	438	11,009	224	19,624
	September "	2	135	532	1,705	33	984	7,172	1,658	—	913	2,869	88	18,135
Total	March 1889	1,661	13,527	25,000	6,860	6,529	498	49,045	22,301	56,055	15,470	64,775	23,294	48,051
	September "	4,140	4,880	21,610	11,531	1,232	998	49,443	17,025	42,384	12,167	69,728	6,570	34,864
	March 1890	1,040	2,344	25,881	21,376	4,189	211	20,494	32,854	41,129	31,501	87,204	19,624	20,811
	September "	2,555	533	27,018	19,847	6,807	578	23,603	26,973	29,301	59,103	72,180	6,862	42,162
	March 1891	13,659	1,088	23,853	8,763	10,901	2,797	17,883	36,810	65,101	70,925	154,048	16,280	106,132
	September "	16,336	1,590	21,435	16,633	16,696	1,470	7,875	48,350	56,151	68,726	104,222	4,641	97,891
	March 1892	6,837	1,165	11,991	12,934	34,052	1,454	18,316	51,146	86,450	59,024	116,729	14,641	147,363
	September "	680	5,406	15,403	17,588	20,980	2,172	5,933	26,068	60,448	48,230	60,019	4,089	72,137

DIAGRAM SHOWING THE COURSE OF PRICES IN THE COIMBATORE DISTRICT
DURING THE RECENT PERIOD OF DISTRESS,
COMPARED WITH THE RATES PREVAILING IN 1876-77
AND WITH AVERAGE NORMAL RATES



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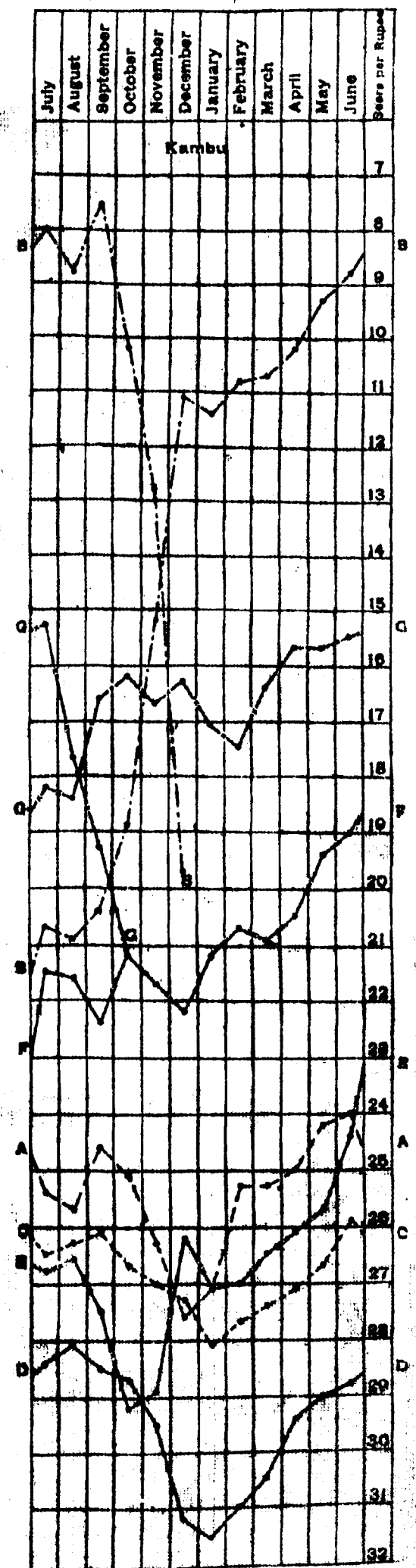


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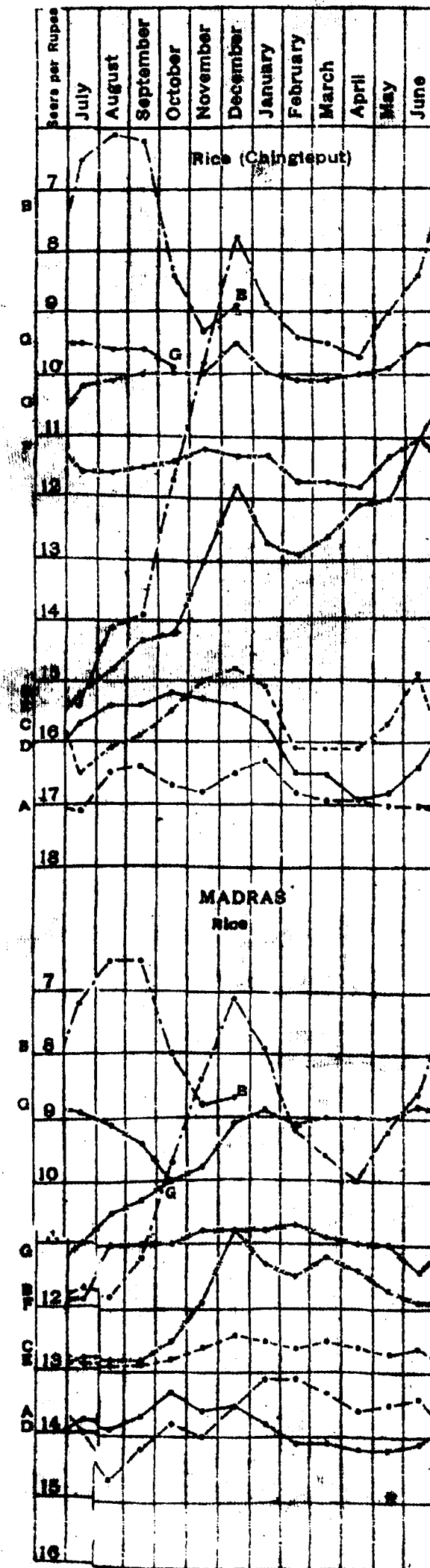
DIAGRAM SHEWING THE COURSE OF PRICES IN THE CHINGLEPUT DISTRICT AND MADRAS

DURING THE RECENT PERIOD OF DISTRESS.

COMPARED WITH THE RATES PREVAILING IN 1876-77

AND WITH AVERAGE NORMAL RATES.

47



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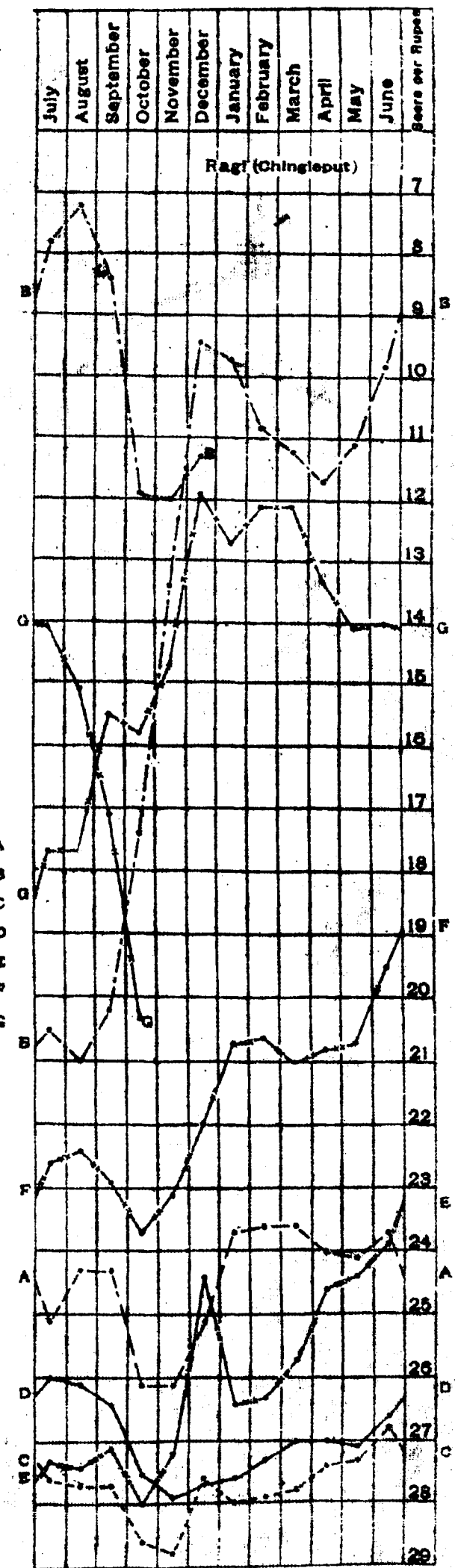
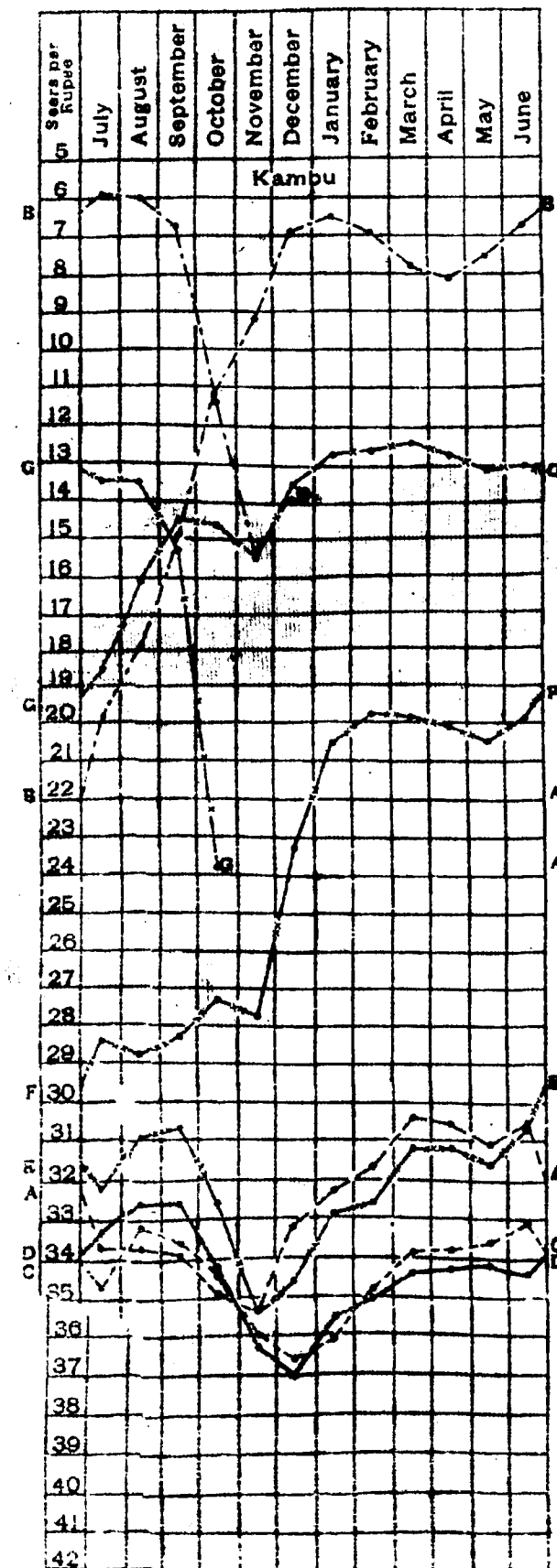


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DIAGRAM SHEWING THE COURSE OF PRICES IN THE CUDDAPAH (SUB-DIVISION)
DURING THE RECENT PERIOD OF DISTRESS.
COMPARED WITH THE RATES PREVAILING IN 1876-77
AND WITH AVERAGE NORMAL RATES.



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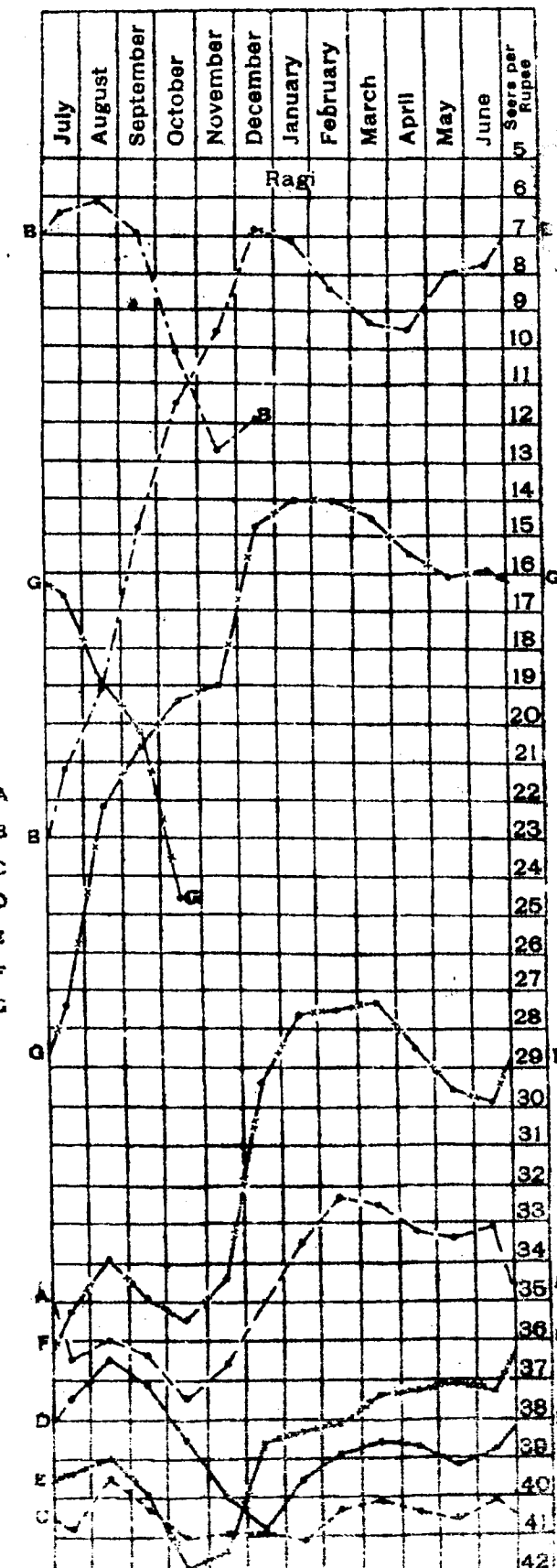
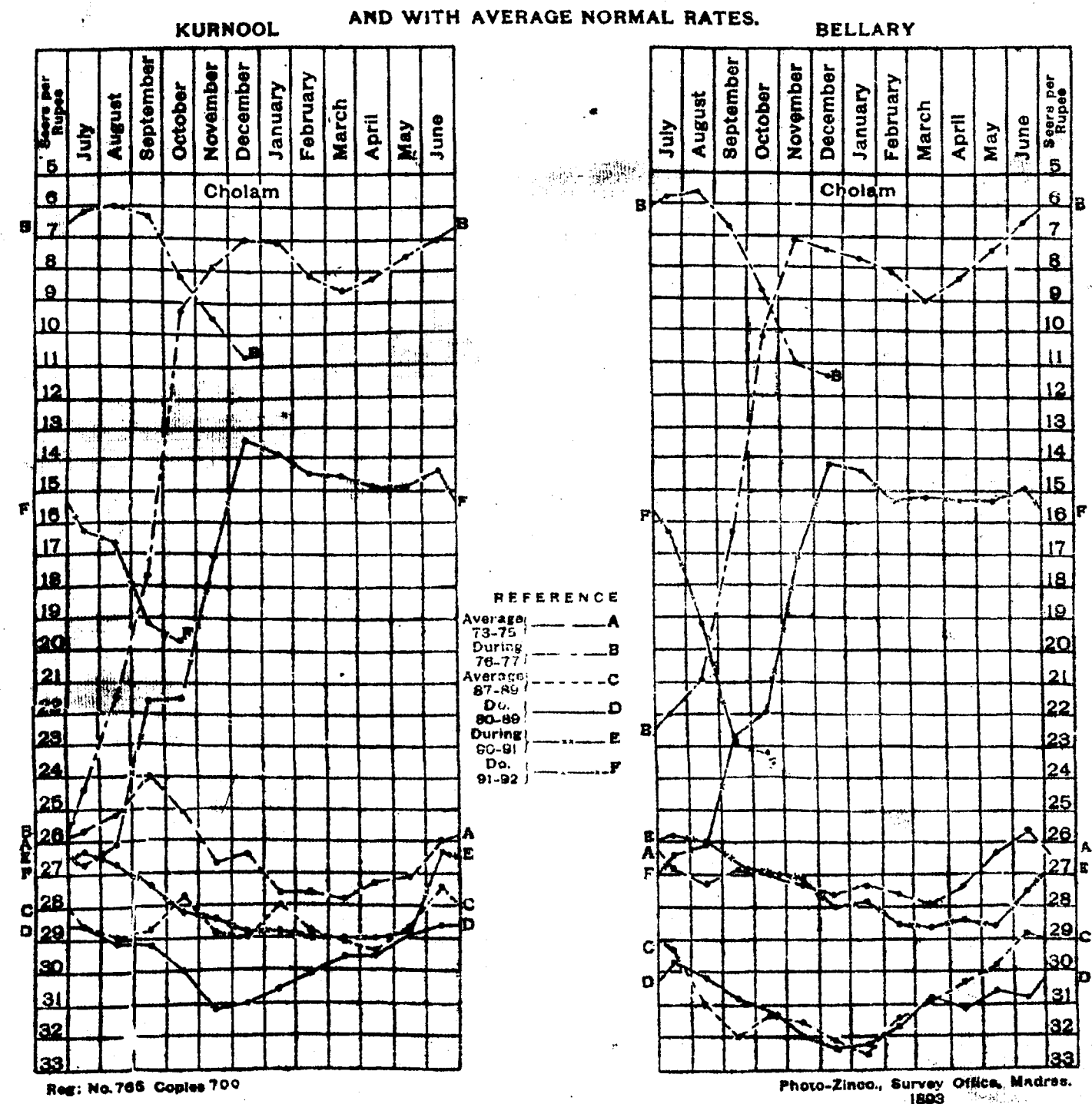


Photo-Zinco., Survey Office, Madras
1893

DIAGRAM SHEWING THE COURSE OF PRICES IN THE BELLARY (PROPER) & KURNOOL DISTRICT
DURING THE RECENT PERIOD OF DISTRESS,
COMPARED WITH THE RATES PREVAILING IN 1876-77



PROCEEDINGS OF THE BOARD OF REVENUE
(REVENUE SETTLEMENT, LAND RECORDS AND AGRICULTURE).

READ—the following letter from J. STURROCK, Esq., Collector of Coimbatore, to the Secretary to the Commissioner of Revenue Settlement and Director of the Department of Land Records and Agriculture, dated 14th November 1892, No. 1739 :—

I have the honour to submit the general report on the conduct of famine operations in this district, called for in Board's Proceedings, dated 12th September 1892, Mis. No. 7430.

2. Anxiety arose towards the close of 1890, when I called for special reports which enabled me to inform Government *
* G.O., dated 19th February 1891, No. 127. on the 20th December of that year that even if there were no more rain, though

the crops over the greater part of the district would be poor, there would be no absolute failure except of particular crops in small areas. Little or no more rain came, and my anticipations were realized, but as garden crops had done well and cotton promised fairly, it was not considered necessary to do more than watch carefully the condition of the Udampet taluk, half of Dhárápúram and Palladam and Polláchi and tracts here and there in Coimbatore, refraining from distraining in these tracts cattle, ploughs or dry lands other than well lands or black cotton lands. In February the condition of the Erode taluk seemed less satisfactory, but I was able to write more hopefully of all other parts except Polláchi, where the bad year followed another year

of low outturn, and the Board ordered † that minor irrigation works should be at once started in the most affected villages of the taluk with a view to test the demand for labour.

† Board's Proceedings, dated 2nd March 1891, No. 113.

3. The Polláchi Tahsildar was thereupon directed to take in hand the repair of the Kódavádi tank which was commenced on the 18th March, and within three days from the opening of the work as many as 351 laborers were employed. On my visiting the work with the Head Assistant Collector in the beginning of April, when the numbers were over 800, we found that tasking was not being properly attended to by the Tahsildar, and I therefore put Mr. Todhunter, the Assistant Collector, in special charge of the work, the Head Assistant's services being required to inspect and report on the condition of other parts of his charge. The improved tasking led to the numbers decreasing in a week to 559, but as no further falling off seemed likely and the earthwork was nearly completed, I requested the Local Fund Engineer to arrange to provide stone-breaking on the Polláchi road near the boundary of the Palladam taluk. Rain fell before the work was opened and no laborers appeared to seek for employment until the 8th May, but a fortnight later there were at work 67 men, 250 women and 18 children.

4. On the 20th May I left for England on a few months' leave on urgent private affairs, and on the 25th idem the Sub-Collector in charge reported ‡ that distress was increasing in parts of Palladam and Polláchi, and the Tahsildars of Erode and Dhárápúram had reported that there was not sufficient work for coolies.

‡ Board's Proceedings, dated 1st June 1891, No. 314.

5. On the 27th June the Commissioner, in company with the Acting Collector Mr. W. J. Tate, inspected the coolies employed on stone-breaking on the Polláchi

road, and found no signs of emaciation or want among them. He also noted that the great majority of the coolies were women.

* Board's Proceedings, dated 3rd July 1891, No. 378. On the 28th June the Board sanctioned the opening of stone-breaking works on two more roads, and ordered preparations to be made to start others if, owing to a continued failure of the south-west monsoon, the numbers increased rapidly. These works were calculated to be sufficient to meet pressing wants in the Polláchi, Palladam, Coimbatore and Udamalpet taluks. The road works were from the beginning placed under the supervision of Mr. Stephens, the Local Fund Engineer.

6. On the 4th August Mr. Tate submitted a full report on the position of affairs and the remedial measures proposed. The numbers on the relief works having risen to 2,265 and distress having been reported in the Dhárápuram taluk, sanction was accorded for the extension of stone-breaking works to that taluk and for the opening of relief kitchens in eight places in the taluks of Palladam, Polláchi, Udamalpet, Dhárápuram and Coimbatore, the Commissioner having satisfied himself by personal inspection that kitchens were really necessary. Special Revenue Inspectors were also entertained in the Palladam, Polláchi and Dhárápuram taluks to expedite work under the Land Improvement and Agricultural Loans Acts.

7. On the 2nd September I rejoined the district, and a few days afterwards accompanied His Excellency the Governor and the Commissioner in a tour of inspection of some of the works and kitchens in the Palladam, Polláchi, Udamalpet and Dhárápuram taluks. At this inspection the condition of the workers was found to be so good that the Commissioner had doubts as to whether relief works had not been started, in Dhárápuram at any rate, before it was actually necessary, and it was decided to reduce the wage in order to ensure that none but the really needy would continue to attend.

8. By this time matters had improved in Polláchi and Coimbatore, but the south-west monsoon had been specially deficient in Erode and Bhaváni. On a work newly opened on the borders of Palladam and Erode, I found some of the coolies in a worse condition than any I had seen before, and a visit to the Bhaváni taluk, which had been very carefully inspected in detail by Mr. Todhunter, led to my seeking and obtaining permission to open works in that taluk.

9. Early in October the prospect was brightened by abundant and timely rain throughout the greater part of the district, which led to ploughing and sowing on a large scale. The numbers on relief works, which had been as high as 8,666 on the 12th September, fell to 3,708 on the 17th October, and all anxiety as to the continuance of serious distress seemed to be practically over, except as regards Dhárápuram, Erode and Bhaváni where the rain had not been so satisfactory as elsewhere. It was not, however, possible at once to close the works anywhere, as the early agricultural operations were not sufficient to afford regular work to all who were destitute, and new works had to be opened in Bhaváni. By the end of the month all but five kitchens had been closed.

10. Throughout November the rainfall continued fairly satisfactory except in Kollegál, and the numbers on relief works fell to 2,806, and towards the end of the month orders were issued to close several of the works and all the kitchens except two in the Dhárápuram taluk, which, however, were also closed soon after.

11. In December the rainfall was deficient in the northern and eastern portions of the district, but prospects continued favorable in the parts which had been first affected, and on the 2nd January 1892 it was found possible to issue orders to close all but one work at each centre and to give notice that the others would be closed on the 15th January. It was, however, anticipated that it might be necessary, after the harvest was over, to open works again in Erode and Bhaváni. Though the season had been exceptionally bad in Kollegál, previous seasons had been so good that it was hoped the people would be able to get on without relief until the south-west monsoon set in.

12. By the end of January the harvest was either over or the crops so far advanced that it was possible to make a fairly accurate estimate of the agricultural position for the year, and it appeared that the Polláchi, Udamalpet, Palladam, Coimbatore and Satyamangalam taluks could be regarded as being generally in a really prosperous state. Dhárápuram, Erode and Karúr could not be called prosperous, but necessity for relief was hardly anticipated. The Kollegál and Bhaváni taluks alone were in such a state that it was considered necessary to call for reports under section 35 of the Famine Code. But for the large amounts disbursed as loans under the Land Improvement Act, it could not have been so confidently anticipated that relief work would not be required in Erode, Karúr and Dhárápuram.

13. Further inquiries with regard to Kollegál led me to consider that the time had not come for the submission of a special report under section 35 of the Famine Code, and in this view the Board concurred, but in parts of Bhaváni, where the previous season had also been bad, it was plainly necessary to re-open the relief works, and my proposals to that effect having received the Board's sanction, works in the Neringipet firka of that taluk were again begun early in April. From about the same time, however, the season began to improve. The numbers on the works never rose above 883. They fell off gradually in May and June, and orders to close all but one were issued on the 4th July. The last work was closed about the middle of the same month.

14. To sum up the above it will be seen that distress first arose in the south-western taluk of the district where the previous season had been bad and prices had risen greatly in consequence. Relief had to be commenced there in March 1891, and as distress gradually extended to the north and the east owing to a deficient south-west monsoon, works were opened in Coimbatore, Palladam and Dhárápuram in July, in Udamalpet in August and in Erode in September, on the 15th of which month the numbers at work rose as high as 9,373. From this date matters began to improve. Works were closed in Coimbatore where the distress had been on a small scale, and the numbers fell off elsewhere, but there were considerable fluctuations, as laborers went off to plough and sow as showers fell, returning again as soon as these operations were over, and the improvement in Polláchi was counterbalanced by an increase of distress in the eastern and northern taluks, involving the opening of works in the Bhaváni taluk towards the end of October. From this date a general improvement set in and the numbers gradually fell off to 2,788 on the 2nd January 1892, when orders were issued to close all the works by the middle of the month. The amount of private work available in connection with the harvest rendered it possible to do this, although the improvement in prices was not very marked; but the outturn in the northern and eastern taluks was so poor owing to the failure of rain after the beginning of November that it seemed doubtful for some time whether it would not be necessary to re-open work in Kollegál, Bhaváni, Erode, Karúr, and Dhárápuram. In Kollegál, however, where the failure was worst, previous seasons had been so good that the people were able to tide over the distress by means of their own resources, and in

Erode, Karúr and Dhárápúram the large amounts of loans granted under the Land Improvement Act provided an unexpected amount of private work. In Bhaváni, in addition to large amounts disbursed as loans, works were found to be necessary and they were started early in April. From this date the season rapidly improved and they were closed again in the middle of July, the numbers never having risen above 883 on the 30th April.

15. With the exception of one irrigation work in Polláchi supervised by Mr. Todhunter and a little prickly-pear clearing and well-digging here and there, the whole of the relief works were in connection with roads, and were carried out under the supervision of Mr. Stephens, the Local Fund Engineer, with regard to whom the

* Board's Proceedings, dated 3rd July 1891, No. 378. Commissioner remarked "after a visit to the district that he had succeeded in obtaining from the coolies engaged in

stone-breaking, and this too for a famine wage, a task which, while not unduly taxing the powers of any of them, would ensure that none but the really needy would resort to the works. This remark, I consider, may be held applicable to Mr. Stephens' arrangements for the utilization of the whole amount of Rs. 74,420 expended between May 1891 and July 1892 on works distributed over seven taluks and for which he entertained only a small additional establishment costing less than two per cent. on the outlay on works. That his tasks were not too light was apparent from the objections everywhere made to them at first, and from the amount of work turned out, and it was equally clear they were not too heavy, as the people, who went away when their demands for lighter tasks were refused, were not the weak and hungry, but the strong and well-to-do who had only come in the hope of finding a lighter task than usual. I may also mention that from the beginning Mr. Stephens worked on the principle of obtaining fair work from gangs where the strong and weakly were mixed up, and I am glad to see that the propriety of doing so has received a more distinct recognition in paragraph 8 of Board's Proceedings, dated 27th May 1892, No. 396, and in G.O., dated 11th August 1892, No. 839, Revenue, than it finds in the Famine Code. (Owing to the works having been started in time while the people were still in a fit state to do a fair amount of work for a little more than a subsistence wage, it was never necessary to form separate weakly gangs with a nominal task. Payments were made twice a week, and, in addition to the departmental checks, arrangements were made under which disbursements were made occasionally in the presence of a Tahsildar or a Divisional officer. I received no reports of short payments discovered by inspecting officers, nor did I find any thing wrong myself on occasions when I went along the roads making inquiries and on pay days making coolies show me the wage they had received.

16. The establishment of eight kitchens for the distribution of cooked food to children and infirm adults was sanctioned in August 1891, two in each of the taluks of Palladam, Udampalpet and Polláchi, one in Dhárápúram taluk and one in Coimbatore taluk. The last mentioned and one of those sanctioned for Polláchi were never opened, but a second one was found necessary for the Dhárápúram taluk. A third was also proposed and opened for a few days, but found not to be really required, and I ordered it to be closed when I inspected it in October. The largest attendance at the kitchens was 927 on the 24th October, from which date the numbers gradually fell off. One was closed in November. Three of the remaining five were closed in the middle of December, the attendance having fallen below 100 at each, and the last two were closed early in January 1892. The expenditure amounted to no more than Rs. 5,236 and the operations were on too small a scale to call for much remark; but I think that the allowance for each person should not be so much grain, but so much husked or cleaned grain in the case of cholam and kambu, and flour in the case of ragi, and the size of a pudding mould should be prescribed as is done for jails with instructions that the food shall be cooked to such a consistency that a given weight will fill the mould. Local experiments led to startling discrepancies in the weight of the portion of cooked food corresponding to the raw ration prescribed in paragraph 188 of the Famine Code.

17. There can be no question that the necessity for direct relief in this district was very much lessened by the large amounts disbursed as loans under the

	RS.
Polláchi	33,250
Udamálpet	45,223
Palladam	65,934
Dhárápúram	53,211
Karúr	65,501
Erode	73,235
Bhaváni	61,060
Coimbatore	26,127
Total	4,23,541

Land Improvement Loans Act, and this was especially the case early in 1892, when, but for these loans, it would probably have been necessary to open works in Erode and perhaps in Karúr and Dhárápúram, while those in Bhaváni must have been on a much more extended scale. The loans disbursed in the affected taluks from the beginning of distress up to the end of May 1892 were as much as Rs. 4,23,541 distributed between the different taluks as shown in the margin.

18. As stated more than once above the condition of the coolies on the works was generally good, although some of the new arrivals undoubtedly showed signs of suffering from insufficient food. During the whole period no deaths from starvation came under my notice, the nearest approach being the case of a man in the Bhaváni sub-jail who died from diarrhoea brought on by the improved diet he received in jail after having been insufficiently fed for some time before his arrest. There was no widespread outbreak of sickness distinctly traceable to want, but the death-rate, both from cholera and other causes, was sufficiently above the average to indicate that privation had rendered a certain proportion of the population more liable to sickness than in ordinary years.

19. Owing, I have no doubt, to the prompt steps which were taken to open relief works and disburse large sums as loans for agricultural works, the suffering of the people was not so great as to drive them in very large numbers to crime, and, though the increase of grave crime in the district for 1891 was as high as 33 per cent. when compared with the preceding year, it was under 5 per cent. when compared with 1887 and 1888.

20. Throughout the whole period of scarcity, until the good rainfall in October 1891, cattle suffered severely in nearly all taluks, but it was only in Kollegal and Bhaváni that the suffering extended into 1892. At an early date I offered free grazing in forests somewhat remote from the cultivated lands, but declined to open to all classes of cattle the forests then being grazed over by cattle for which permits had already been taken out, as the grazing in these forests was very much worse than usual and the cattle of those who habitually took out permits had certainly the first claim to it. The offer of free grazing in distant forests was not availed of and grazing concessions were therefore limited to free extension of permits for one quarter from 1st October 1891 in Palladam and Udampalpet and from 1st April 1892 in Bhaváni. Though the cattle suffered severely, and many changed hands at low prices, and others were sold out of the district, and many walking skeletons were seen, I do not think the mortality of useful cattle was great, and, when rain eventually came, there was no serious difficulty in bringing a somewhat unusually large area under the plough.

21. The Board has asked me to bring to notice the conduct of any officers who have done specially good work. Foremost of all I must mention that of Mr. Stephens, the Local Fund Engineer, whose admirable work I have mentioned above, and have

* Letter, dated 1st August 1892, Reference on Board in a separate communication. * He specially mentions the good work of the three supervisors and two overseers. The

Divisional officers had very little to do in connection with works, but the preliminary inspections required to decide whether works were necessary, involved much hard travelling and exposure. Mr. Harding, the Head Assistant Collector, was unsparing in his labours in this direction and acquired a thorough knowledge of the condition of the crops and of the people throughout his division. My Sub-Collector was frequently changed, but Mr. Wynch worked very hard at inspection during his short tenure of office, and it was through Mr. Moberly's efforts that the special Well

Rules got into satisfactory working order in the sub-division. Mr. Todhunter, Assistant Collector, did excellent work in introducing tasking amongst 880 coolies who were doing pretty much as they liked on a tank work before his arrival, and afterwards on inspection work in the Head Assistant's division and in Bhavani. The

* G. Narayanasami Aiyar.

† R. Ramachendra Aiyar.

‡ Minakshi Sundram Pillai.

Tahsildars of Palladam * and Udamalpet † took care to acquaint themselves thoroughly with the condition of their taluks, and, though the Tahsildar of Bhavani ‡ had not their judgment or experience, he certainly spared no pains to acquire

information and to make himself thoroughly familiar with every corner of his charge.

22. The reports submitted by the Head Assistant Collector and the Local Fund Engineer are forwarded herewith. As the present Sub-Collector did not join the district until the distress was nearly over, he has submitted no report.

ENCLOSURE No. 1.

From H. O. D. HARDING, Esq., Head Assistant Collector of Coimbatore, to the Collector of Coimbatore, dated 1st November 1892, No. 621.

I have the honour to submit my report on the recent famine operations in my division. The first signs of scarcity began in 1889. In the hot weather April and May 1889 there was unusually heavy rain in all three taluks. This filled the wells and saved garden cultivation for the year. The south-west monsoon was not very good however. It came late and the early cholum crop suffered in consequence. There was heavy rain in September which benefited the intermediate crops, cumbu and samai, in Pollachi and the Avanashi division of Palladam. The north-east monsoon was bad. After some rain in October there was very little rain till the middle of December. Late cholum, gram, cotton, &c., all suffered. At the end of December Mr. Thomson was thinking seriously of famine and special reports were called for. Rains in December and January 1890 however much improved matters, and after all a famish crop was reaped. Still the year was not a good one and tended to impoverish the small holders of the bad lands which gave very little produce. In 1890 the April-May rains were not very good. They were followed by a weak late monsoon which gave very small outturns in Palladam and Udamalpet and poor even in Pollachi. The north-east monsoon was worse. There was no rain hardly in September anywhere and the north-east monsoon held off till the 25th October. Then in five days some 19 inches of rain fell in Pollachi and Udamalpet and some 10 inches in Palladam. This rain enabled the ryots to sow but as it was followed by almost no more till February 1891 again very small outturns and none in many places were the result. Also this heavy rain breached tanks and channels, filled up wells with mud and did damage to the extent of many thousands of rupees. Gardens were buried in sand; if a field was on a slope the soil was all washed from the upper end to the lower, making the whole field almost useless. Such crops as struggled up under all these disadvantages were eaten largely by insects. The result of all these things was to reduce all but the richer people to great poverty. The ryots had to spend instead of making money for three seasons. The coolies who live in the main by grain food and at harvest were starving because the harvests had been little or nothing. It was obvious that relief measures would soon be necessary.

1891 promised to be a gloomy year and evil prophecies about Khara and Nandana went about among the people. The hot weather came—April and May—with almost no rain. Sowing was much retarded and the coolies had no work. The first relief work opened was at Kodavadi in Pollachi. A minor irrigation work was started there in April and in a very short time some 800 or 900 people were at work. At this time all over the division prickly-pear was a principal article of food for the cooly classes and I believe it was of great value in saving life. The roots of the aloe hedge were also eaten in some fashion and various other wild seeds were added to grain to swell the food-supply. In Pollachi rain fell in April and over the whole taluk heavily on the 22nd May. This gave a little work and the taluk was rapidly sown; but people could not live on the sight of growing crops. Grain stores there were none and there was not work enough for the coolies, consequently stone-breaking was opened on the Pollachi-Udamalpet, the Pollachi-Palladam, the Palladam-Salem, and the Palladam-Udamalpet roads; also roads were opened from the Udamalpet-Palladam road to Pulavadi and Senjerimalai. I have not got details of the figures reached on these works, but they are of course available in your office or the District Board's office; neither have I the dates of opening and closing each work. In general the works were in progress from July-August 1891 up to January 1892. The south-west monsoon of 1891 was better than in the previous year, but very partial; Pollachi and south and west and north of it did well. East of Pollachi and the whole of Udamalpet did very badly.

Palladam, except the portion adjoining Udamalpet, did fairly well. Thus the people began to recover. In October 1891 a heavy north-east monsoon set in and the famine ended with the harvesting of the north-east monsoon crops.

Udamalpet, which had no harvest in the south-west monsoon in 1891, did extremely well in the north-east. Palladam, the Avanashi firka, did badly in 1891 and was more distressed in that year than in 1890. Relief kitchens were opened at Gomangalam in Pollachi taluk, Kamaikampalayam and Senjeri Puthur in Palladam taluk and Udamalpet and Anikadavu in Udamalpet taluk. These were all opened about August 1891. The Palladam kitchens were soon closed. They never had any inmates. It was not quite sufficiently realized how far the late rains of July 1891 had improved Palladam taluk and those kitchens were not really necessary.

Gomangalam, Anikadavu and Udamalpet kitchens were closed at the end of the year. They were, I think, necessary, though not very largely resorted to. They contained upwards of 100 inmates each, either beggars or infirm persons or young children, whose parents were on relief works. The ryots having not enough for themselves had nothing for beggars. The famine wages were not enough to support a family. Hence these people came to our kitchens. The famine was the result of three bad seasons. Three bad seasons must necessarily bring famine to the cooly and small ryot class who have no savings to fall back upon. The relief works were resorted to by this cooly and small ryot class and were of very great service to them. There were no deaths from starvation, but I believe there would have been but for the works.

Visiting Kodavadi one day, after the work there was finished, I found a number of the coolies who had been turned off the work grubbing for bones in the village mound to sell as manure. This was a means of livelihood to a good many and with prickly-pear served to prevent starvation.

As regards the officers who conducted the operations there is not much to be said. I think the road overseers all did their duty. I frequently inspected the works and did not find complaints against the overseers. Mr. Stephens' management of all the works was excellent. The kitchens were under the Tahsildars and were well managed. There were, however, small affairs and call for no remarks.

The peculiarity of this famine was that it was felt most severely in Pollachi taluk and the parts of Udamalpet and Palladam bordering thereon. The famine in these parts was more severe according to the general statements of the people than in 1876-77. They say that in those years there was no famine in Pollachi taluk at all except such as was occasioned by the incursion of thousands of starving persons from country further north and east. The oldest inhabitants did not remember three such bad years in succession in the Pollachi taluk. The famine showed up the advantage of wells and it was most refreshing after several miles of brown, stony, bare country to come to a dip in the ground and find a few flourishing gardens. But the wells also gave out in many places before the rains of October 1890 and many were damaged, so that garden cultivation also suffered to some extent. I should add that Mr. Todhunter, who had just joined the district, did good work in charge of the Kodavadi relief works and also in making considerable general inspections elsewhere. I purposely give no details and figures in this report because I have not got them completely and they are available in your office and the Treasury. It is merely a general report based on my own knowledge of what has occurred as I have been in the division since 1889. Cholera went about a good deal in a sporadic form after the cholum harvest in 1891, i.e., for about July-August. This was, I think, due originally to coolies weakened by previous insufficient and bad food, eating too much raw cholum in the harvest fields. It began in the villages west of Pollachi to which thousands of people went for harvest. They took the disease all over the division.

As regards the actual relief work done there is no doubt that stone-breaking is very good work, easily managed and sufficiently unpleasant not to attract people not in need of it; but, I think, the labour might have been more usefully expended. We have miles of broken stones heaped by the road sides. Before it will be used much of it will be washed away by wind and rain and lost in the dust. If famine again visits us, I think it might be put to some use by expending labour on the repair of old roads and itteries. Of course the Taluk Board could not keep them up, but they would be vastly improved and be serviceable means of communication for 10 or 15 years. By that time another famine might be expected and they could be repaired again. Improvement of communications would be some slight compensation for absence of crops, whereas mere disappearing heaps of broken metal are none at all.

ENCLOSURE No. 2.

From the Local Fund Engineer, Coimbatore, to the President, District Board, Coimbatore, dated 29th September 1892, No. 187.

With reference to your endorsement, No. 1978, dated 16th instant, on Proceedings of the Board of Revenue, No. 7430, dated 12th instant, I have the honour to report that famine operations in this district were first commenced in May 1891 on the Pollachi-Palladam road. We

commenced with a few coolies, but almost at the very beginning a system of tasks was introduced, which tended to confine the operations to those who really needed work. On some works, particularly on the Coimbatore-Pollachi road, when it first became known that work for the purpose of giving relief was opened out, very large numbers flocked to it from all the surrounding villages, expecting to get paid for simply attending, having recollections apparently of the great famine of 1876-78. I have seen on the above road nearly 1,500 coolies melt away to a few hundreds on it becoming known the task each man, woman and child was expected to do, particularly when they saw that they were only paid in proportion to the work that had been done. The above road being near to head-quarters, there was more trouble on it than any other; one morning a large gang, numbering some hundreds, marched to the Collector (Mr. Tate) to complain; he, however, was firm and refused to interfere, the consequence was that all those who were comparatively well-off and were not in want of work left, but those who were really in want of work returned to it and kept on to the last. The above was more or less the experience on all our works; at first some trouble and difficulty and sometimes even odium and abuse from the coolies, but by firmness and good management order soon prevailed; those who were not really in want seldom returned, while the others worked patiently on. Tasking may appear an easy thing, but when large numbers have to be dealt with, a regular system of tasking (not one merely in name) is no child's play; it requires a deal of patience and firmness, not only with reference to the coolies, but more so in regard to the subordinates who have the dividing and sub-dividing of the gangs, the measurements of the work done by each gang to be taken, &c.

2. From the numbers who flocked to the works, and the rapidity with which the numbers diminished when it was known and felt that tasks were strictly enforced, I estimate that *but for the above system* the total expenditure on relief works in this district, instead of being Rs. 74,420, would have been *two or three times that amount*. Here I wish to state that if the Executive had been unduly interfered with in regard to tasks, &c., it would have been impossible to *create order* or a regular system; the work of the Executive, sufficiently anxious and burdensome, would have been made very much more so; but I am extremely glad to be able to say that from the Collector down to the Tahsildars (with perhaps one slight exception) there was not only no undue interference, but material help was given in convincing the work people that while every person who needed help were welcome to the relief works, they were not to expect charity or gratuitous relief, but will have to work and do their appointed task for their wage.

3. Results and experience have made it clear that the scale of tasks which were enforced in this district, while not lenient, were by no means too severe; that while sufficiently severe to keep away those who were not in need of work were sufficiently reasonable as to make it possible for those who were willing to work to earn enough for their support. The largest number employed on the works in any one day was on the 15th September 1891, when 9,378 people were registered; this number, as will be inferred from what had already been stated, would have been much larger but for the strict system of tasks which were enforced on every work.

4. Out of the 10 taluks forming this district, famine works were opened out at different times in no less than 7 taluks, from which it will be seen that the relief works were scattered about in a wide area, which made supervision all the more difficult.

5. The work in this district was carried out entirely on the TASK-WORK SYSTEM. This is different to the piece-work or petty contract system. There is no doubt that for famine relief works, when the pushing on with the work, for work sake, is no object, when it is necessary to keep down the numbers to those actually requiring help and when it is specially necessary to see that every man, woman, and child has received the wage that had been earned, and that no undue advantage is afforded to any particular section of the laborers; for all these reasons the task-work system was found the most suitable on famine relief works, though undoubtedly it is the most troublesome system for the Executive; there is not only the tasking and measuring, but also the clerical work in making up the wage due to each individual cooly in reference to the task turned out; this would be laborious at any time, but particularly so at the time of famine, when the amount due to every cooly has to be made up twice a week for purposes of payment. Few outside the department will know the extent of clerical work that had been quietly gone through by the overseers, &c., when late into the night (at times nearly all night) men were busy calculating as quickly as possible and finding out the wage due to each cooly in proportion to the work which had been done, so as to have the rolls ready for payment by the next morning. This went on night after night; it was wearying, some had broken down under it.

6. With the exception of a few temporary overseers and a couple of clerks, the work was looked after by the ordinary permanent establishment. The total cost of the temporary establishment was Rs. 1,279-13-2, which is a percentage of about 1½ on the cost of the work that had been done, which was Rs. 74,420-3-5. This extremely low percentage will show that the burden fell

on the usual permanent establishment which had the looking after their usual taluk work in addition to the famine relief operations. In this connection I would bring to notice the services of supervisors Pattabirama Iyer, Casava Rao and Mr Walker, also overseers Narasinga Rao and Candasawmi Pillai. These, in my opinion, have done specially good work.

RESOLUTION—dated 3rd December 1892, No. 766.

Recorded pending preparation of the general famine report.

(True Copies and Extract.)

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

To the Collector of Coimbatore.

1892.

Board of Revenue

(Revenue Settlement, Land Records
and Agriculture),

MADRAS.

Printed December 12th.

Proceedings, 3rd December 1892, No. 766.

Recording, pending preparation of the general
famine report, report submitted by the Collector of
Coimbatore on the conduct of famine operations
in the district during the past season.

BOARD OF REVENUE (REV. SETT., L. RDS. AND AGRI.), 5TH DEC. 1892, No. 774.

PROCEEDINGS OF THE BOARD OF REVENUE (REVENUE SETTLEMENT, LAND RECORDS AND AGRICULTURE).

READ—the following letter from E. A. SMITH, Esq., Special Deputy Collector,
Salem, to the Collector of Salem, dated 6th September 1892, No. 330-D. :—

I have the honour to submit the following report on the famine operations in
the Salem district during 1891-92.

2. The signs of distress were discovered in this district even before it was felt
by the people and they were—

- (1) failure of timely rains,
- (2) unfavorable prospects of a coming harvest; and
- (3) abnormal rise of prices consequent on the above two cases.

3. *Rainfall.*—The following statement shows the rainfall of the years 1888-89,
1889-90, 1890-91 and 1891-92, compared with the average of 10 years ending
1887-88 :—

Taluku.	AVERAGE OF 10 YEARS ENDING 1887-88.		1888-89.		1889-90.		1890-91.		1891-92.	
	April to Sep- tember.	October March.	April to Sep- tember.	October March.	April to Sep- tember.	October March.	April to Sep- tember.	October March.	April to Sep- tember.	October March.
Salem	21.57	13.08	18.97	9.31	30.79	10.14	20.53	9.16	11.59	11.75
Atur	20.82	16.10	20.35	15.25	24.75	9.75	23.14	14.13	10.52	16.97
Namakal	14.65	11.65	11.58	7.75	24.55	8.68	9.45	14.37	6.64	9.27
Tiruchengód	16.80	12.63	11.36	6.70	22.03	8.32	11.46	9.62	7.90	9.39
Dharmapuri	20.06	14.37	16.85	9.38	23.79	9.28	14.65	12.62	9.70	10.40
Hosur	18.57	13.42	14.07	12.08	21.05	13.07	23.21	15.67	9.58	12.86
Krishnagiri	18.41	13.31	17.63	11.40	23.40	13.28	17.23	19.81	14.40	8.33
Tirupatúr	20.43	13.77	19.90	13.16	22.37	13.75	22.59	8.04	12.29	9.72
Uttankari	16.85	14.23	21.63	15.86	18.28	8.69	19.84	9.62	10.67	13.94
Shevaroy Hills	42.38	24.98	44.70	24.50	60.53	14.55	32.20	20.38	18.73	15.74
District Average	20.06	14.09	18.35	11.62	25.82	10.63	18.98	12.33	11.42	8.85

Taking the rainfall up to 1890-91, it will be seen that on the whole it has
been deficient except in one monsoon, viz., the south-west monsoon of 1889-90,
during which period there has been an excess in all the taluks.

It will also be seen that the rainfall in the Salem taluk has been deficient in all
monsoons but one, the south-west monsoon of 1889-90.

In Atur the rainfall was about normal, except the north-east monsoon of 1889-90,
which was deficient.

In Namakal the rainfall has been deficient in all except two, which were good.

In Tiruchengód, except the south-west monsoon of 1889-90, the rest have been
failures.

In Dharmapuri there has been a failure of three north-east monsoons and two
south-west monsoons.

In Hosūr the seasons have been practically normal. The same is the case with Krishnagiri.

In Tirupatūr, the north-east monsoon of 1890-91 only was a failure.

Uttankarai had two successive failures of north-east monsoons.

To sum up, the rainfall was deficient in all the monsoons, except the south-west of 1889-90, in the taluks of Salem, Tiruchengód and Dharmapuri. Next comes Atūr, Námakal and Krishnagiri which had only two normal monsoons. The rest had three or more normal monsoons.

During the south-west monsoon of 1891-92, it will be seen that rainfall was less than the average in all the taluks, being less than or nearly half the average, except in Krishnagiri, Tirupatūr and Uttankarai.

As Salem, Tiruchengód and Dharmapuri taluks had already suffered from a series of bad seasons, there was good reason to fear that the failure of the south-west monsoon in 1891 would affect those taluks considerably. As Uttankarai had two successive bad north-east monsoons, the failure of south-west monsoon affected it also to some extent.

The failure of good and timely rains had its effect on the cultivation and prices, as will be seen below.

4. *Cultivation*.—The following statement shows the actual extent cultivated from April to September 1891 as compared with the average:—

Taluka.	April to September 1891.		Average.		Percentage of cultivation up to September to the average.	
	Dry.	Wet.	Dry.	Wet.	Dry.	Wet.
Salem	ACRES.	ACRES.	ACRES.	ACRES.	60.48	74.29
Atūr	81,893	5,618	140,383	7,555	27.07	74.60
Námakal	11,689	5,994	54,231	8,363	113.23	72.49
Tiruchengód	48,591	9,891	61,315	8,738	79.48	70.91
Dharmapuri	94,155	4,038	118,460	5,728	75.31	82.65
Krishnagiri	79,249	5,034	99,163	7,127	93.62	98.07
Hosūr	51,695	4,869	68,639	5,808	94.25	82.16
Tirupatūr	56,916	5,685	80,859	6,605	69.10	39.06
Uttankarai	41,956	2,743	44,546	5,260	70.12	78.64
Total	28,836	1,093	63,930	2,797		
	501,010	44,908	714,521	57,101		

Thus the cultivation up to the end of September 1891 amounted to only 501,010 acres under dry and 44,908 acres under wet, or 70.12 and 78.64 per cent. of the average cultivation for five years ending 1890-91. The decrease occurs in all the taluks in dry cultivation and in wet in all but Námakal. Under dry the decrease is very perceptible in the taluks of Salem, Atūr and Uttankarai. Next comes Námakal, Tiruchengód, Dharmapuri and Krishnagiri. With regard to Tiruchengód, it is also to be noted that the rains in May and June seem to have induced many ryots to cultivate their lands in the hope of getting further rains, which unfortunately disappointed them and they thus lost even their seed-grains. The wet cultivation in Tirupatūr and Uttankarai was much less than the average.

5. *Prices*.—The following statement compares the number of seers of 80 tolas of the staple food-grains of the district per rupee in each of the years 1887-88 to 1890-91:—

Names of grains.	1887-88.	1888-89.	1889-90.	1890-91.	April 1891.	May.	June.	July.	August.	September.	Scarcity rate.
Rice 2nd sort ..	16.3	15.2	14.0	12.47	12.1	12.0	11.6	11.3	10.7	10.4	6.5
Cholum	30.3	25.9	26.0	22.39	21.5	21.2	21.3	19.3	18.7	16.1	11.6
Cumbu	29.5	26.2	28.3	23.39	21.4	20.7	20.2	19.5	18.1	16.3	13.6
Ragi	34.0	31.7	31.5	28.27	25.8	25.9	24.43	22.6	20.7	17.7	13.6

The prices of all the food-grains have year after year risen gradually owing to a succession of bad seasons. The prices in August and September 1891 were considerably higher than the average price of 1890-91.

The following statement compares the selling price of the staple food-grains in August 1891 with the normal and the scarcity rate of the district fixed in G.O., dated 11th September 1890, No. 1137:—

Staple food-grains.	Normal rate (i.e.) average of three years ending 1875-76.	Scarcity rate sanctioned for the district in G.O., dated 11th September 1890, No. 1137.	Average price for August.	Percentage of rise over the normal rates.	Percentage below the scarcity rate.
Rice	14.30	8.5	10.7	25.17	25.88
Ragi	27.52	13.5	20.7	24.78	53.33
Cholum	23.25	11.5	18.7	19.57	62.61
Cumbu	25.92	13.0	18.1	39.17	39.23

It will be seen that the price of ragi and cholum shows a rise of less than 25 per cent. over the normal rates, that of rice shows a rise of 25.17 per cent., and cumbu 30.16 per cent. The prevailing prices were also below the scarcity rates for the district.

Hitherto the prices quoted by Tahsildars were those prevailing in the bazaars, but as the people generally purchase at the weekly markets where the prices are considerably less than at the bazaar, I would suggest that in future the average price of grain at some of the principal markets be taken as the selling price in each taluk.

6. The statistics of the rainfall, cultivation and prices and the reports of the Divisional officers showed that the only taluks giving cause for anxiety were Salem, Tiruchengód, Dharmapuri and Uttankarai which had suffered most since 1888-89, and where scarcity for drinking water and fodder was most generally felt.

7. These facts were reported to the Board by the Collector in his letter No. 1858, dated 29th August 1891, after a personal inspection of the Salem and Tiruchengód taluks. The Board thereupon agreed with the Collector in considering that in the event of a failure of the September rains, measures for the relief of distress would be necessary. On the 19th September, it was reported to the Board that early rains had failed, and that relief works should be started by the first week in October at the latest. On the 24th September, the Board's sanction was asked to open one road work in each of the taluks of Salem, Tiruchengód, Uttankarai and Dharmapuri prior to the Commissioner's inspection as a test work. This proposal the Board sanctioned in its telegram, dated 26th September, and the works were accordingly started.

8. *Test works*.—As already observed above, the rains of September having failed, it was thought advisable that steps should be taken to guard against a famine; and in order to ascertain accurately the extent to which and the localities in which relief works would be necessary, one test work was opened in each of the taluks of Salem, Tiruchengód, Dharmapuri and Uttankarai, the circumstances of which justified a test. With this object in view the following works were started as test works on the 28th September 1891:—

- (1) Repair of road from Sankari to Yedapadi in Tiruchengód taluk.
- (2) Repair of road from Omalūr to Chinnappampatti in Salem taluk.
- (3) Repair of road from Hogenkal to Dharmapuri in Dharmapuri taluk.
- (4) Repair of road from Mallápuram to Pappireddipatty in Uttankarai taluk.

These were started, because they are situated in the parts considered to be most affected, and also because road repair works afforded sufficient unskilled labour, and as the work was easily supervised and tasked, were considered most suitable for famine relief works.

The following statement shows the weekwar particulars of coolies on test works:—

Weeks.	Mallapuram to Papireddipatti.	Hojenkal to Pennagaram.	Omalur to Chinnappampatti.	Sankaridrug to Yedapadi.
Week ending 3rd October	232	392	1,412	4,056
Do. 10th do.	240	459	363	6,032
Do. 17th do.	60	461	289	3,262

Average number.

As the numbers proved that there was no great demand for work on works Nos. 1, 2 and 3 in the taluks of Uttankarai, Dharmapuri and Salem, these works were closed. Particulars of these, with the reasons for their closure, are given below (*vide* Collector's letter, No. 2637, dated 18th November 1891, printed in Board's Proceedings, No. 757, dated 2nd December 1891):—

(1) "*Road from Mallapuram to Papireddipatti.*—This work was closed on 17th October with the Commissioner's permission, as a few days' test showed that there was no real demand for labour, the coolies resorting to the works being composed mostly of children and old women; of these also a considerable number refused to attend the work on the ground that they could earn better wages by agricultural labour.

(2) "*Hojenkal-Pennagaram road.*—As regards the work started near Pennagaram in the Dharmapuri taluk, the Commissioner, who visited it at its early stage, was of opinion that the work might be closed by the 24th October, but it was kept open a little longer as the number at work showed an increase just before and after the 24th and as, owing to improper supervision, no real test was applied to judge the demand for work. On the 4th November the work was visited and found that the orders regarding the execution of work and the enforcement of task had been very much neglected, that the coolies were paid full wages for not one-eighth the quantity of work to be done, and that there was no real demand for work. Accordingly, the work was closed on the 7th November.

(3) "*Omalur-Chinnappampatti road.*—The number of coolies on the Omalur-Chinnappampatti road in the Salem taluk was 243 on the date of Commissioner's inspection, viz., 6th October. On the 12th October the overseer under my orders informed them that a regular task would be enforced, upon which no coolies came to work on the 13th. The overseer thereupon reported this, upon which it was ordered that the work should not be closed, but kept open until the Collector could see it. Coolies, however, resorted to the work from the next day and continued to do so till the 16th (inclusive) after which for four days no coolies came. From the 21st coolies resorted to the work in such varying numbers that from 45 on the 22nd they rose to 142 on the 28th, that on the 29th they fell to 96 and rose to 196 on the 5th November, that on the 6th day they rose to 348 and continued to rise till the 9th on which day they amounted to 421, and that on the 10th they fell to 180. The work was again inspected on the 15th November and then it was found that only 40 coolies were employed on it and that most had abandoned the work. As there was no real demand for work, this work was closed on the 15th November."

On the test works the coolies were required to perform 75 per cent. of the full task prescribed in the Famine Code. This imposition is necessary in the first stages of a famine and the task should be rigidly enforced. These test works, which are not referred to in the Famine Code, were for the first time tried in this district under the Collector's orders with considerable success. They proved beyond all doubt that relief was needed in the Tiruchengód taluk alone where the numbers rapidly increased and other works had consequently to be opened. In arriving at a conclusion whether relief is needed in any particular locality, it is unsafe to be guided entirely by the opinions of inspecting officers, for it often happens that where one officer may be of opinion that relief is necessary, another may be of a contrary opinion because it is impossible for an inspecting officer to say whether any particular individual has lost condition from want or other causes, or whether that is his normal

condition, and one can never get the people to speak the truth. Therefore test works are absolutely necessary and should in future be opened in all cases before determining whether relief works are necessary or not.

9. *Progress of famine.*—In October though the rainfall was below the average in all the taluks except Hosúr, Atúr and Uttankarai, still it improved the state of all the taluks generally, and, as a result of these rains, there was a considerable advance in the cultivation during the month. Prices also fell considerably. During the early part of November there was a fair amount of rain, but after the middle of the month the weather became dry generally. In consequence of general failure of the rains, much anxiety was felt by the people for the dry crops which promised well at first but were fading at the end of the months. Water scarcity was also much felt generally in both the Salem and Tiruchengód taluks and much more so in Sankaridrug division of the Tiruchengód taluk, where people got their supply of water with great difficulty. During the month the prices of all food-grains also rose so much that rice was dearer than the scarcity rate at Uttankarai, and the district average rate for ragi also exceeded the scarcity rate. The rise was also partly due to the merchants holding back their grains stock. Kitchens had to be opened at Salem and Tiruchengód and another work beside the one opened as a test work was opened in the Tiruchengód taluk. At this time the Collector permitted the ryots of Tiruchengód taluk to cultivate dry crops on wet lands at dry rates of assessment, provided no water from any irrigation work was used. This action of the Collector was approved in Board's Proceedings, No. 757, dated 2nd December 1891. A complaint of the temporary want of supplies of ragi in the Hosúr market was specially brought to the Collector's notice, but this state of affairs did not fortunately last long. During December also the rain failed almost throughout except in 4 or 5 stations and the outlook was more gloomy than the previous month. The failure of the rains resulted in a general deterioration of the standing crops which affected the outturn materially. There was practically no rain in January, and the condition remained *in statu quo*. In February a good fall of rain occurred at Sankaridrug which was threatened with a severe water famine and hope was infused into the people. This rain allowed of some ploughing being carried out in parts of the Tiruchengód taluk. In March, though some good showers of rain fell in Tiruchengód, the condition of the people remained unaltered. During the latter part of April there was rain in both the Salem and Tiruchengód taluks, but there was no material change in the condition of the season except that prospects became less gloomy owing to seasonable rain.

There was a decided improvement in the season from May, during the beginning of which month good rains fell in both the affected taluks and the prospects began to improve. Drinking water difficulty was very much mitigated. Many of the irrigation sources received some supply. Cultivation actively proceeded and pasture began to improve. The prices also became easier after this, particularly in Salem. The rainfall was fully up to the average in June at Tiruchengód and the prices of grains fell rapidly in Salem, but remained stationary in Tiruchengód.

In July the season continued fair and promising, and the prices of ragi and cumbu became easier both at Salem and at Tiruchengód owing to the commencement of the harvest of the early sown crops.

There were also good showers in July and August at Tiruchengód, and this improved the condition of the affected parts of the taluk very much and the numbers on works went down rapidly.

The present season has been so far so favorable that one could not expect anything better. This will surely be a year of plenty.

It is gratifying, however, to note that not a single instance of death from starvation occurred in this district.

10. *Execution of relief works.*—It was first proposed by the Collector that the relief works should be carried out by the Public Works Department and that no relief work should be executed under civil agency. But the Board, in its Proceedings, No. 560, dated 8th September 1891, stated that the Collector should also look

for assistance to the professional agency of the Local Fund Engineering Department, which is accustomed to the carrying out of such works and which they suggested should be strengthened for the purpose. Therefore both minor irrigation and road works executed as relief works were placed under the supervision of civil agency till about the middle of March, when, in accordance with the Government order communicated with Board's Proceedings, No. 114, dated 16th February 1892, the only minor irrigation work which was at the time being repaired by civil agency was transferred to the Public Works Department on 15th March 1892. But as the work was verging completion and the Public Works Department found it inconvenient to supervise the work, it was retransferred to the charge of the civil agency after 10 days, i.e., on 24th March 1892, on the requisition of the Public Works Department.

The only relief works carried out by the Public Works Department are the repairs to Chinnappampatti and some minor tanks, and, judging by the way in which these works were supervised, I am of opinion that, except in the case of large works needing much professional supervision, civil agency is better suited for the execution and supervision of relief works.

The duty of the Public Works Department should, I think, be to propose and estimate for works in localities pointed out by the Revenue Department, and for the latter to have works executed by relief labour.

The following statement shows the relief works opened in the Tiruchengód taluk with the dates of opening and closing and the numbers employed on them on the last day of each month :—

Names of work.	Date of opening.	Date of closing.	Number of coolies on the last day of									
			1891.			1892.						
			October.	November.	December.	January.	February.	March.	April.	May.	June.	July.
1. Sankari-Yedapadi road, metal collection.	28th Sept. 1891.	6th Aug. 1892.	1,068	1,000	1,726	1,248	1,003	331	335	379	309	336
2. Tiruchengód-Namakal road.	12th Oct. 1891.	20th Nov. 1891.	1,988	..	..	..	..	..	..	..	..	..
3. Tiruchengód-Pallipoliam road, metal collection.	23rd Nov. 1891.	28th Feb. 1892.	..	1,836	2,023	1,047	..	..	..	..	..	..
4. Sankari-Tiruchengód road, metal collection.	8th Feb. 1892.	16th April 1892.	..	..	..	..	842	561	..	..	..	..
5. Tiruchengód-Paramathi road.	24th Mar. 1892.	21st April 1892.	..	..	..	..	..	1,566	..	..	..	..
6. Yedapadi-McDonald's Choultry road.	31st Mar. 1892.	20th Aug. 1892.	..	..	..	..	..	344	1,872	1,815	1,750	823
7. Sankari-Komarapoliem road.	20th April 1892.	Do. ..	..	..	..	..	..	..	2,106	2,400	2,165	1,905
8. Sholasiramon-Caavery station.	30th April 1892.	20th May 1892.	..	..	..	..	..	..	2,099	..	..	..
9. Sankari-Tiruchengód road, metal spreading.	24th May 1892.	20th June 1892.	..	..	..	..	..	..	..	2,606	..	..
10. Tiruchengód-Paramathi road, metal spreading.	16th June 1892.	10th July 1892.	..	..	..	..	..	..	..	..	2,212	..
Minor Irrigation Works.												
1. Padanadu tank	6th Nov. 1891.	10th Feb. 1892.	..	296	295	291	..	..	..	..	..	..
2. Srinivasampolliem tank.	4th Nov. 1891.	11th Dec. 1891.	..	188	..	..	..	..	..	..	..	..
3. Agraharathalanir-Manguttapatti tank.	3rd Nov. 1891.	8th Jan. 1892.	..	60	132	..	..	..	..	..	..	..
4. Avaniperur - Kondayampatti tank.	9th Feb. 1892.	27th Mar. 1892.	..	..	..	..	137	..	..	..	..	..
Total ..			3,056	3,330	4,176	3,486	4,665	2,792	6,412	7,200	6,486	3,944

Sankari-Yedapadi road.—The work of metal collection was first commenced on the road. When this work was progressing, a diversion was proposed by the Collector from the 3rd to 6th mile to avoid the very steep gradients, about 1 in 12, at 3 points on the old road, where carts with only half a load could not ascend and descend with out assistance. The heaviest gradients on the diversion is about 1 in 20, and throughout this is a much better line than the old one. The estimate for this work is Rs. 15,500 and the high cost is due to the construction of substructural culverts and bridges and to heavy blasting work which had to be done.

The work has been completed excepting a few railed culverts which remain to be covered. This is being done by contract.

The Yedapadi-McDonald's Choultry road.—This is a new road leading from the village of Yedapadi where a large weekly shandy is held and from whence large quantities of lamp-oil are exported by rail to MacDonald's Choultry Railway station via Kongahapuram, another weekly market place. This is a most useful feeder road and is much valued by the inhabitants of Yedapadi and its neighbourhood. The estimate for this work is Rs. 24,600. The road has been formed throughout and has been metalled for a distance of about 5½ miles. The entire length is 9 miles and 4 furlongs. The culverts have yet to be built by contract, but arrangements have been made for opening the road for traffic.

Railway station, Komarapoliem road.—The first mile and a half is a diversion and a new work. This saves carts going towards Komarapoliem, a distance of 2 miles and 4 furlongs. The old itteri has been improved and converted into a metalled road. The traffic on this road promises to be heavy, and like the Yedapadi-McDonald's Choultry road it is much appreciated by the people. The estimate is Rs. 6,400 and the work has been completed. As directed by the Board in its Proceedings, dated 13th October 1891, No. 648, four minor irrigation works were also opened as relief works in the four firkas of the taluk. The rest of the works executed by relief labour were only repairs to Local Fund roads, but these have been done in a substantial manner, 6 inches of metal having been laid throughout.

11. *Task.*—When the relief works were first started, there was considerable confusion and all coolies were paid 3rd-class rates irrespective of the work turned out by them because there was no system of supervision and check, but subsequently rules were framed by the Collector of the district which were approved of by the Board in its Proceedings, No. 757, dated 2nd December 1891. A copy of these rules is appended to this report. At first, task as laid down in the Famine Code task table was exacted from the coolies, but from the 6th January 1892 a revised task table was substituted for the above, separate tasks being fixed for road and minor irrigation works. Later on the task for metal and gravel spreading was found to be somewhat high and was accordingly reduced by 34 per cent. The appended table shows the full task for various descriptions of work as last revised by the Collector and will be found a very useful guide in fixing the task on future occasions. It has been found by actual experience to be well suited for the purpose, being neither too heavy nor too light. It may be noted that no gangs here ever earned 1st-class wages and few earned even 2nd-class wages. With 50 per cent. task after the revision of the task table by the Collector the coolies were well able to earn 3rd-class wages. Seventy-five per cent. of full task prescribed in the Famine Code was first enforced on the works in the Tiruchengód taluk, but the task was reduced to 50 per cent. in the beginning of October on the Sankari-Yedapadi road and from the 25th October on the Tiruchengód-Namakal road. This led to an increase in the numbers from 3,330 in November to 4,176 in December. During the month of January it was brought to the notice of the Collector that the relief works were interfering with the demand for private labour, that some well-to-do ryots were also found resorting to relief works and that the coolie classes were required to make up the task of the gangs. The task was accordingly raised from 50 to 60 per cent. and subsequently to 75 per cent., and the gangs were re-distributed into ryots and coolie classes. This led to a slight diminution in the numbers in the ryots class gangs. During the month of March the relief task was reduced from 75 to 50 per cent. of the full task as the District Medical officer was of opinion that "a lenient task which can be fairly and easily performed

by all should be enforced, considering the increasing deterioration in the condition of the people, particularly the women, the enervation accompanying under-feeding and labour in the great heat of the season, the scarcity of drinking water, and the distance many of the people had to walk to reach the works and that many of the women had to support young children."

This led to a marked increase in the month of April in the number of coolies on the works.

In May the first heavy fall of rain occurred in Tiruchengód. This and the prevalence of cholera on the Sholasiramoni-Cauvery station road tended to reduce the numbers considerably, but after a few days coolies began to return to the Sankari-Tiruchengód road where the work of metal spreading was started in lieu of the Sholasiramoni road which was closed. As it was noticed then that some of the coolies, particularly those who had been on the Sholasiramoni road had lost condition, special weakly gangs were formed on all the relief works under orders of the Commissioner and the task fixed for them was 25 per cent. of the full task.

12. *Payment of wages.*—According to the provision contained in the Famine Code, the calculation of the wages paid to the coolies was at first made with reference to the selling price of ragi; but later on as the price of cumbu was found to be easier, cumbu was substituted for ragi in accordance with the Board's Proceedings, Mis. No. 3993, dated 2nd May 1892.

The following are the rates of 3rd class wages paid to the coolies:—

	Males.	Women.	Children.
	AS. P.	AS. P.	PIES.
From the beginning up to 26th October 1891	1 6	1 2	9
From 26th October up to 21st November 1891	1 5	1 1	9
" 21st November up to 29th November 1891	1 6	1 2	9
" 29th " " 19th June 1892	1 8	1 4	10
" 19th June " 10th July " "	1 7	1 3	9
" 10th July " 18th " " "	1 6	1 1	8
" 18th " " 25th " " "	1 4	1 0	7
" 25th " " 15th August " "	1 3	0 11	7
" 15th August " " " " " "	1 2	0 11	7

The wages were, as a rule, paid twice a week, and it is satisfactory to note that there were few or no complaints of short or non-payment of wages to coolies. This was chiefly due to the fact that the paymasters were separate officers independent of the establishment entrusted with the supervision and carrying out of the works. This system of making payments through an independent paymaster is a good check against fraud. It is not referred to in the Famine Code and has been first proposed by the Collector in this district. The duties of such a paymaster are clearly laid down in paragraph 27 of the rules appended. The system of transferring to a separate register the names of coolies absent at time of payment as laid down in paragraph 28 of the rules worked remarkably well.

The following persons were appointed as paymasters:—

- | | |
|--------------------------------|--------------------------|
| (1) Muthuthandaraya Mudaliyar. | (5) Devasigamani Pillay. |
| (2) Subroyalu Naidu. | (6) Bheema Rao. |
| (3) Govindasami Chettiar. | (7) Srinivasaiyengar. |
| (4) Muthusami Chettiar. | (8) Desikacharry. |

Of these, Devasigamani and Desikacharry worked the best, although the former was rather slow at first.

13. *Control of works.*—The relief works were under the immediate management and supervision of the Local Fund overseers, two of whom were appointed specially for the purpose. The work done was measured daily by the overseer and his subordinates and this was check-measured once a week by officers of the Revenue department and the quantity of work done reported to the Collector. This is a system introduced into this district by the Collector in connection with all ordinary Local Fund works and is a good check against fraud.

14. *Gratuitous relief.*—This is divided into three heads—

- (1) Money dole.
- (2) Cooked food.
- (3) Raw grain.

In this district gratuitous relief in the form of cooked food only was given, as it was declared after experience the most efficacious and the cheapest form of relief. Two kitchens were opened in this district, one at Salem and the other at Tiruchengód. The inmates of the kitchen at Tiruchengód and Salem were fed on ragi, but latterly at Tiruchengód they were fed on cumbu, as it was considered to be wholesome and was cheaper than ragi. The Salem kitchen was closed on the 25th June and the one at Tiruchengód on the 20th August when the relief works were also closed. The people fed at the kitchen were chiefly chucklers and pariahs. Very few caste people resorted to the kitchen as they consider it a disgrace to be fed at the kitchen. In a few cases parents had to be compelled to send their children who were in bad condition to the kitchen, but they soon disappeared with the children. The following statement shows the number of destitutes fed on the last day of each month:—

Name of kitchen.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.
Salem ..	169	82	161	92	88	88	91	89	..	..	Closed on 25th June.
Tiruchengód ..	128	132	190	174	162	129	109	107	117	102	72 Closed on 20th August 1892.
Total ..	297	214	341	266	250	217	200	196	117	102	72

The expenditure incurred on account of the above kitchens is as follows:—

	RS.	A. P.
Salem kitchen ..	2,093	3 11
Tiruchengód kitchen ..	2,941	12 4
Total ..	5,035	0 3

and the average cost per head was as follows:—

	PIES.
Salem ..	8
Tiruchengód ..	9

15. *Money dole.*—A grant of Rs. 300 was sanctioned by the Board in its Proceedings, dated 26th February 1891, Mis. No. 2032, from the donation received from His Highness the Maharajah Holkar of Indore. Out of this amount, Rs. 180 was placed by the Collector at the disposal of the Tahsildar of Krishnagiri for payment to certain gosha women and children in need of relief; Rs. 73-5-8 has been reported to have been disbursed by the Tahsildar of Krishnagiri up to 27th August. The remainder Rs. 120 was proposed to be placed at the disposal of the Tahsildar of Salem, but no portion of it appears to have been utilized.

16. *Reserved Forest.*—With a view to relieve the generally felt want of fodder, the Conservator of Forests was addressed about the opening of reserved forests and lands for grazing purposes free of charge. On receipt of the Conservator's reply to the above reference, a notice was issued to the effect that grazing of cattle and sheep (not goats) would be permitted free of charge in all the reserved forests and lands during the prevalence of scarcity in the taluks of Salem, Namakal, Tiruchengód and Uttankarai. To the same end a notification was issued permitting villagers to cut and remove grass, free of charge from all reserves, except those extents that were already felled over, and arrangements were also made to cut and stack the same by departmental labour, to supply the needy ryots for the actual cost of collecting, should they require it later on in the hot weather. Very little progress was made in the month of April in cutting and storing hay. A few cart-loads were removed by the villagers in Atúr, Uttankarai and Tirupatúr and about 46 cart-loads were cut and stored by the Forest department in the Salem west range. No grass was available in the other taluks.

17. *Loans.*—In the beginning of August 1891 only 53 and 39 applications under the Land Improvement Loans Act were pending in the Salem and Tiruchengód taluks respectively. As applications came on in increased numbers 15 Special Revenue Inspectors were specially sanctioned by Government to be entertained for two months to help the disposal of these applications. The Revenue Inspectors joined their appointments in November. Two Stock Inspectors were also posted to the district by the Board and they were sent by the Collector to inquire into and report on these applications in the Tiruchengód taluk. The Special Revenue Inspectors were granted an extension of one month and were subsequently dispensed with in February when their time expired, except three who were retained till the end of February. The Stock Inspectors are still doing duty in the Tiruchengód taluk. The following statement shows the number of applications pending on 1st August 1891 and the number received since then up to 1st August 1892, the number disposed of and the amount disbursed during that period:—

Name of taluks.	Number of applications pending on 1st August 1891.	Number received from 1st August 1891 to 1st August 1892.	Total for disposal.	Number disposed of.	Number pending on 1st August 1892.	Amount disbursed.
1. Salem	53	2,277	2,330	2,084	246	Rs. 74,230
2. Tiruchengód	39	1,671	1,710	1,477	233	32,786
Total	92	3,848	3,940	3,561	379	1,07,016

It will be seen that Rs. 74,230 and Rs. 32,786 have been disbursed in the Salem and Tiruchengód taluks respectively, of which Rs. 3,181 in Salem and Rs. 5,696 in Tiruchengód under the Special Well Rules. The work in connection with the sinkings and raising of wells also afforded considerable work but in the majority of cases inspected by me the members of the loan-takers' one were employed on ordinary earthwork, professional men being employed for blasting purposes. Rs. 1,595 and Rs. 1,945 have been disbursed under the Agriculturist Loans Act during these 12 months in the Salem and Tiruchengód taluks respectively.

18. *Weavers.*—It was brought to the notice of the Collector in December that a number of families consisting mostly of weavers in the Salem town were emigrating in search of livelihood and the then Special Deputy Collector was asked to make inquiries and to report whether the emigration was due to the existence of the distress among this class of people. The Special Deputy Collector stated that though the reports of emigration were exaggerated, emigration did take place to some extent. The prices of cloths fell so low that the weavers were unable to maintain themselves, and the Special Deputy Collector proposed that some relief should be afforded to them. As the weavers were unaccustomed by the practice of their profession to hard manual labour, it was proposed to help them in their profession by purchasing from the weavers cloths made by them of specified kinds, payments being made partly in material and partly in money, the latter being calculated at third-class rates on the number of days required for making each description of cloth. The Board approved of the Collector's proposal, and recommended a grant of Rs. 25,000 for this purpose which was sanctioned by Government in Government Order, No. 150, dated 16th February 1892. But before Government sanction was received, a Nattukottai Setti, a banker in Salem, entered into an agreement with certain weavers of Gogai to pay them the cost of twist and silk used as well as usual money-wages on the condition that the weavers sold to the bank all cloths manufactured by them for a period of 2 years. Following this example, certain weavers of Sevvápet also entered into similar contract with the weavers of that place, in consequence of this the prices of cloths rose at once considerably. The sanctioned amount for this kind of relief was not therefore availed of as the prices continued to keep high. The rules for the execution of this kind of relief to weavers drawn up by the Collector are appended to this report and may probably be of much use on some future occasion.

19. The next important item is the expenditure incurred on works and gratuitous relief. As audited figures are not available, the following figures, which are only approximate, have been adopted in the following statements:—

Relief Works.				RS.	A.	P.
Civil Agency works	...	...	...	1,09,144	4	3
Gratuitous Relief.						
Purchase of food in bazaars	...	...	...	4,052	1	5
Petty establishment	...	...	...	535	15	9
Sundries	...	...	...	446	15	1
Total	...	...	...	5,035	0	3
Famine establishment including travelling allowance and tentage excluding those entertained by the Local Funds.				3,482	11	10
Grand Total	...	...	...	1,17,662	0	4

The following statement shows the actual expenditure on Civil Agency works as compared with the value of work done on them:—

STATEMENT showing the actual expenditure on works compared with the value of the work done on the works.

Name of works.	Actual expenditure on works.	Estimated value of work done.	Excess cost.	Percentage of estimated value to actual expenditure.
<i>Salem taluk.</i>				
1. Omsár-Chinnappampatti	Rs. 821 10	Rs. 491 9 9	Rs. 330 0 4	59.93
<i>Dharmapuri taluk.</i>				
2. Dharmapuri-Hogenakal road	1,189 11 4	642 10 10	547 0 6	54.03
<i>Uttankarai taluk.</i>				
1. Mallapuram-Papiroddipatti	165 4 5	67 13 2	97 7 3	41.21
<i>Tiruchengód taluk.</i>				
1. Sankari-Yedapadi road	26,250 6 5	13,381 7 8	12,874 14 9	50.96
2. Tiruchengód-Námakal road	5,222 11 10	2,126 6 9	3,096 5 1	40.70
3. Tiruchengód-Pallipolliem road	18,700 8 11	10,711 3 0	7,989 5 11	57.43
4. Tiruchengód-Paramathi road metal collection	5,121 11 6	2,705 4 11	2,416 6 7	52.81
5. Sankari-Tiruchengód road metal collection	4,251 8 5	2,514 1 5	1,737 7 0	59.12
6. Sholasiraman-Pallipolliem road	2,637 7 11	1,555 10 5	1,081 13 6	58.98
7. Sankari-Tiruchengód road spreading	2,772 14 4	2,294 10 8	478 3 8	81.76
8. Tiruchengód-Paramathi road spreading	3,138 10 3	2,134 12 7	703 13 8	77.57
9. Yedapadi-MacDonald's Choultry road	17,548 12 8	11,451 8 8	6,097 4 0	65.26
10. Sankari-Comarapolliem road	17,815 10 7	10,222 1 1	6,693 9 6	62.00
<i>Minor Irrigation Works.</i>				
1. Sreenivasampolliem tank	431 11 11	272 0 1	159 11 10	62.96
2. Palavedu tank	2,183 0 6	1,467 0 8	715 15 9	67.20
3. Agraharathalayor tank	514 5 4	313 5 5	200 15 11	60.89
4. Kondayampatti tank	572 1 11	348 6 6	223 12 5	60.64
Total, Tiruchengód	1,08,967 10 6	62,527 14 10	44,439 11 7	58.45
Total for the District	1,09,144 4 3	63,730 0 7	45,414 3 8	58.39

The percentage is low in Uttankarai taluk and fair in Salem taluk. In Tiruchengód taluk the percentage is 58.45, and this is very fair considering that only 50 per cent. of the full task was enforced for the greater portion of the time during which the relief works were in progress. Except on the two roads which were first opened and on which no task was enforced as there were no rules then for the guidance of the overseer, the percentage

is either above or very nearly 55 per cent. On the Sankari-Yedapadi road till the 10th October, no task was enforced and the coolies were paid full 3rd-class wages for the days they worked. The high price of ragi on which the rates of wages to coolies was at first calculated also contributed to reduce the percentage. The percentage is very high in cases where the work of spreading was carried on as will be seen in the Sankari-Tiruchengód road and Tiruchengód-Paramathi road. This fact proves that the task for this description of work which was subsequently reduced was somewhat high.

20. *Postponement of Kists and Remissions.*—The land revenue instalments for 1891-92 were postponed for two months, and orders were also issued to the effect that coercive processes should not be issued in cases where the ryots had to pay an assessment of Rs. 25 and less in Tiruchengód taluk and Rs. 10 and less in parts of Salem, Námakal, Dharmapuri, Krishnagiri and Hosúr taluks. Besides the above concession remissions were also granted. The jamabandi of the two chiefly affected taluks of Salem and Tiruchengód was conducted by the Collector himself.

21. *Inspections.*—The works were inspected by the Collector on several occasions—twice by the Famine Commissioner first when the relief works were opened, i.e., on the 29th September, and again on the 10th and 11th of June 1892. The works were also visited by His Excellency the Governor on the 15th of October.

22. *Establishment.*—A Special Deputy Collector was sanctioned by the Government to supervise the relief works, and for this purpose M.R.Ry. G. Kothandaramayya Garu, M.A., was first appointed. He took charge about the end of October 1891 and continued on special duty until the 16th of January when he was relieved by me. A Special Sub-Magistrate for each of the taluks of Salem and Tiruchengód was also appointed in October to relieve the Tahsildars and Deputy Tahsildars of all magisterial work. The Special Sub-Magistrate at Tiruchengód was dispensed with on the 7th August, but the Special Sub-Magistrate at Salem will continue in office until the new scheme comes into operation in October next.

23. The Tahsildar of Tiruchengód and Deputy Tahsildar of Sankari helped me in the inspection of the coolies and in check-measurement of works, in the latter of which duties they were assisted by the permanent Revenue Inspectors of the taluk.

In conclusion, I wish to bring to notice the good work done by my Head Clerk S. Narasiah, B.A. who did his work with great care.

Endorsement by G. STOKES, Esq., Collector of Salem, dated 30th September 1892, No. 3372.

Submitted to the Commissioner of Revenue Settlement, Land Records and Agriculture, Madras.

2. *General.*—The district is chiefly dependent on the south-west monsoon. The rainfall under it in 1891-92 proved a failure, having been only 10.61 inches against 21.93 the average of the five years ending 1890-91. This failure, following as it did a succession of bad seasons in the Salem, Tiruchengód and Dharmapuri taluks and three indifferent monsoons in the Tirupatúr and Uttankarai divisions of the respective taluks, and resulting in the failure of the dry crops raised up to the month of July 1891 in scanty and insufficient pasture and in scarcity of water-supply for men and cattle, gave rise about the close of August 1891 to grave anxiety in the western part of the Salem taluk, in the Sankaridrug division of the Tiruchengód taluk, in the Pennagaram division of the Dharmapuri taluk, and in the Uttankarai division of the Uttankarai taluk; but the ordinary public works coupled with increased expenditure under minor irrigation works and a liberal grant of loans under the Land Improvement Loans Act and the opening of forest reserves for free grazing, enabled the ryot and the laboring classes to tide over the pressure without much difficulty for some time. In September the season showed no improvement until quite the end of the month,

when two kitchens—one at Salem and the other at Tiruchengód—were opened, as also relief works (collections of metal on four Local Fund roads) to gauge the demand for labour in the Salem, Tiruchengód, Uttankarai and Dharmapuri taluks. Towards the end of September and during October there was generally a good fall of rain which improved prospects generally, and employment at field work was available everywhere. Of the four test relief works, that opened in Uttankarai was closed on the 17th October as no real destitution was found to exist there; that in Pennagaram on the 7th November as there was no real demand for labour; and that in Salem on the 15th November as most of the coolies had abandoned the work.

After the middle of November and during December there was no rain worth the name. The result of this failure, following the failure of the south-west monsoon, was that the standing crops which promised well in the beginning had greatly deteriorated in condition and their probable outturn had been materially reduced. The condition of the Salem and Tiruchengód taluks, of parts of the Námakal taluk and of the Pennagaram division of the Dharmapuri taluk, was, at this time, reported to give cause for special anxiety owing to pressure of high prices and the cessation of field work, so much so that certain minor irrigation works were taken up as relief works in addition in the Tiruchengód taluk, and application made to the Board for sanction to re-open the closed works in the Salem and Dharmapuri taluks, which was granted in Board's Proceedings, dated 30th December 1891, No. 834. With a view, however, to see for myself whether it was really necessary to re-open the closed works, I made a tour of inspection in January into the Tirupatúr, Krishnagiri, Hosúr, Dharmapuri, Salem and Tiruchengód taluks and found that there was no reason for serious anxiety about the condition of the people anywhere; that, except in a large portion of the Tiruchengód taluk, the distress was not intensifying; and that the condition of the people was everywhere good. In March, however, the situation became worse, but prospects began to improve from about the end of April when seasonable rains commenced which continued in sufficient quantities so as to gradually remove all cause for anxiety. The kitchen at Salem was closed on the 25th June and the kitchen and works at Tiruchengód on the 20th August 1892. The Salem taluk was removed from the affected area in Board's Proceedings, dated 23rd July 1892, No. 531, and the Tiruchengód taluk in Board's Proceedings, dated 25th August 1892, No. 602.

3. *Relief works.*—All the works carried out, with the exception of the Shola-siramani-Cauvery station road and the spreading of metal collected on the Yedapadi-Sankaridrug road (not on the diversion) are useful works and have been satisfactorily and well executed and are practically completed. The new roads from Yedapadi to McDonald's choultry and from the railway station to Comarapaliam road are most useful railway feeder roads. The value of work done was Rs. 63,730-0-7 which forms 58.39 per cent. of the expenditure on works, viz., Rs. 1,09,144-4-3. This, I think, is a satisfactory percentage as the result of relief.

I would ask attention to what the Deputy Collector says about test works. I consider that there is no way so good to test whether there is any real difficulty in obtaining employment, but to this end it is essential that the establishment for the test work should be fully organized beforehand; that the task should be not less than 75 per cent. of full; and that it should be strictly enforced. Under these circumstances not only the numbers resorting to the work, but the relative number of men, women and children is a valuable indication of the necessity prevailing. I found it impossible in this district to get any relief works organized by the Department of Public Works. I could get no information as to the works under execution or available and not Rs. 100 of the Public Works budget grants were utilized in this district in the relief of distress. Hence I was obliged to fall back on Local Fund Works entirely. It seems to me that much the best division of labour in the matter is very much that which was adopted here in regard to the Local Fund Department, viz., to make the professional department responsible for finding work when wanted and for executing it, leaving the payment to be made by the Revenue Department as well as the arrangements for sending the coolies to the work and for feeding them, &c., while on it.

The task-table, as it now stands, shows very accurately what the tasks for the kinds of work specified should be, except items Nos 1, 2, 3, 4 and 5 under road works which are taken from the task-table in the Famine Code. It was found essential to separate spreading into two parts as shown. If the rates of equivalents taken

in this district, viz., 1 man = 2 women = 4 children be adopted, it does away with the necessity for typical gangs and elaborate calculations of task and was found to work very well here.

I regard the arrangement under which the payment of the coolies was carried out by an establishment totally distinct and independent of that employed in working them as the principle which prevented any difficulty or hitch in carrying out of the works in this district and as one which should invariably be applied in the execution of all relief works. I also consider that payment should be in strict proportion to the proportion of task turned out in all cases, any hardship, &c., being met by adjustment of the task or by varying the formation of the gangs. I also consider that check measurement by an independent authority is an essentially necessary check on the execution of works by task work. It is absolutely necessary to prevent both over-measurement in favour of the coolies and under-measurement against them, both of which are equally pernicious.

The method followed for ascertaining the prices on which wages are to be fixed is also a matter of great importance. I think the fixing of the prices should be governed not by the prices in the bazaars of the cusba town, but by those prevailing in the weekly markets to which the people resort and that it should be the duty of the chief officer in charge of relief in the taluk to ascertain these prices and fix wages in accordance with the principles of the famine code. I have not found it lead to good results to leave this matter to the Tahsildar.

4. *Gratuitous relief.*—The relief kitchen at Salem was in immediate charge of the Town Sub-Magistrate and that at Tiruchengód in charge of the Taluk Sheristadar, subject to frequent and careful supervision on the part of the Special Deputy Collector. They were inspected on several occasions by the District Surgeon and myself. The expenditure amounted to Rs. 5,035-0-3, which gives an average of 8 pies per head at Salem and 9 pies per head at Tiruchengód.

In October last 150 male, 75 female and 175 children cloths were received from Sir Savalai Ramasamy Mudaliar which were distributed to the inmates of the kitchen at Salem and Tiruchengód when His Excellency the Governor visited the kitchen.

Of the sum of Rs. 300 allotted to this district out of Maharaja Holkar's donation (Board's Proceedings, dated 26th February 1892, Mis. No. 2032) Rs. 78-5-8 were spent, leaving a balance of Rs. 226-10-6 which is kept in deposit.

5. *Loans under the Land Improvement and the Agriculturists' Loans Acts.*—The following statement shows the transactions in the affected taluks of Salem and Tiruchengód up to the fortnight ending 15th August 1892:—

Taluku.	Particulars of loans.	Applications accepted up to 15th August.		Loans disbursed up to 15th August.		Applications pending on 15th August.		Wells.	
		Number.	Amount.	Number.	Amount.	Number.	Amount.	Constructed or repaired.	Under construction or repair.
Salem	<i>Land Improvement Loans Act.</i>		Rs.		Rs.		Rs.		
	1. Repairs and construction of wells.								
	(a) Ordinary rules.	655	81,569	652	78,594	161	22,110	74	414
	(b) Special well rules.	74	8,310	57	8,256	97	18,770	..	27
Tiruchengód.	2. Other purposes	13	2,660	13	2,400	..	..	..	..
	1. Repairs and construction of wells.								
	(a) Ordinary rules.	324	32,806	318	31,911	77	14,770	64	278
	(b) Special well rules.	147	8,574	131	7,420	21	5,450	1	138
Salem	2. Other purposes	..	..	..	..	..	..	..	..
	<i>Agriculturists' Loans Act.</i>								
	1. Purchase of fodder	35	2,030	36	2,030	138	7,147	..	..
	2. Purchase of cattle and seed grain.	..	..	..	..	1	100	..	..
Tiruchengód.	3. Other purposes	..	..	..	..	..	..	..	..
	1. Purchase of fodder	..	..	..	..	..	..	..	..
	2. Purchase of cattle and seed grain.	62	2,900	62	2,900	83	2,055	..	..
	3. Other purposes	..	..	..	..	..	..	..	..

The small amount advanced under the special well rules is due to the novelty of the system.

To facilitate the speedy disposal of the applications, special Revenue Inspectors were employed under the orders quoted in the margin. The Special Deputy Collector was also empowered to act as a divisional officer under the rules (G.O., dated 27th May 1892, No. 2594, communicated in Board's Proceedings, dated 31st May 1892, Mis. No. 4800).

6. *Other measures of relief.*—Under G.O., dated 17th December 1891, No. 1204, communicated in Board's Proceedings, dated 19th December 1891, Mis. No. 7438, the collection of land revenue instalments on ryotwar lands both dry and wet was postponed for two months and the issue of coercive processes for the collection of wet assessment was further stayed until the jamabundi of the respective taluks was completed.

In October last I found that the tanks in the Tiruchengód taluk had received little or no supply and that ryots were in many cases anxious to sow dry crops, but were prevented from doing so, as they feared that, should the tank afterwards receive supply, they might be charged wet rates. I thereupon, considering that a deficiency of water was established and that the season for sowing dry crops would soon be over, allowed the cultivation of dry crops on wet lands at dry rates of assessment. This was duly approved by the Board and Government which granted a further concession in directing that only water-rate in addition to the dry-rate be charged instead of the full wet assessment on irrigated dry crops grown on wet lands (G.O., dated 17th December 1891, No. 1204, communicated in Board's Proceedings, dated 19th December 1891, Mis. No. 7438).

In February 1892, coercive processes for the collection of dry revenue against pattadars paying Rs. 25 and less in the Tiruchengód taluk and against pattadars paying Rs. 10 and less in the following firkas were stayed—Mathur and Krishnagiri firkas in the Krishnagiri taluk; Denkanikotta and Kilamangalam firkas in the Hüzur taluk; Palkod and Pennagaram firkas in the Dharmapuri taluk; Omalur, Mecheri, Salem and Rasipur firkas in the Salem taluk; and Sendamangalam and Kabilakurichi firkas in the Námakal taluk. This was duly approved by Board in Board's Proceedings, dated 25th June 1892, No. 462.

The amount involved under each head of suspension of revenue is as follows:—

	Rs.
Land revenue ryotwar instalments the collection of which was postponed for two months	7,85,790
Amount of dry revenue involved in pattas of Rs. 10 and less in some firkas of the Salem, Námakal, Dharmapuri, Krishnagiri	
1 Hosur taluka and of Rs. 25 and less in the Tiruchengód taluk, coercive processes for the collection of which were stayed.	1,70,861
Amount of wet revenue coercive processes for the collection of which were stayed pending jamabandi	1,44,834
Amount of peishkash on mittas and cesses therein the collection of which was postponed	15,540
Amount of jodi or quit-rent on inam villages and cesses therein the collection of which was postponed	9,650
Total	11,26,675

All restrictions on the issue of processes have been withdrawn in the case of the Tiruchengód taluk from the 17th July, and in the case of other taluks from the 10th July (Board's Proceedings, dated 15th and 19th July 1892, Mis. Nos. 6070 and 6147 respectively).

Particulars of the season remissions granted will be reported separately.

7. Out of a ryotwari current demand of Rs. 18,64,451 only Rs. 1,61,400 were outstanding on the 1st of the current month in the district, of which Rs. 66,080 appertain to Salem and Rs. 67,707 to Tiruchengód. Out of a mitta current demand of

Rs. 4,50,809, Rs. 65,898 were outstanding on the 1st of the current month in the district, of which Rs. 9,852 appertain to Salem and Rs. 34,307 to Tiruchengód. These balances (at any rate the former, viz., ryotwari) will be largely reduced by the end of the current month.

8. Mr. Smith was in charge of relief in the district during all the most difficult period, and I desire especially to bring to the notice of the Board and Government the very excellent work he has done. By his personal influence and powers of control, by his obedience to orders and willing intelligence in interpreting them he has given me in every matter the utmost aid and assistance.

READ—the following letter from F. A. NICHOLSON, Esq., Collector of Salem, to the Secretary to the Commissioner of Revenue Settlement and Director of the Department of Land Records and Agriculture, dated 30th November 1892, No. 4950-For.:—

[Reference—Memo. No. 2108, Routine, dated 17th November 1892.]

In reply I have the honour to state that the grazing of cattle and sheep was permitted free as per notices dated—

20th August 1891

17th September „

28th „ „

published in Forest Sheets Nos. 8-A and 10 to the District Gazettes for the months of August and October 1891.

RESOLUTION—dated 5th December 1892, No. 774.

Recorded pending preparation of the general famine report.

2. It is observed that in paragraph 5 of the Deputy Collector's report he has noted the percentage decrease in quantity of grain sold and not the increase in price in August 1891.

(True Copies and Extract.)

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

To the Collector of Salem.

1892.

Board of Revenue

(Revenue Settlement, Land Records
and Agriculture),

MADRAS.

Printed December 13th.

Proceedings, 5th December 1892, No. 774.

Recording, with remark, report submitted by the Collector of Salem on the famine operations in the district during the past season pending preparation of the general famine report,

64
BOARD OF REVENUE (REV. SETT., L. RDS. AND AGRIC.), 7TH DEC. 1892, No. 778.

PROCEEDINGS OF THE BOARD OF REVENUE (REVENUE SETTLEMENT, LAND RECORDS AND AGRICULTURE).

READ—the following letter from W. J. H. LE FANU, Esq., Collector of North Arcot, to the Secretary to the Commissioner of Revenue Settlement and Director of the Department of Land Records and Agriculture, dated Chittoor, 3rd November 1892, No. 1282-Index:—

With reference to the Board's Proceedings, Mis. No. 7430, dated 12th September 1892, I have the honour to report as follows on the recent distress of 1891-92.

The warning note of the recent distress was sounded in the year 1889, when on the eleven year cycle theory distress ought to have been expected. In the early part of the south-west monsoon of that year there was no cause for complaint in taluks south of the Pálár, but I felt some anxiety as to the whole district north of the Pálár and there was a tendency to a rise in prices. Rain was however heavy and general in August, September and October, but, though the monsoon was on the whole plentiful, it was capricious. The physical conditions of Chandragiri and Kálahasti and the two northern taluks of Kárvetnagar tended to avert failure in those tracts, but the Tirutani taluk of the zemindari, lying outside the gháts, was less fortunate; next door to Tirutani is the Arkónam division of Wálajápet taluk and there the conditions were worse than anywhere else. I was keeping the Revenue Secretary informed of the character of the season from time to time demi-officially.

2. The early part of the north-east monsoon up to the middle of December 1889 caused no small anxiety. The monsoon held off till a very late date. The tanks dependent on the Pálár and the Poiney anicuts received a fair supply of water, but the rain-fed tanks generally had a very poor supply; the wet crops in certain parts of the district, especially in the Arkónam division and in the adjoining zemindari tracts, especially Kálahasti, suffered considerably. From about the middle of October to the middle of December, there was scarcely any fall of rain worth mentioning and this accentuated the evil plight of the tracts referred to; but the position of Kálahasti was critical and I submitted a detailed report on 10th December 1889, predicting that a general scarcity was apprehended. The Commissioner of Revenue Settlement visited Arkónam in the first week of December 1889 and inquiries there made satisfied the Commissioner that, in Wálajápet taluk, there was an almost certain failure of the wet crops on about one-third of the taluk and of varagu crop on 7,000 acres, *i.e.*, in that part of the taluk belonging to the Arkónam division where the tanks are all rain-fed. Every precaution was taken to meet the threatened scarcity, but, fortunately for the district, rain began to fall from the 17th December up to the 8th January following all over the district, which removed all cause for serious anxiety. Though the rains did material good to the standing crops, they brought an insufficient supply of water to the tanks. The rains having been also too late for the wet crops in certain parts, namely Wálajápet, Arcot, Pólúr and Wandiwash, remissions had to be given for wet waste and shavi in that year (*falsi* 1299) to an appreciable extent. The total amount remitted on account of wet waste was Rs. 16,290 or 12 per cent. of the assessment on the total wet area in occupation. Adding to this other seasonal remissions for shavi, tirvakammi, &c., namely Rs. 6,776, the total remissions of land revenue on account of the adverse character of the season amounted to Rs. 23,066.

3. The change in prospects caused by the above-mentioned rainfall led to a gradual fall in the prices of the principal food-grains in January 1890, though the normal price for rice was nowhere reached. The rain fell exactly when it was most wanted and the result was that the district escaped from a general distress, the mischief being confined to the loss of revenue above referred to.

4. There was again a revival of anxiety when the south-west monsoon of 1890 showed signs of failure. I went to Europe on privilege leave for 3 months in August 1890, and, on my return in November 1890, I presaged danger from the parched and backward appearance of crops in Bombay and the Deccan. Immediately on taking charge on return from leave in November 1890 I examined the rain and crop returns and found them unsatisfactory. The north-east rains were late and insufficient in several taluks. In Wandiwash, the rainfall from October to December inclusive was less than a third of the average of the previous five years for the same period—8.08 inches against 25.53 inches—and in the Kālahasti zemindari, including Maderpāk division, it was just about a third or a little over the normal. In Pōlūr, Chandragiri and Palmanér, and in the Punganūr and Kangundi zemindaries and the Arni jaghir, it was considerably below the average. The rain-fed tanks and tanks in the lower course of the Pālār and Cheyār ancient channels did not receive a sufficient supply, and, about the month of December, apprehensions began to be entertained about the condition of some of the Government taluks, especially Wandiwash and Pōlūr and the zemindari of Kālahasti.

5. Seeing that there was no hope of improvement in prospects, I started on a tour of inspection on the 1st December 1890 and found things bad in the eastern part of the district, Chandragiri, Kālahasti, Puthur, Tirutani, Arkōnam, Wandiwash and Pōlūr. I was satisfied that no dry remissions were necessary anywhere in the district, even though the outturn of the late dry crops, especially in parts of Wandiwash and some other taluks, was estimated as low as four annas. On wet lands, however, large failure of crops over a considerable area was anticipated, especially in Wandiwash and Pōlūr, and the total loss of revenue in the shape of seasonal remissions was estimated at Rs. 1,89,000, the bulk of which, namely Rs. 86,500 and 35,500, related to Wandiwash and Pōlūr respectively.

6. The conditions were so bad in Wandiwash and Pōlūr and in the Kālahasti zemindari, which were specially marked out as affected tracts in this district, that it was found necessary to make arrangements to start works to afford employment for the laboring classes. There were, however, some unhoped for and quite abnormal falls of rain in January and February which saved a good deal of crops in Pōlūr taluk from perishing, and, in fact, removed all cause for apprehension about the condition of the people in this taluk and reduced the amount of remissions appreciably. There was also some rainfall about this time in parts of Wandiwash taluk and Kālahasti zemindari, but it was not enough to improve the condition of these tracts materially, though, in Wandiwash, it tended to save a large extent of crops which would otherwise have entirely perished or yielded only a scanty outturn of less than two annas. The amount of remission in this taluk was also considerably reduced as a consequence of this rainfall. However, several irrigation works—minor and major—were started to give employment to the laboring classes and the condition of the poorer classes gradually showed a change for the worse, and, at the date of His Excellency's visit to Wandiwash on the 16th March 1891, the necessity for vesting the Collector with discretion to grant gratuitous relief had become evident, and the opening of a few kitchens, where cooked food was to be issued to weak-bodied, helpless and destitute people, including men, women and children, was sanctioned. The supervision of relief works and kitchens and the making of constant inquiries in the distressed tracts as to the condition of the people became from this time forward a task of no small magnitude, and, in view also of the impending jamabandi, the Tahsildar and the Divisional officer were relieved of their ordinary duties by the appointment of a Special Deputy Tahsildar to be in charge of the taluk and a Special Deputy Collector to be in charge of the division. The Tahsildar and the Divisional officer being thus set free to inspect villages, to direct people in want

of employment to works and to organize kitchens, they inspected the worse affected tracts and started nine kitchens in convenient centres between the 27th March and the 20th April 1891, the latter being the date of the Famine Commissioner's visit to Wandiwash. On this last-mentioned date, there were 858 inmates on the rolls, the actual number in attendance being 537 children, 113 women and 208 men. The selection of the destitute poor and the arrangement for the distribution of gratuitous relief met with the approval of the Commissioner as expressed by him in Board's Proceedings, No. 240, dated 24th April 1891. The demand for employment for the laboring classes was also sufficiently met by opening 18 major and 15 minor irrigation works in several parts which employed about 3,700 coolies. Similar relief was also started in Kālahasti where the Divisional officer (the Head Assistant Collector) was appointed to supervise relief, his ordinary work being performed by a Special Deputy Collector appointed for the purpose.

7. A loan of four lakhs of rupees under the Land Improvement Loans Act was sanctioned in G.O., No. 105, dated 13th February 1891, to enable the zemindar to carry out repairs to irrigation works throughout the affected tracts and other villages of the zemindari and a Special Engineer was also placed at the Raja's disposal to carry out the works. Owing to the necessity, however, of preparing estimates and plans and consequent delay, a sum of Rs. 10,000 was also advanced to the Dewan to the Raja for carrying out repairs to minor irrigation works with a view to afford immediate employment to the distressed. Within a short time seven works were started by the Special Executive Engineer and six works under the Dewan's supervision and 900 coolies were employed on them. I may, however, state here that not long after the granting of the loan was abandoned and the cost of relief works and supervision was ordered to be debited to Famine Relief. As in Wandiwash, kitchens were also started for the distribution of cooked food to the destitute people. At first 4 kitchens were started by the Head Assistant Collector, on which 178 people, mostly children, were fed.

8. The situation continued unfavorable and was further accentuated by the lateness of the south-west monsoon rains, which, when they came, were extremely deficient. Loans were granted in Government villages under the Special Well Rules to enable ryots to sink wells and save their crops. The number of people resorting to works and kitchens gradually rose. In Wandiwash there were 31 major and 19 minor irrigation works on which nearly 5,250 laborers were employed on the 11th June—besides the number employed in sinking wells from Government loans—while the numbers fed in kitchens on the same date were 746. The distress was much severer in Kālahasti than in Wandiwash owing to a serious deficiency in the south-west rains, and about 1,770 people were employed on the irrigation and Local Fund road works in this zemindari. The extreme dryness of the weather which prevailed throughout the district from March 1891 caused such an utter scarcity of fodder and drinking water supply for cattle that they died in large numbers throughout the district notwithstanding that our forest reserves were opened for free grazing. Drinking water for human beings also failed in several villages and small grants were made from Local Funds for sinking and deepening ponds. There was, however, general fall of rain in the early part of June, of which Wandiwash received $3\frac{1}{2}$ inches, which alleviated distress to some extent. Sowings were encouraged and pasture also began to spring up; but this was all a mere phantom, the effects of which soon passed away. In Kālahasti, the showers were only local and insufficient to stimulate agricultural operations. There was practically no rain worth mentioning in July and August and large areas of crops withered away, and, as pasture became very scarce even in forest reserves and dry fodder was not procurable owing to failure of crops, the sufferings of men and deaths among cattle increased. The general prospect was gloomy throughout and grew darker day by day. On the 29th August, the numbers on relief works in Wandiwash rose to 6,054, while those fed at kitchens amounted to 1,486. Two additional kitchens were opened about this time in this taluk. In Kālahasti, 4,281 persons were employed on the relief works, while 2,115 persons were fed in 16 kitchens. The work of the Deputy Tahsildars in

charges of the two divisions of the zemindari having become very heavy, two Special Deputy Tahsildars were appointed to be in charge of the office work and to set the permanent men free for inspection work. His Excellency the Governor visited the affected parts of the Kálahasti zemindari towards the end of August 1891.

9. The failure of the south-west monsoon till the end of August created in me some apprehensions about the condition of the district generally. There were reports that the situation was becoming tighter in Arkónam division of Wálájapet taluk, Tirutani division of Kárvetnagar zemindari, in the eastern portion of Arcot taluk and in Pólúr taluk, but the only tract where the position had become critical was Pólúr. This taluk also suffered from failure of the north-east monsoon of 1890, but narrowly escaped owing to the abnormal fall of rain in January and February 1891. Owing to the serious failure of south-west monsoon, the condition of the taluk again gave cause for serious anxiety. There was very little rain in April and May, but in June the fall was good. In July, however, the drought set in and was followed by a phenomenally dry August. The tanks were almost all dry, and drinking water had in some cases to be brought from considerable distances. There were, however, some minor irrigation works in progress which afforded employment to those seeking it and the Public Works Department was also requested to start four works for which estimates were ready. Advances were also made under the special well rules to enable ryots to sink wells, and two kitchens were opened for the benefit of the destitute on the recommendation of Surgeon-Major Walker, who was employed on special duty in this district; a third kitchen was also found necessary soon after.

10. The distress soon intensified owing to the holding off of rain, so that at one time between September and October the highest numbers employed on works and fed in kitchens were as follows:—

							Employed on works.	Fed in kitchens.
Kálahasti	...	...	...	...	...	...	5,229	2,877
Wandiwash	...	...	...	...	...	...	6,721	1,760
Pólúr	...	...	...	...	...	...	2,096	145

Towards the end of September and in the first fortnight in October, rains began to fall which stimulated agricultural operations. These were followed in the second fortnight by further heavy falls in all the affected tracts and the improvement in prospects continued in the early part of November, but the high prices which prevailed increased the sufferings of the poorer classes. The whole first crop of 1891 was lost and the second crop was just on the ground. I had therefore to advocate that relief should continue till the harvest of the standing crops was over, but on the recommendation of the Commissioner, relief works were closed at the end of December and relief kitchens in the first week of January.

11. About this time the situation was tightening to a crisis in another part of the district, viz., Punganúr, and I was reporting to Board about it. The outcome of this will be dwelt at length later on. Looking back on the relief operations brought to close at this time, there were in the Kálahasti zemindari 49 relief works opened under the special Engineer, besides 16 works undertaken by the Dewan of Kálahasti and about 20 Local Fund roads. The average number of coolies working under the Executive Engineer was 2,315 per diem, while the Dewan's work gave employment to about 70. In Wandiwash, 82 works were in progress from March 1891 to January 1892, and the average attendance of coolies per day was 4,488. As regards the number fed at the kitchens there were 16 kitchens opened in the Kálahasti zemindari from the end of March 1891 to January 1892, and the average number fed in them per day was about 850, while in Wandiwash 11 kitchens were opened during the same period with an average attendance of about 555. In Pólúr taluk, three kitchens were opened from September 1891 to January 1892, the average number fed being 145. It is unnecessary to swell this report with further details about the amount spent on relief works or gratuitous relief

as all the information is already in the Board's office. The supervision of relief works was excellent in Wandiwash and Pólúr, but the same cannot be said of the state of affairs in Kálahasti owing to want of proper arrangements for making regular payments to coolies, &c. The management of kitchens was, however, carried out efficiently in all the affected tracts. In Wandiwash each kitchen was under the supervision of an influential local committee and was also visited twice a week, once by the Tahsildar and once by the Deputy Collector, and any habitual scamping of rations was impossible.

12. As to the success which has attended the administration of this form of relief I cannot do better than quote once more the words of Dr. Walker. He says:—

"From my inspection of the recipients of gratuitous relief at the kitchens of Wandiwash and Kálahasti, I have formed the opinion that considerable distress must have existed in the areas served by the kitchens, and that many persons would have died of privation and its attendant diseases (anæmia, dropsy, scurvy, diarrhoea and dysentery) if they have not been rescued by the prompt opening of the relief kitchens. As it was, six persons died of conditions the result of previous starvation after having been admitted to the Kálahasti kitchens; and one child, a boy of six years, died of starvation at Raipadu before the kitchen was opened there; furthermore eight caste people are known to have died of famine diseases, they having obstinately refused to avail of the kitchen relief though every effort was made to persuade them to attend.

"I saw indications of considerable distress in Pólúr taluk before kitchens were opened there as detailed in my diaries, dated October 17th and 21st, respectively (Proceedings of the Board of Revenue, dated 3rd October 1891, pages 1 and 5) at Ogur and Chetput groups of villages where the poorer classes were mustered for my inspection. At the Ogur group I found 20 per cent. and at the Chetput group 10 per cent. of those inspected showing signs of chronic starvation. These starvelings were mostly children. About these parts the starving people were living to a great extent on a small starveling root called 'Kottikalungu' which they dug for in the dry tank beds. It is, I believe, the same that the pigs usually root about in tank beds; its use by the people indicates a severe measure of distress. At these two places I advised the immediate opening of relief kitchens which was done.

"On the 26th October I inspected the Vellama caste village of Musali Nayudu Khandigai in Kálahasti zemindari, population 700. The Vellama people, who claim to be the 'same caste as the rajah', will not accept kitchen food, nor will they work on relief works, nor even accept work in fields which belong to any caste but their own. They are essentially 'poor and proud.' They own a little land on the security of which they have also been aided by private charity. I found that a girl of 10 years of age, and 9 and 12, were suffering from leanness, emaciation, anæmia, and were unable to borrow to a limited extent and withstanding these helps they were in sore need of aid. Of 55 children mustered in this village for examination, I found 10 per cent. suffering in different degrees of distress. It was the case with people who could not have been distributed from private sources, it may be imagined what would have been the case had the relief kitchens not been opened, and that the health of a still larger number would have been permanently undermined."

"I have no doubt whatever that a considerable number of persons (chiefly old people and children) would have succumbed had the relief kitchens not been opened, and that the health of a still larger number would have been permanently undermined."

13. I think I may safely assert that we took the distress in time and were not a day too soon. As I have said once before it would have been an easy thing to have had a "butcher's bill," but according to the Famine Code—Introduction, page 3,— "the bills of mortality furnish the only true criterion" of "the success or failure of a system of relief."

14. While on this subject I cannot help referring to the controversy about the excess of human mortality during the prevalence of distress and at the time of closing relief. In my letter, reference on Board, No. 438, dated 15th February 1892, para. 1, I submitted, in reply to Board's call (vide Board's Proceedings, No. 826, dated 25th December 1891), a full report giving monthwar and stationwar statistics of mortality from June to December 1891, as compared with the average for the past five years distinguishing deaths from cholera from those due to causes other than cholera. The subjoined is an abstract for the whole district compiled from the detailed statement referred to above.

Month.	Average of five years.			1891.			Variations (increase).		
	Mortality from causes other than cholera.	Mortality from cholera.	Total.	Mortality from causes other than cholera.	Mortality from cholera.	Total.	Mortality from causes other than cholera.	Mortality from cholera.	Total increase.
June ..	2,557	64	2,621	2,728	210	2,938	+ 171	+ 146	+ 317
July ..	2,868	39	2,907	2,332	747	3,079	+ 364	+ 708	+ 1,072
August ..	3,024	141	3,165	3,294	1,225	4,519	+ 270	+ 1,084	+ 1,354
September ..	3,082	90	3,172	2,910	814	3,754	+ 172	+ 754	+ 926
October ..	3,218	55	3,273	3,342	522	3,864	+ 124	+ 467	+ 591
November ..	3,332	87	3,419	4,458	787	5,245	+ 1,126	+ 700	+ 1,826
December ..	3,779	498	4,277	5,598	1,533	7,148	+ 1,816	+ 1,055	+ 2,871
Total ..	21,880	974	22,854	25,550	5,898	31,447	+ 3,669	+ 4,914	+ 8,583

As I said in my letter embodied in Board's Proceedings, No. 826, dated 26th December 1891, the above abstract clearly proves that there had been a tendency to increase in the death-rate since June 1891 and that it was marked in November and December. The Board, however, was inclined to put it down to cholera and improved registration. The above abstract however, while showing that cholera mortality accounts for a large percentage of the increase in the earlier months, clearly proves that deaths from causes other than cholera were on the increase in November and December 1891. No doubt cholera contributed largely to the high death-rate, but it is equally undeniable that the debilitated condition of the people, owing to insufficient diet, which again is due to tension of high prices, predisposes them to disease of all kinds, of which cholera is only one and a well known concomitant of famine. As regards the abnormally high death-rate in November and December, this was attributed to its being an unhealthy time of the year, but this does not sufficiently account for the excess over the average for the same unhealthy months of the previous years. Then again if the mortality is to be credited to improved registration, the birth figures should be accepted as more accurate than usual. The subjoined abstract shows the figures as compared with those for the previous three years:—

Months.		1	11.	1892.
August ..	..	1	7,378	4,319
July ..	..	2	6,768	4,470
June ..	..	3	7,760	3,823
May ..	..	4	5,181	3,446
April ..	..	5,095	4,299	3,004
March ..	..	4,136	4,043	3,626

The considerable falling off in births as shown in August, July, June, May, April and March 1892 proves conclusively that vital deterioration was going on in November, October, September, August, July and June 1891, respectively.

15. I said in paragraph 11 *supra* that the situation in Punganur was threatening. The scanty south-west monsoon was followed by extremely deficient north-east rains. From April to September 1891 only 7.48 inches of rain were registered against 18.97 inches, the average due for the same period. In October there was a fair fall of 4.80 inches, but in November there was an almost complete failure of the rains, and though there were some showers in December, they were not of any agricultural value. The Commissioner paid a visit to Punganur about the middle of January 1892, and, from what he saw of the standing crops and supply in tanks, he was convinced that there was a widespread failure of the crops in one-half of the zemindari and immediately after his visit relief measures were ordered to be started early in February. In the neighbouring parts of the district lying above the ghāts, namely, Venkatagirikōta division of Palmanur taluk and Kangundi zemindari, the situation,

though threatening, was not so bad and the opening of relief measures was, therefore, postponed. For Punganur a special Engineer was appointed to supervise the execution of relief works and a Special Deputy Collector was appointed to organize kitchens and superintend the grant of loans for sinking wells, as also to see that all those requiring employment were drafted on to the relief works. There were three road works started at first by the District Board Engineer which were afterwards taken over by the special Engineer. Works for improving the water-supply of villages were also started and a number of wells for men and cattle were excavated. About 72 wells were sunk for agricultural purposes out of loans advanced under the Land Improvement Loans Act. A kitchen was also started at Ramasamudram for the distribution of cooked food to the destitute children, men and women where 45 people on an average per diem were fed for four months. The most trying months were those of April and May when the numbers on relief works rose from 500 to 2,000.

16. On the 15th May His Excellency the Governor visited the zemindari and inspected the laborers on the works whose condition was pronounced to be satisfactory. The actual number of coolies employed on relief works on the 14th May was 1,357. Though the condition of the people was said to be good, some families were found who were hard-pressed, but who, however, still declined to avail themselves of the relief offered. Fortunately for these the south-west monsoon which had held off came in, and though late, it was plentiful. The heavy and unprecedented rains in June and July brought on a material change in the condition of the affected tract as well as throughout the district, so that it was possible to bring the relief operations to a close by the 15th July. But for the timely rains in June and July, the distress would have been very considerably intensified. As it was, the relief works were started just in time to prevent the kitchens from being swelled by the list of applicants for gratuitous relief.

17. The sinking of wells was in a great measure encouraged by the recent distress. The people were hitherto very apathetic about accepting Government loans. At a very early period of the distress, the Special Well Rules were introduced into this district, and loans were granted to ryots to enable them to sink wells with a view to save the crops from failure. The total number of applications accepted up to the end of September 1892 was 4,904 involving Rs. 6,46,242-8-0, of which payments were made in 4,369 applications, the amount disbursed being Rs. 4,25,643-8-0. 909 wells have been constructed up to date, while 2,643 wells are under construction. Nearly three-fourths of these loans have been advanced in the affected taluks and these tracts also account for 2,811 out of 3,552 wells completed and under construction. Loans for the purchase of seed-grain and cattle were also granted chiefly in the affected tracts, to the extent of Rs. 4,145, the number of applicants being 127. It is impossible to describe within this short space the enormous benefits accruing to the country from these loans. It is true that in some localities facilities for well-digging do not exist, but wherever they exist, wells which have been dug have saved not only the crops, but have also tended to save the lives of men and cattle during the recent distress. Many people also found employment on well-digging which, though one of the means of relieving distress, is much cheaper to the State than other forms of relief. The figures given above and the statistics from time to time reported which are already in the Board's office show how zealously the officers employed in the affected tracts worked in encouraging the ryots to benefit by these loans.

18. I must respectfully beg to bring to the notice of the Board and Government the names of officers who so ably and zealously co-operated with me in carrying out the arduous duties entailed by the famine operations. Mr. Buckley's work from January to October was harassing and excellent. He was inclined to grow slack from November till the relief was closed, but of his work during the press of distress, in the very trying climate of Kālahasti, it would be impossible to speak too highly. Mr. C. Smith of the Public Works Department rendered excellent and willing service in Maderpāk division. Surgeon-Major Hackett-Wilkins and Doctor G. L. Walker co-operated most zealously in their departments. Mr. J. M. Lacey,

Assistant Engineer, did excellent work cheerfully in Punganur. M.R.Ry. Lakshmana Row Garu, Deputy Collector, was indefatigable in Wandiwash. I may say the same of M.R.Ry. Narayana Iyer Garu, Deputy Collector, first in Pólur and afterwards in Punganur. Mr. Buckley and the two Deputy Collectors were continually in camp and on the move for a complete year, and the Commissioner knows what a terrible year it was, the heat being quite abnormal, while hot winds and dust storms were almost continuous for the whole of the hot weather.

19. The reports of Messrs. Buckley and Lacey and M.R.Ry. K. V. Lakshmana Row Garu are forwarded and that of M.R.Ry. Narayana Iyer Avergal will follow.

ENCLOSURE No. 1.

Public Works Department.—Report on the conduct of the Famine operations in Punganur Zemindari, North Arcot District, by J. M. Lacey, Esq., Assistant Engineer.

In their Order, No. 121 of 4th February 1892, Revenue Department, Government ordered measures to be started for affording relief to the distressed in the Punganur zemindari, and the Public Works Department were directed to supply the necessary staff for the professional supervision of the relief works and the execution of task.

Establishment.—Mr. J. M. Lacey, Assistant Engineer, was posted to charge of the works started in zemindari, and the following subordinates were placed under him—

- (1) Mr. Fonseca, Overseer, Public Works Department.
- (2) Dyrianatha Mudaliar, Overseer, Public Works Department.
- (3) Punchapaskea Iyer, do. do. do.
- (4) Thumbasawmy Pillay, do. do. do. and Local Fund Overseer.

Mr. Wettibron. There were no changes in the staff during the relief operations.

Works.—There were three roads just started by the District Board Engineer which were taken over at the beginning of April—

- (1) Constructing a road from Ramasamudram to the Cuddapah frontier via Chembukur, estimate Rs. 7,400.
- (2) Repairing road from Punganur to Chowdapalle, estimate Rs. 17,930.
- (3) Do. do. do. to Kolar-Palmaner road via Sunkarayalpet, estimate Rs. 10,020.

It was also proposed to repair the road from Punganur to the Mysore frontier via Ramasamudram, but this was found unnecessary as the three roads abovementioned afforded sufficient work for all coolies who came to them. Works also for improving the water-supply of villages were started and a number of wells for men and cattle were excavated. All works were finally closed by the 15th of July 1892.

The total expenditure on the works were—

Roads.	Expenditure.
	RS. A. P.
(1) Constructing a road from Ramasamudram to Cuddapah frontier via Chembukur	3,384 12 11
(2) Repairing road from Punganur to Chowdapalle	5,823 1 4
(3) Do. do. do. to Kolar-Palmaner road via Sunkarayalpet	6,188 2 3
Improvements of village water-supply	1,169 14 8

Condition of coolies, &c.—The famine coolies on relief works were in very fair condition: those on the roads were not exactly the professional class of men but they soon learnt their work and were capable of earning first and second class wages. The distress was not so acute as to attract the professional class of men, viz., Woddars, to the road works, as they complained of the low rate of wages; but they generally found employment in the well works for the improvement of village water-supply and in the wells, for the excavation of which loans were advanced to agriculturists where they were paid by piece-work and earned from 4 to 6 annas a day.

General remarks.—The most trying months were those of April and May when the numbers on relief works rose from 500 to 2,000, and there is no doubt that if the timely rains had not fallen at the beginning of June and subsequently in July, that the distress would have been very considerably increased. As it was the famine was in its infancy and the relief works were just started in time to prevent the people falling to that stage where gratuitous relief would have been absolutely necessary.

The health of the famine coolies was generally good and there were only a few deaths due to cholera.

ENCLOSURE No. 2.

From L. E. BUCKLEY, Esq., Acting Head Assistant Collector, on Famine Duty, North Arcot, to the Collector of North Arcot, dated Ránipet, 28th January 1892, No. 43.

I have the honour to submit the following report on the relief administered during 1891 in the Kálahasti zemindari.

2. The following statement shows the kitchens opened, the dates of opening and closing, and the number of people who have availed themselves of relief at each kitchen:—

No.	Names of kitchens.	Date of opening.	Date of closing.	Number of persons relieved.			Total.
				Men.	Women.	Children.	
1	Vellatukota	28th Mar. 1891 ..	14th Jan. 1892 ..	24	40	121	185
2	Alagiriipet	4th April	14th	16	43	78	137
3	Panapak	9th	18th	9	39	96	144
4	Janakipuram	15th	14th	21	67	110	198
5	Buchivaidukandigai	23rd	16th	9	32	96	137
6	Anjoor	20th	16th	6	31	84	122
7	Ragigunta	8th May	16th	14	42	100	156
8	Royapedu	12th	16th	7	45	109	161
9	Maderpak	23rd	16th Dec. 1891 ..	11	48	76	135
10	Palambedu	24th	19th	5	26	72	103
11	Edar	25th	20th June	1	6	3	9
12	Arambakam	27th	16th Dec.	6	7	49	61
13	Choda Agraharam	31st	19th	8	34	70	112
14	Kallivedu	1st June	19th	18	75	165	248
15	Arai	4th July	16th Jan. 1892 ..	6	23	62	81
16	Bépalie	23rd	14th	16	43	75	134
17	Madhavembudu	10th Aug.	14th	19	33	50	102

Kitchens attached to Public Works Department.

1	Perandur	1st Oct. 1891 ..	2nd Jan. 1892 ..	..	..	69	69
2	Pennalurpet	5th	2nd	..	..	74	74
3	Kannavaram	30th Sept.	14th	..	..	182	182
4	Chilamattur	26th	11th	..	..	372	372
5	Chavali	24th	11th	..	..	110	110
6	Kothakandigai	24th Oct.	16th	..	..	125	125
7	Kattur	24th	16th	..	..	48	48
8	Royapedu	14th Nov.	16th	..	..	260	260
9	Ragigunta	10th Oct.	16th	..	..	470	470
10	Arai	17th	16th	..	..	180	180
Total ..				194	633	3,278	4,105

3. The statement subjoined shows the expenditure on supplies, establishment, and contingencies:—

Month.	Consumption.	Pay of establishment.	Sheds.	Office contingencies.	Total.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
1891.					
April	62 7 0	37 1 8	..	..	89 8 8
May and June	688 15 11	79 5 7	11 15 8	43 0 8	821 5 10
July and August	1,637 0 3	423 0 2	183 1 3	30 6 4	2,272 8 0
September	1,643 7 2	190 6 3	301 12 0	26 0 9	2,170 10 2
October	3,667 14 5	403 15 3	42 11 6	18 11 10	4,130 5 0
November	1,036 10 6	320 8 6	41 11 6	3 0 0	2,001 14 6
December	1,762 16 5	333 6 6	..	3 4 0	2,099 11 11
1892.					
January	764 3 0	239 11 8	..	12 14 0	1,056 12 8
Do. supplemented	446 1 7	102 15 2	..	..	549 0 9
Total ..	12,284 11 3	2,190 8 9	584 3 11	132 5 7	15,191 13 6

* Out of Rs. 449-0-0, Rs. 297-14-0 are to be disbursed by the Deputy Tahildar of Maderpak and Rs. 251-2-0 are to be disbursed by the Kálahasti Deputy Tahildar.

4. Deaths known to be due to privation are as under:—

Caste and name.	Sex.	Adult or child.	Village.	Date of death.	Remarks.
1. Kristnan, Poligar.	Male	Child (10 yrs.)	Marrappa Reddi Kandigai.	11th May 1891.	Before kitchens were opened.
2. Gruvappa Chetty, Potter.	Do.	Adult (60 yrs.)	Venkatapuram.	27th June ..	Was offered a ticket, but refused to avail of it.
3. Ragappa Naidu, Velama.	Do.	Adult ..	Musal Naidu Kandigai.	20th	Refused to go to kitchen.
4. Yanadi ..	Female	Do. ..	Buchi Naidu Kandigai.	May	Died after admission to kitchen.
5. Velama ..	Do.	Do. ..	Alathur ..	July	Refused to go to kitchen.
6. Vellachi, Pariah.	Do.	Do. ..	Pulambadu ..	29th Aug. 1891.	Lived by begging; refused to work.
7. Cheneu, Muttrasa.	Do.	Do. ..	Pallavada ..	6th	Refused to go to kitchen.
8. Pariah ..	Male	Do. ..	Edur ..	August ..	Refused to attend the kitchen (in his own village).
9. Pariah ..	Do.	Child ..	Répalle ..	27th Sept. 1891.	After admission to kitchen.
10. Velama ..	Female	Do. ..	Buchi Naidu Kandigai.	October ..	Refused to enter kitchen.
11. Lutchimi (Yanadi).	Do.	Adult ..	Anjur ..	10th Nov. 1891.	After admission to kitchen.
12. Velama ..	Male	Do. ..	Musal Naidu Kandigai.	October ..	Helped from charity of Mahajana Sabha.
13. Do. ..	Do.	Do. ..	Do. ..	Do. ..	Do. do.
14. Do. ..	Do.	Do. ..	Lakshimpuram.	Do. ..	Do. do.
15. Do. ..	Do.	Do. ..	Do. ..	Do. ..	Do. do.
16. Yanadi ..	Do.	Child ..	Répalle ..	Do. ..	Died after admission to kitchen.
17. Brahmin ..	Female	Adult ..	Razucheruva ..	16th Dec. 1891.	Relieved from the Mahajana Sabha's funds.
18. Nages (Yanadi) ..	Do.	Child ..	Anjur ..	13th Jan. 1892.	Died after admission to kitchen.

5. The following special officers served under me as Circle Inspectors:—

Name.	Date of arrival.	Date relieved.
1. M. Venkataramana Sastri ...	27th March 1891 (forenoon).	25th January 1892.
2. P. Ragava Pillai ...	4th April 1891 (forenoon).	25th
3. V. Sitambara Devu ...	2nd May 1891	25th
4. B. K. Santayya ...	12th	22nd
5. K. Situ Rao ...	13th	1st
6. A. Kandayya Mudali ...	1st June ..	22nd

6. Special Deputy Tahsildars were appointed and relieved as under:—

	Appointed.	Relieved.
1. I. Venkatarama Iyer ...	24th August 1891	18th January 1892.
2. M. Subramaniya Iyer ...	24th	19th

7. I solicit orders as to what is to be done with the records relating to relief work.

ENCLOSURE No. 3.

From M.R.Ry. K. V. LAKSHMANA RAO GARU, Deputy Collector on General Duties, North Arcot, to the Collector of North Arcot, dated Wandiwash, 4th October 1894, Gl. Eng. No. 5864.

With reference to Reference on Board No. 2433 of the 21st September 1892, I beg to submit my report on the conduct of famine relief operations in the Wandiwash taluk during the past season.

2. Wandiwash, the extreme south-eastern taluk of the district, borders on the east on the Coojevaram and Madurantakam taluks of the Chingleput and on the south on the Tindivanam taluk of the South Arcot district. Its area is 466 square miles and population 177,584. The taluk is for the most part flat and open country, intersected by the only principal river Choyár, which enters it on the west and flowing in a north-easterly direction forms its northern boundary.

3. It consists of 285 villages and has in all 576 irrigation works, of which 121 are river-fed under the Choyár anicut system, and the rest 455 are purely rain-fed, and all of them depend chiefly upon the periodical rains of both the monsoons, to the advantage of which the taluk is subject.

4. Rainfall of and cultivation up to November of 1890, as compared with the corresponding period of 1889, are as shown below:—

Year.	Rainfall.		Cultivation, April to November.				Total.
	April to September.	October to December.	Dry.		Wet.		
			1st-crop.	2nd-crop.	1st-crop.	2nd-crop.	
1889	25.48	19.09	81,840	6,001	39,165	2,109	130,015
1890	21.77	8.08	80,671	6,321	37,219	1,779	124,990

Harvest and outturn.

Year.	20 annas.	16 annas.	8 annas.	4 annas.	Total.
1889	135	2,066	60,798	8,254	61,253
1890	..	2,547	21,206	13,469	40,222

Estimated outturn of standing crops.

Year.	16 annas.	8 annas.	4 annas.	Less than 4 annas.	Shavi.	Total.
1890	..	5,310	47,340	21,708	10,380	84,768

The loss of revenue anticipated was in round figure 1 lakh of rupees.

(a) It will be seen that the rainfall and cultivation in 1890 was considerably below par and the season presented a much gloomier aspect.

5. Though the south-west monsoon in 1890 was fairly good, the later dry crops of the taluk were bad, having been so low as 4 annas. It was, however, the conditions of wet crops chiefly dependent on the north-east monsoon which were mostly unsatisfactory, especially in the tracts north and north-east on the Chingleput frontier, that menaced parts of the taluk seriously. The later rainfall was less than a third of the average of the previous five years. Out of the total number of 576 tanks (including the river-fed ones) more than 300 were empty at the close of December 1890, and 129 had water for one month and under. Nearly half the area of the taluk was affected by the failure of crops.

6. In 70 of the villages distress began to manifest itself about the close of the year and 75 more threatened to follow them.

7. Wide famine experience and far reaching foresight of the district administrator at once found from the above state of things signs of approaching distress and kept the officers in the district in timely warning of it. At the same time the necessity to provide labour on a large scale was foreseen and the widening of the Choyár channel suggested both as a work requiring improvement and as affording employment for a large section of the people requiring it.

8. It is a recognized fact that inspections of the affected areas and inquiry of leading men of the villages alone can furnish information of a reliable character as to the prevalence of distress. No time was accordingly lost in issuing orders to this end and prompt inquiries and inspections thus insisted upon furnished continuous information of the general conditions of each local area and the means of gauging the gravity of the position from time to time.

9. To meet the coming scarcity the first of the steps taken were the arrangement for affording employment to those who need it in the given tracts, and the minor irrigation works sanctioned for Wandiwash for 1891-92 were ordered to be put in hand from the commencement of February 1891. The Public Works Department authorities were desired to carry out the repairs of certain major works and to arrange for the early commencement of the Choyár channel extension works.

10. About the close of January about 200 persons in about 32 affected villages where the failure of crops have been very great were ascertained to be without any means of existence and in need of relief.

11. Proposals were in consequence made about this time that the Divisional officers should be vested with discretion to admit to money-dole the very old and infirm persons who were utterly destitute, and also to establish kitchens for children whom their relations on whom they depended in ordinary times were unable to support, and relieve the Tahsildar of his then pressing work in connection with the jamabandi and census in view to set him free for the more important duty of inspecting the distressed villages.

12. About this time rain fell very unusually over a limited tract on 6 days amounting to 1.75 inches on the 19th and 20th January and to 1.44 inches on the 11th, 12th, 13th and 17th February, and these abnormal falls had the effect of saving the withering standing crops and reducing the amount of the estimated remissions in the taluk considerably.

13. In the middle of February, the Famine Commissioner toured through the affected tracts of the taluk and the result of this inspection was more minor irrigation works were started as provisions for employment in all parts of the taluk in addition to the Public Works Department works.

14. At the latter part of February I joined the division, and under the order and clear instructions already issued by the Collector, myself and the Tahsildar, who had by this time been relieved of his ordinary duties by a Special Deputy Tahsildar stationed at Wandiwash, toured systematically and constantly over the affected areas, taking fresh tracts each time and carefully noted down in each village the state of the people, number of people who wanted work, number capable of doing any work and who were sent out to the several works in the neighbourhood, number emigrated, and number who from want of sufficient nourishment showed signs of weakness, how they lived then, and their proportion to the able-bodied. The selection of these persons was confirmed at the inspection subsequently made by the District Surgeon and the Collector. The advantages of having wells in precarious seasons and those offered by the special well rules were widely circulated and the latter explained to the people during our tours, and the applications for loans invited largely from the ryots. The early administrative operations had so far been successful and complete that assistance reached before people began to lose strength from want of food.

15. Over 600 of the people selected for Government measures of relief assembled at Wandiwash during His Excellency the Governor's visit to the station on the 16th March, and His Excellency having been satisfied that time had arrived for the distribution of gratuitous relief, sanction was accorded in Government Order, dated 19th March 1891, No. 223, to the relief being given to a limited extent in the shape of cooked food and to the opening of kitchens for the purpose to feed destitute children, men and women, physically incapable of labour and having no well-to-do relations to support them.

16. I was at the same time relieved of my ordinary duties as Divisional officer and set free to continue the inquiries about the state of the season and to organise kitchens in Circles of not more than 5 miles in diameter to suit the convenience of the recipients.

17. The tracts most affected, comprising villages on the east and south-east, on the Madurantakam frontier, were taken up for inquiries and inspections. The next worse tracts were central including the town of Wandiwash-southern and south-western. From further inquiries, persons deserving relief were selected and 9 kitchens were started in convenient centres between the 27th March and the Famine Commissioner's visit on the 20th April, with 858 inmates on the rolls.

Actual attendance being ... $\left\{ \begin{array}{l} 537 \text{ Children,} \\ 113 \text{ Women,} \\ 208 \text{ Men.} \end{array} \right.$

18. The selection of the destitute poor and the arrangements for the distribution of gratuitous relief met with the approval of the Commissioner as signified in Board's Proceedings, dated 24th April 1891, No. 240.

19. Fodder and water-supply became, at the close of April, scarce in the affected tracts; and orders were issued for the free grazing in forest reserves. Drinking-water sources were improved, wherever required, at the cost of the Local Funds. The demand for employment for the labouring classes had been sufficiently met with 18 major and 18 minor irrigation works started in several parts, which employed about 4,700 coolies.

20. Relief was granted also in the shape of loans under the Land Improvement Act and Special Well Rules to holders of lands. The ryots, who from failure of crops, suffered and had no food stocks to fall back upon, turned themselves well-diggers utilizing the money for their own subsistence—works which, in ordinary times, always employed professional waddars. The loan granted to the end of April came to Rs. 8,770.

21. Influential persons in villages, where the kitchens were established, came forward to assist in the charitable cause by way of superintending the distribution of relief in the above kitchens and the other arrangements effected were as economical as possible and only such servants—caste servants and cooks—as were absolutely necessary were entertained.

22. In May, the major and minor works, 26 and 24, respectively, were in progress and afforded employment on an average for 4,800 coolies. The strength in the kitchens in the several weeks of the months did not exceed 738. The harvest of 2nd-crop paddy and ragi proved below middling. Cumbu and gingelly failed to some extent for want of rains. Fodder and water-supply were scarce and cattle began to look weak. There was rain varying from 1 to 2 inches in parts central, southern and western, but the rains were beneficial only to small areas of standing crops under wells and as improving pasture.

23. In June, 42 major and 22 minor works were in progress employing on an average 4,800 coolies, which rose at the latter part of the month to 5,371. The number on gratuitous relief also rose slightly at the end of June to 755. The rainfall in the two fortnights of the month amounted to 3.11 inches, which furnished drinking-water supply in certain localities and encouraged the sowings of cumbu and gingelly on dry lands. Pasture was insufficient and cattle continued to suffer. The price of ragi also rose from 20.20 seers per rupee in May to 19.11 seers at the end of June. The amount of loan disbursed up to the month came to Rs. 21,673 and provided employment for over 200 men.

24. In July, 5,250 were employed on 44 major and 25 minor works during the first fortnight of the month, but the number decreased to 4,400 in the second fortnight owing to the completion of the light work of removing silt from the bed of the Choyár at the time. Prices of ragi and rice (second sort) rose in the first and second fortnight to 17.29 and 11.55 seers per rupee from 19.11 and 12.56 seers, respectively. Cumbu and gingelly sown in June were withering for want of rain, which in the month amounted to only 57 cents, was of no value to any crop. The loans granted in the month, Rs. 28,138, employed 1,320 coolies at the latter part of the month. The number on relief in the nine kitchens also rose to 784.

25. In August supplies in wells began to fail for standing wet crops under them and cumbu and gingelly sown in June withered all over the taluk. Drinking supply became scarce and cattle suffering increased, and mortality began. Mortality from cholera increased. The coolies on 10 minor and 44 major works increased from 4,353 at the end of July to 6,000 and the number on gratuitous relief in the 10 kitchens (the 10th was opened in the month for the north-eastern villages) rose also suddenly to 1,486. The loans for wells (Rs. 30,025) employed in the month the largest number of over 3,100 persons. The rainfall in August 1.38 inches was too scanty to be of any value. In brief the outlook in August was gloomier, the failure of the early south-west monsoon was complete by the end of August and distress had reached at the beginning of September a serious point.

26. In September, the rainfall was too slight to be of any value. The supply in wells failed, cattle mortality considerably increased from want of fodder, cattle subsisted merely on leaves of trees, the price of ragi rose from 17.29 seers to 11.56 seers per rupee, owing to failure of importations from the Mysore countries, where also the season grew worse. People began to lose heart. One more kitchen was opened in the month and the number fed in them rose on the 20th September to 1,748.

27. Number of coolies on the Choyár works fell to a large number, while those on sinking wells under loans increased to 3,920 during the month. A sudden change in the season prospects, however, for the better occurred, at the latter part of the month, there having been a little over 4 inches of rain on the 27th and 29th. The drinking-water supply improved, irrigation works received 10 to 20 days' supply. Ploughing operations began on dry lands, the Choyár was in fresher, and above all, the price of ragi slightly fell at the close of September. The Collector and the Special officer, Doctor Walker, inspected the relief operations at the latter part of the month, specially the latter as to the diseases prevailed and the general suitability of the diet. The latter officer placed some of the inmates under special diets (Board's Proceedings, No. 676, dated 21st October, 1891).

28. With the later rains of September supplemented by the rainfall in the first fortnight of October, the season considerably improved. Dry and wet cultivation began generally all over, pasture and cattle improved, the price of ragi fell to 17.29 seers a rupee. The number on works decreased from 6,145 to 5,299 and the number on gratuitous relief sunk to 1,332. In the latter part of October, unprecedentedly heavy rains fell in addition to the earlier falls in the month, which reduced the number on works from 6,145 to 1,479. Agricultural operations began all over and the number on gratuitous relief also decreased from 1,670 on the 3rd to 886 on the 31st October. The improvement in the season commenced in October, continued afterwards and the months of November and December were very favorable for agricultural operations. The number on works and on gratuitous relief gradually fell to a low figure with abundance of pasture; after the rains, cattle began to improve, though their mortality was very great between August and October. The price of ragi alone did not fall even after the rains.

29. It will thus be seen that distress commenced in April, continued moderately to the end of July, assumed a magnitude in August and reached a serious stage in September as the failure of crops, the enormous cattle mortality from want of pasture, sudden rise in the number on works (both Government relief and private well-sinking) and gratuitous relief would indicate.

It began to abate early in October and after the unusually heavy rains at the end of the month, when the general agricultural operations began all over the taluk, the relief works were deserted, the kitchen attendance fell considerably.

30. The kitchens were, however, kept open till the middle of January this year, until the season prospects showed a decided improvement and the people found means to support themselves and their dependents in the general agricultural operations of the country.

31. The chief feature in the famine of 1891 was crime did not increase, as is usual during the adverse seasons and there was no emigration of whole families from place to place. A few of the able-bodied villagers nearer to the Chingleput district, however, left for Madras during the period preferring light labour available there in the transshipment of goods on the beach, to the harder nature of relief works, and a few others induced by their relations, who have already been to Ceylon and the Wynaad for labour on coffee plantations, left their villages.

32. The absence of increase of crime is due to the following causes:—

(1) Timely and convenient provisions for employment of the able-bodied among the destitute persons, who required it.

(2) Gratuitous relief granted to their aged relations incapable of physical labour and young children, who otherwise would have proved a burden to them, limited their wants and restrained them from a tendency to crime.

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35. I beg to attach a statement showing the average number on gratuitous relief each month and the expenditure incurred for each of the kitchens. The total expenditure incurred from April to the 15th January 1892 has come to Rs. 12,142-1-10 in all.

READ—also the following letter from K. NARAYANA IYER, Acting Deputy Collector in charge of Treasury, North Arcot, to the Collector of North Arcot, dated Chittoor, 24th November 1892, No. 2888-Genl.:—

With reference to your Reference on Board No. 2433 of 1892, dated 31st September 1892, I have the honour to submit the following report on the conduct of famine operations in Punganur during the past season.

2. The Government Order sanctioning the starting of relief works, communicated in Board's Proceedings, No. 1309, dated 5th February 1892, having been received on the 6th idem and the gazette appointing me Special Deputy Collector for relief purposes having been received on the 11th, I took charge of the office on the same day and proceeded to Punganur, arriving at it on the 14th idem. The fortnightly narratives of the state of affairs in Punganur, commencing with the 1st, which I submitted on the 2nd March, and closing with the last, which was sent on the 17th July, for the period ending 15th idem, when the relief works were finally closed, give a full and detailed account of the operations in the zemindari. I will, however, describe them here briefly.

3. Though I reached Punganur on the 14th February as stated above, none of the relief works proper which were sanctioned to be started were commenced till about the middle of March 1892, save the work of grass cutting at Ramasamudram owing to the absence of subordinates of the Public Works Department under whose professional control the works had been ordered to be carried out. I was therefore busily employed in the meantime in inspecting the affected parts.

4. The state of affairs in the division, which culminated in distress in the first half of this year, has already been reported to Board and Government. The rainfall in the year 1891 was extremely deficient, being far below the average due. In January and February 1892 it was *nil*. The supply in the tanks throughout the zemindari were failing, those on the western and southern sides containing either no water or too little to be of any practical value. Of the 1,212 tanks in the zemindari

914 tanks were dry, 272 had a supply ranging from 5 to 10 days, while the remaining 26 tanks had from 15 to 60 days' supply. This inadequacy of water-supply naturally told considerably on the cultivation. The wet cultivation was on the decrease during the past three years, that during fasli 1301 being extremely backward. Ragi and cumbu suffered much in September and November 1891, so much so that the outturn did not generally exceed 4 annas, and this resulted, as a matter of course, in the rising of the prices. Second-sort rice was selling at 8 4/6 seers and ragi at 13 4/4 seers per rupee, the scarcity rates being 10 00 in the case of the former and 13 2 in that of the latter. Cholum and cumbu were not available for sale in the markets. The working classes were the first to suffer from this state of affairs, some of the children and old people showing signs of mal-nutrition. The ryots were in anxious fears about their cattle lest the hot months should make short work of them. There was hardly any pasture for them anywhere, save in the guarded forests lying in the eastern part of the zemindari. Agricultural operations were almost at a standstill except under wells, the supply in which had not entirely failed. This was briefly the condition of affairs when the relief operations were ordered to commence in Punganur.

5. The tract of country with Punganur as its centre, bounded on the east by a line due north and south through Chandepalli, and on the other sides by the limits of the zemindari, where it touches Cuddapah district, Mysore territory, and Palmanor taluk, with about 300 square miles and a population of nearly 69,000, the area and population of the entire zemindari being 618 square miles and 92,000 nearly, was more affected than the rest of the zemindari.

6. The various measures employed for relief purposes are briefly noted below—

Grass cutting operations.—The only work that was going on when I entered upon my duties was that of grass cutting at Ramasamudram as stated above. This work, which was undertaken mainly with the object of giving needed employment to soldiers, was commenced on the 9th February 1892 under the supervision of the Forest Department and lasted till about the 20th March 1892, when it was stopped on the starting of the road work at Ramasamudram. The total expenditure in the collection of grass at Ramasamudram was Rs. 321, the quantity collected being 65 tons 33 cwt.

Opening of kitchens.—Only one kitchen was opened on the 12th March 1892, and that was at Ramasamudram. It began with 32 persons (2 men, 2 women and 28 children) almost all being of the Musulman caste. This kitchen was closed on the 15th July 1892, when the number stood at 23. The rise and fall during this period was as follows:—on the 15th March it was 40, on the 26th it was 45, on the 14th April 40, on the 30th 51, on the 14th May 57, on the 31st 58, on the 11th June 46 and on the 25th it was 35. The higher classes did not resort to the kitchen at all, save 1 or 2 solitary cases, owing to caste scruples. Mains and Madigan, who also held aloof at the commencement, came to the kitchen gradually as they began to feel the pinch.

Relief works.—Besides the grass digging at Ramasamudram already mentioned, the relief works started are (i) the repair of Punganur-Chandepalli road started on the 18th March, (ii) the construction of a new road from Ramasamudram to Cuddapah frontier commenced on the 21st March, (iii) repair of road from Punganur to Banker-rolapet and Palmanor-Colar road begun on the 31st March and (iv) deepening of drinking-water wells. The number of coolies employed on these works was 430 on the 26th March 1892. It rose to 545 on the 15th April, to 594 on the 30th, to 1,367 on the 14th May, to 1,862 on the 28th idem, to 2,031 on the 4th June, when it was the highest. It fell to 1,696 on the 11th June, but increased to 1,764 on the 25th idem. The works were finally closed on the 15th July. Works 1 and 2 were started and carried out under my general supervision until the arrival of Mr. Lacey on the 31st March 1892. No. 4 (well works) remained in my charge till the 2nd May 1892. The zemindar of Punganur also started some relief works—construction of three wells and repair of one tank—which gave employment to about 260 persons.

Loans.—Not a single loan had been granted in the zemindari before I joined it. Finding that the tenants had generally salable interest in the lands held by them on patta, I explained the rules to them in the course of my tours, pointing out the

It began to abate early in October and after the unusually heavy rains at the end of the month, when the general agricultural operations began all over the taluk, the relief works were deserted, the kitchen attendance fell considerably.

30. The kitchens were, however, kept open till the middle of January this year, until the season prospects showed a decided improvement and the people found means to support themselves and their dependents in the general agricultural operations of the country.

31. The chief feature in the famine of 1891 was crime did not increase, as is usual during the adverse seasons and there was no emigration of whole families from place to place. A few of the able-bodied villagers nearer to the Chingleput district, however, left for Madras during the period preferring light labour available there in the transshipment of goods on the beach, to the harder nature of relief works, and a few others induced by their relations, who have already been to Ceylon and the Wynaad for labour on coffee plantations, left their villages.

32. The absence of increase of crime is due to the following causes:—

(1) Timely and convenient provisions for employment of the able-bodied among the destitute persons, who required it.

(2) Gratuitous relief granted to their aged relations incapable of physical labour and young children, who otherwise would have proved a burden to them, limited their wants and restrained them from a tendency to crime.

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4. The state of affairs in the division, which culminated in distress in the first half of this year, has already been reported to Board and Government. The rainfall in the year 1891 was extremely deficient, being far below the average due. In January and February 1892 it was nil. The supply in the tanks throughout the zemindari were failing, those on the western and southern sides containing either no water or too little to be of any practical value. Of the 1,212 tanks in the zemindari

914 tanks were dry, 272 had a supply ranging from 5 to 10 days, while the remaining 26 tanks had from 15 to 60 days' supply. This inadequacy of water-supply naturally told considerably on the cultivation. The wet cultivation was on the decrease during the past three years, that during fasli 1301 being extremely backward. Ragi and cumbu suffered much in September and November 1891, so much so that the outturn did not generally exceed 4 annas, and this resulted, as a matter of course, in the rising of the prices. Second-sort rice was selling at 8-46 seers and ragi at 13-44 seers per rupee, the scarcity rates being 10-00 in the case of the former and 13-2 in that of the latter. Cholum and cumbu were not available for sale in the markets. The working classes were the first to suffer from this state of affairs, some of the children and old people showing signs of mal-nutrition. The ryots were in anxious fears about their cattle lest the hot months should make short work of them. There was hardly any pasture for them anywhere, save in the guarded forests lying in the eastern part of the zemindari. Agricultural operations were almost at a standstill except under wells, the supply in which had not entirely failed. This was briefly the condition of affairs when the relief operations were ordered to commence in Punganur.

5. The tract of country with Punganur as its centre, bounded on the east by a line due north and south through Chandepalli, and on the other sides by the limits of the zemindari, where it touches Cuddapah district, Mysore territory, and Palmaner taluk, with about 300 square miles and a population of nearly 50,000, the area and population of the entire zemindari being 648 square miles and 92,000 nearly, was more affected than the rest of the zemindari.

6. The various measures employed for relief purposes are briefly noted below:—

Grass cutting operations.—The only work that was going on when I entered upon my duties was that of grass cutting at Ramasamudram as stated above. This work, which was undertaken mainly with the object of giving needed employment to coolies, was commenced on the 9th February 1892 under the supervision of the Forest Department and lasted till about the 20th March 1892, when it was stopped on the starting of the road work at Ramasamudram. The total expenditure in the collection of grass at Ramasamudram was Rs. 321, the quantity collected being 55 tons 3½ cwt.

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Loans.—Not a single loan had been granted in the zemindari before I joined it. Finding that the tenants had generally salable interest in the lands held by them on patta, I explained the rules to them in the course of my tours, pointing out the

advantages and urged them to apply for loans for sinking new or repairing old wells, which were fast drying up. The tenants evinced great reluctance at first, but gradually yielded. The few applications that were received at first were promptly attended to and disposed of. The applications then began to pour in. At the time of closing the relief on the 15th July, the number of loans accepted and disbursed were, respectively, 89 involving Rs. 13,835 and 70 involving Rs. 8,665. Of the latter, 67 wells were under construction, 3 having been completed. The construction or repair of a large number of the other wells had so far advanced that they were being used for irrigation. One Special Revenue Inspector was appointed in connection with this work in the middle of May 1892, and his services were dispensed with at the end of July.

The special establishment entertained directly under me for relief purposes consisted exclusive of myself of the following:—

Two clerks, one on Rs. 25 and the other on Rs. 15, and 3 peons on Rs. 7 each. Besides these one Special Revenue Inspector was entertained as already stated. The kitchen establishment consisted of one gumasta and two cooks. A Stock Inspector arrived some weeks prior to the closing of the operations.

7. I may state that human mortality and sickness were only normal, though deaths from cholera were somewhat high in about the middle of June. The total deaths from this cause from February to July amounted to 129. The cattle mortality returns show that deaths from starvation in the zemindari amounted to 1,077.

8. As stated already, the rainfall in January, February and March 1892 was nil. In April it was 1.05 and in May .25. This was the beginning in the change of the season for the better. Though the fall in April was not general, it still enabled the ryots to commence ploughing dry lands, but the poor fall in May retarded the agricultural operations greatly and the gloomy aspect of affairs caused thereby, which chilled the hearts of the people, was providentially relieved by a good fall of rain in June, commencing with 1.70 inches on the 2nd idem. The aggregate fall in that month amounted to 9.40 inches, far above the fall registered during the month during the past 19 years. The fall in July to the close of the distress was 4.80 inches. Tanks almost everywhere received decent supply; dry and parched up ground began to be clothed with pleasing verdure, which relieved the sufferings of the cattle and set at rest the anxieties of the ryots. The price of rice was still stationary but that of ragi—the staple food—had fallen to 17.6 measures per rupee. Dry as well as wet lands began to be prepared for cultivation all over. Prospects everywhere were bright, and all relief operations were closed on the 15th July 1892.

Endorsement by the Collector of North Arcot, dated Chittoor, 29th November 1892, No. 1282-In. I.

Forwarded to the Secretary to the Commissioner of Revenue Settlement and Director of Land Records and Agriculture, with reference to paragraph 19 of this office letter No. 1282-In. of 1892, dated 3rd November 1892, submitting report on the famine of 1891-92.

RESOLUTION—dated 7th December 1892, No. 778.

Recorded pending the preparation of the general famine report.

(True Copies and Extract.)

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

To the Collector of North Arcot.

Exd. J. Moses.

1892.
Board of Revenue
(Revenue Settlement, Land Records
and Agriculture),
MADRAS.

Printed December 13th.

Proceedings, 7th December 1892, No. 778.

Recording, report from the Collector of North Arcot on famine operations in the district pending preparation of the general famine report.

73
BOARD OF REVENUE (REV. SETT., L. RES. AND AGRI.), 10TH JAN. 1893, No. 11.

PROCEEDINGS OF THE BOARD OF REVENUE
(REVENUE SETTLEMENT, LAND RECORDS AND AGRICULTURE).

READ—the following letter from J. THOMSON, Esq., Collector of the Chingleput District, to the Secretary to the Commissioner of Revenue Settlement and Director of the Department of Land Records and Agriculture, dated Saidāpet, 27th December 1892, Ref. on No. 821 G. & B.—S.L.R. :—

I have the honour to submit a general report on the late distress in the Chingleput district and the relief operations carried on during that period as called for in Board's Proceedings, dated 12th September last, Mis. No. 7430.

2. The period of distress may be said to have commenced in January 1891 and ended with December of that year when the relief works ended and the kitchens were closed. The minor irrigation works, where incomplete, were proceeded with to completion up to the end of March 1892, and the land improvement and agriculturists' loans were continued to be given till the end of September 1892. The district was never declared a famine district and the Famine Code was not put into force.

3. *Season characteristics.*—The normal rainfall of the district is about 20 inches in the south-west monsoon and 32 inches in the north-east. In 1888-89, which was an ordinary year, the south-west monsoon yielded 21.52 inches and the north-east monsoon 33.21 inches. In 1889-90, a very indifferent year, the fall was 17.53 in the south-west monsoon and 21.37 in the north-east, the result being that about 84 per cent. of the cultivated area yielded eight-anna and four-anna crops. In the next year, *i.e.*, 1890-91, the south-west monsoon was 19.59 inches, which is a little below normal, but the north-east monsoon—poor till November—gave 8.35 inches up to that month as against 26.73 and 12.08 of the corresponding periods of 1888 and 1889 respectively (*vide* talukwar details in the margin) and thus occasioned anxiety. Reports of local officers, then called for, revealed a state of things summarized by Mr. Hammick as “on the whole fair in Conjeeveram; not very bad in Chingleput; bad in Ponnéri and Tiruvallūr and in parts of Saidāpet; Madurantakam not suffering much.”

4. The cultivation—dry and wet—of fasli 1300 (1890-91) compares with that of fasli 1298, an ordinary year, as follows.

Months.	Normal (<i>vide</i> Dis- trict Manual).	1888-89, fasli 1298.	1889-90, fasli 1299.	1890-91, fasli 1300.
April	3.50	0.13	0.61	0.54
May	2.00	5.19	0.10	0.21
June	1.50	2.01	2.87	5.14
July	3.50	2.85	4.66	5.79
August	4.50	7.81	4.26	3.45
September ..	5.00	3.50	5.02	4.46
Total ..	20.00	21.52	17.53	19.59
October	10.00	12.26	8.19	5.61
November ..	14.00	14.47	3.89	2.74
December ..	6.00	6.00	8.80	0.99
January	1.00	0.42	0.49	1.15
February ..	0.50	0.66	..	0.84
March	0.50	..	..	0.01
Total ..	32.00	33.21	21.37	11.34

North-east monsoon, October and November.			
Stations.	1888-89.	1889-90.	1890-91.
Saidāpet	33.06	14.05	6.85
Poonamallee ..	35.15	8.45	5.80
Ponnéri	26.60	22.62	9.36
Tiruvallūr	24.10	9.05	10.00
Satyavedu	20.90	15.50	5.00
Chingleput	38.68	13.64	12.61
Madurantakam ..	20.25	10.02	9.15
Uttaramorur ..	15.64	12.00	5.60
Conjeeveram ..	23.14	8.01	12.87
Sriperumbudur ..	29.85	7.50	6.40
Total ..	267.17	120.84	83.64
Average ..	26.71	12.08	8.36

Taluk.	Fasli 1300.			Fasli 1298.			Difference in fasli 1300.		
	Dry.	Wet.	Total.	Dry.	Wet.	Total.	Dry.	Wet.	Total.
Saidápet ..	24,369	40,158	64,527	21,454	46,139	70,893	- 85	- 6,281	- 6,366
Ponnéri ..	29,235	38,501	67,736	29,236	38,169	67,700	1	+ 32	+ 31
Tiruvallúr ..	35,349	53,408	88,757	32,967	53,221	86,191	+ 2,382	+ 184	+ 2,566
Conjeeveram ..	38,071	69,816	107,917	36,492	70,596	107,088	+ 1,579	- 750	- 829
Chingleput ..	17,717	40,211	57,928	17,095	45,313	62,408	+ 622	- 6,102	- 4,480
Madurántakam ..	53,119	58,212	111,331	49,026	62,127	111,153	+ 1,093	- 3,915	- 179
Total ..	197,860	300,336	498,196	189,270	316,168	505,438	+ 8,590	- 15,832	- 7,242

5. This shows no material decrease in the quantity of cultivation in 1890. The earlier part of the north-east monsoon induced the ryots to carry on cultivation without any misgivings and the crops came on well everywhere until blasted by the unexpected final failure.

6. In December 1890 it was ascertained that in Madurántakam the Pálar river channels were fairly well supplied; the Madurántakam tank had four months' supply; Uttramerur two months and a half; Salavakam four months; Edamichi four months; Allapakam three months; and the rest contained but a month's supply the most. In Chingleput the crops under the river channels and river-fed tanks were fair; the Chingleput tank had five months' supply; the rainfed tanks varied from good to bad. In Conjeeveram the Kambakal and other river channels brought one to five months' supply; the Kuvam and Tenneri tanks had three to five months' supply; and the rainfed tanks from one month to nil. In Saidápet the Red Hills tank contained only a six months' supply; the next biggest, Chembrambakam, one month; the river-fed tanks had not been filled, while some of the rain-fed ones had absolutely nothing. The same was the case in Ponnéri and Tiruvallúr. The crops under the Sholaveram tank and Vallúr anicut in the former, and under the river-fed tanks in the latter, were, however, fair. On the 17th January 1891, Mr. Tremenhoe reported the condition of the district in the following terms: "The failure of rice crop has been lamentable in Ponnéri, very serious in Tiruvallúr and Saidápet, and disquieting in Chingleput and Madurántakam and in a portion of Conjeeveram." It was then considered that of the total extent of wet cultivation in the year which was acres 330,200, the rice crops on acres 74,600 must have yielded an average outturn, and those on acres 126,200 would come to maturity but with a poor outturn; that those on 66,400 acres had withered and those on 63,000 acres were green with poor chances of success. These figures refer merely to ryotwari land.

7. The 19th and 20th January 1891 brought welcome showers ranging from .12 at Ponnéri to 3.50 at Madurántakam, Saidápet having little or none. Ponnéri derived but little benefit, except that ryots were enabled to transplant and cultivate ragi to a certain extent. The rise of prices was checked in Tiruvallúr, Madurántakam and Chingleput, and they slightly fell in Conjeeveram. Many of the irrigation sources in Madurántakam and Tiruvallúr received supplies varying from about 10 days to 2 months, as also the small tanks in Conjeeveram, which received about 15 days' supply. A good deal of standing crops was also saved, though with poor outturn; and the pasture improved.

8. At first the Ponnéri taluk, parts of the Tiruvallúr taluk (except the neighbourhood of Satyavedu, the Nagalapuram tract and the neighbourhood of Tiruvallúr town) and parts of Saidápet were the localities most affected, but the south-west monsoon subsequently failing, the distress extended more or less over the rest of the district.

9. From an account of the outturn of crops (subsequently ascertained) in ryotwari holdings, whole inams and minor inams put together, the four-anna crop compares with that of the previous years as follows:—

Crops.	Fasli 1300.		Fasli 1299.		Fasli 1298.	
	Extent of cultivation.	Percentage of four-annas crop.	Extent of cultivation.	Percentage of four-annas crop.	Extent of cultivation.	Percentage of four-annas crop.
Paddy ..	426,018	67.05	474,596	39.45	511,171	25.52
Ragi ..	60,412	37.02	66,353	40.05	56,822	29.65
Cholum ..	9,635	5.87	7,218	54.32	6,980	37.53
Cumbu ..	16,939	44.97	11,671	59.59	11,133	31.05
Other food-crops ..	62,828	59.47	50,168	29.66	52,105	24.42
Total ..	569,832	62.14	610,006	39.27	637,311	25.21
Other crops ..	121,775	Not available.	107,867	Not available.	110,241	Not available.
Total ..	691,607	..	717,873	..	747,552	..

This shows 62.14 per cent. of the entire food-crops of the district in the year under report to be a four-anna crop, which means a yield of between 4 annas and zero, and includes shavi; in other words, it is the measure of very nearly total loss. Another clue to the extent of failure in fasli 1300 is furnished by the remissions on shavi and waste which amounted to Rs. 3,36,363. The loss to the ryots may be roughly estimated at three times that sum or over ten lakhs of rupees.

10. The immediate consequence of this failure was the rise of prices which, already high from the consequences of a previous bad season, compared at the commencement of the fasli under report with those of an ordinary year (fasli 1298) as follows:—

	1890-91.	1888-89.
Rice ..	SEERS.	SEERS.
Ragi ..	12.66	19.27
	25.61	29.24

They rose slightly but steadily month after month to 11.77 and 21.08 seers of rice and ragi respectively per rupee at the end of 1890-91 and to 10.22 and 12.27 seers per rupee at the end of 1891-92, the scarcity rates for the district being 10 seers of rice and 13 seers of ragi per rupee. The annexed table illustrates the rates:—

Months.	1888-89.				1890-91.				1891-92.			
	Rice.	Ragi.	Cholum.	Cumbu.	Rice.	Ragi.	Cholum.	Cumbu.	Rice.	Ragi.	Cholum.	Cumbu.
April ..	19.27	29.24	..	20.40	12.66	25.61	18.43	17.60	11.85	20.94	17.28	17.16
May ..	18.67	29.30	..	20.40	12.49	25.47	18.43	17.01	11.39	20.80	18.00	17.16
June ..	18.09	28.68	..	..	12.47	24.99	19.15	17.45	11.04	19.38	..	17.16
July ..	17.34	28.34	..	20.40	12.11	23.30	18.43	17.60	10.32	17.75	..	17.16
August ..	17.19	28.31	..	19.68	11.95	23.14	18.02	16.40	10.16	17.66	15.18	..
September ..	17.01	28.12	..	18.42	11.86	23.55	18.09	17.11	10.09	15.64	14.46	..
October ..	16.35	28.59	..	17.16	11.75	24.24	17.80	17.44	10.08	15.94	14.49	..
November ..	16.05	29.26	..	17.16	11.71	23.77	16.02	17.44	10.12	14.93	13.63	13.06
December ..	16.48	29.07	..	20.70	11.80	21.55	17.37	17.16	10.06	12.58	11.10	..
January ..	16.42	28.99	..	21.12	11.72	20.74	18.72	18.48	10.17	12.17	12.17	11.88
February ..	17.52	28.60	..	21.12	11.77	21.08	18.72	21.12	10.22	12.27	12.47	11.88
March ..	17.52	27.78	..	..	..	..	..	..	..	..	..	..

11. When the apprehensions entertained in November and December 1890 were found likely to be realized, the first measure of relief given was the stopping of printed in Board's Proceedings, dated 23rd January 1891, No. 33, further recommended the following means of employing labour:—

- Repair of minor irrigation works.
- Improvement of village-sites and water-supply.

(c) Works under the Public Works Department and under the Local Fund Engineer.

(d) Loans for digging wells and for purchase of cattle and seed grain.

To these, in course of time when the scarcity deepened into distress, were added the following additional measures :—

(e) Gratuitous cooked food.

(f) Postponing collection of kist from poorer pattadars and on manavari lands.

(g) Remissions of land revenue.

(h) Raising the pay of village menial servants.

(i) Throwing open forest reserves for grazing purposes.

12. (a) Of these, the measure first adopted was the repairing of minor irrigation works. The works proposed to be executed in 1891-92 to the amount of Rs. 4,798 in Tiruvallūr and Rs. 7,360 in Ponnéri were taken in hand in advance in January 1891 and fresh works were sanctioned in these and other taluks from time to time till the aggregate expenditure in this form in 1890-91 and 1891-92 amounted to Rs. 22,107 and Rs. 68,313 respectively in the whole district as shown in the annexed abstract :—

Taluks.	1st January to 31st March 1891.		1st April 1891 to 31st March 1892.		Total.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.
Saidápet	31	Rs. 4,422	56	8,116	87	12,538
Ponnéri	61	6,988	16	7,810	107	14,798
Tiruvallūr	46	6,087	102	11,157	148	20,534
Conjeeveram	8	1,448	45	12,152	53	13,900
Chingleput	21	2,387	52	15,330	73	17,717
Madurantakam	11	775	43	10,138	54	10,913
Total	178	22,107	311	68,313	522	90,420

These works were a ready means in the hands of Revenue officers of gauging the necessity of, and affording relief in, isolated places not covered by the Public Works Department works; but when the tracts where such relief was afforded became more widely distressed, a Public Works Department work was opened in its centre and the Revenue officers as the providers of labour retired. They were carried out as a rule on contract, and the Revenue officers personally saw that the classes needing labour had it from the contractor who was ordinarily either the village headman or a ryot interested in the work and sympathizing with the suffering poor. There was no means to secure the observance of all rules; frequent inspection and great watchfulness on the part of the Revenue officers obviated difficulties, and there was hardly a case in which those requiring labour did not get it. These works were a sort of current account upon which the Revenue officers could draw at a moment's notice when timely rescue by the professional department was impracticable.

13. (b) The second means of relief, practically also in the hands of the Revenue officers, was the improvement of village-sites and of the water-supply carried out at the expense of the Local funds. Later in the season the continued drought dried up most wells, and people had to go long distances to secure this essential of life. Mr. Mullaly reported, in July 1891, that in the town of Chingleput good water came to have a saleable value (*vide* Board's Proceedings, dated 20th July 1891, No. 440, Revenue Settlement, page 5), and I believe that a scrambling for this commodity took place in very many villages. The Government made a special and timely grant of Rs. 5,000 towards water-supply. Below is an abstract showing talukwar expenditure under water-supply :—

	RS.
Saidápet	3,381
Ponnéri	1,888
Tiruvallūr	1,419
Chingleput	2,265
Conjeeveram	1,446
Madurantakam	1,709
Total	12,108

14. (c) The works under the Public Works Department were among the most substantial modes of assistance that were afforded. Simultaneously with the commencement of the minor irrigation works the Public Works Department was addressed to start such irrigation repairs in the Ponnéri and Tiruvallūr taluks as were available (*vide* paragraph 2 of Mr. Hammick's letter printed in Board's Proceedings, dated 31st December 1890, No. 415). They were first commenced on the contract system, under which naturally skilled or competent labour was employed to the exclusion of those whom distress had affected and compelled to seek labour as a means of relief. On the 31st January 1891 the Arani river diversion was started at Ponnéri to gauge the need for labour and was carried on under the departmental agency without the intervention of contractors. A Deputy Collector, and subsequently an Assistant Collector, was posted to it to report their observations regarding the need for labour in that area and the condition of people who sought relief as an index of the need. The numbers on the work increased and put the existence of distress beyond dispute.

15. The worst portion of the Tiruvallūr taluk was the extreme horn on the north with Kadur-Kambakam at its centre. Works under the Public Works Department agency were commenced in February 1891 and were carried on here till November following.

16. Distress at the same time made itself felt at and round Uttukottai, and this village was selected as the centre of relief for that locality. The repair of Uttukottai tank, which was being carried on from February 1891 on the contract system under which a man could earn up to 4 annas a day, was undertaken by the departmental agency on the 11th April 1891, upon which all but 25 coolies left the work to be instantly replaced by others not capable of hard work but in need of labour owing to the distress.

17. In the first week of March 1891 the Deputy Collector, Tiruvallūr Division, submitted disquieting accounts of the condition of people in the eastern part of that taluk, upon which Mr. Tremenhoe proceeded to the spot, and in conjunction with the Deputy Collector inspected 17 villages and came to the conclusion that "the tract could not afford to rely upon labour supplied by contract works and must have departmental work at once." At this inspection he came upon the poorest classes who resorted to unusual food. The wild millet (mavaragu) which was abundant in the fields upon which shavi had occurred; the seeds of the korakkapalli tree; the bamboo rice; the kernel of the palmyra; the seeds of the tamariad or mango which are boiled or roasted; the flowers of the Iluppai which went to fatten cattle and goats when they were not at once swept up by an army of children; the seeds of various grasses as well as grain stored in ant-holes, to which parties of 3 or 4 people laid siege; these classes and found their condition in some cases below par (*vide* Board's Proceedings, dated 25th March 1891, No. 167-S.L.R.). The Vadamadura tank work was thereupon started under departmental agency on the 28th March 1891 in the tract known as the Periapoliem tract and furnished labour on an average to 500 persons a day.

18. The inspection of the Chingleput taluk by Mr. Tremenhoe, accompanied by Mr. Mullaly, disclosed an equally distressed state of things. It was then that Mr. Tremenhoe described the condition of the Pariahs of Senneri in words which laid the foundation of the Pariah agitation to which the distress under report gave birth. Subsequently Mr. Holmes brought to notice that several of the villages visited by him contained persons who exhibited emaciation, collapsed stomach, sunken cheeks and

other signs of semi-starvation. Mr. Tremenheere, together with the Commissioner, inspected the tract when the latter ordered a grain dole to six of the worst cases. In the words of the Sub-Collector (Board's Proceedings, dated 9th April 1891, No. 207, page 7) "the condition of things was serious. The number of people who have left almost every village to get work and the condition of those that remain clearly indicate widespread distress." In the middle of April 1891, Manambadi was fixed as a centre of relief in the Chingleput taluk and relief works were opened there under departmental agency.

19. On the 11th April 1891, another departmental agency work was started at Acharavakam in the Madurantakam taluk where the Sub-Collector had on the 4th April reported the existence of a good deal of distress.

20. Subsequently the south-west monsoon having proved a total failure and the distress becoming more severe and widespread, two more centres of relief under the departmental agency were established in July 1891, one at Tirumushi in the Saidapet taluk and the other at Kuvam-Mappedu in the Conjeeveram taluk.

21. The works carried out, 63 in number, and the amounts expended by the Public Works Department in all the centres of relief Rs. 92,045-15-6, are shown in appendix No. 5.

22. The coolies on the abovementioned departmental agency works were paid for daily tasks which fetched a maximum of annas 3, 2 and 1½ per man, woman and child, respectively. But in several cases it is to be feared that the payment was below the said maximum rates. Once the payments amounted to 68 per cent. of the full rates (Board's Proceedings, dated 20th July 1891, No. 440). There were cases also in which the task was unduly large owing to the hardness of the soil or other reasons. Steps were taken to rectify these matters as far as possible.

23. For a time the G.O., dated 6th April 1891, No. 265, Revenue, gave weakly persons the minimum wage of three-fourths and malingers had the minimum of three-eighths. But on the representation that there was not such demoralization in the country as to require this safeguard and that the Government Order tended at least to generate it, it was withdrawn. The expenditure for malingering and weakly wages did not come to much, the Government Order having been speedily withdrawn.

24. *Payments.*—At first it was in contemplation to introduce daily payments for "the fear of having to work several days without pay would deter those really in want from coming from a distance, thus the object of the work as a gauge is defeated" (Board's Proceedings, dated 23rd February 1891, No. 93). But as this was found to be a matter of practical difficulty, the final arrangement arrived at was that "frequent" payments were enough except in special cases in which daily payments on any particular work might be considered necessary by the Collector (Board's Proceedings, dated 13th March 1891, No. 139, Settlement). Practically the Public Works Department paid weekly or bi-weekly and in rare cases daily. There were several complaints about the irregularity in payments which necessitated several personal conferences between the Collector and the Executive Engineer. I may refer to an instance or two of irregular payments at Vadamadurai and Amur as typical cases (*vide* Board's Proceedings, dated 14th August 1891, No. 520, Settlement, page 4, and dated 1st July 1891, No. 370, Settlement, page 2).

25. During the time the distress existed, all the relief works in the district were eagerly resorted to and much of the emigration in quest of labour and the flocking into towns were averted. In the periodical reports submitted care has been taken to give the number of coolies upon each work conducted on the departmental system and on other works such as Minor irrigation, Local fund, &c., which also contributed towards relief and the rise or fall in numbers has been explained. The subjoined abstract of these reports shows the average and highest numbers on the different kinds of works. These numbers exclude laborers on the usual contract works from which returns were not received, the number of whom must have been considerable. It was noticeable throughout how appreciably any small fall of rain affected the classes who resorted to works, and how from the time the rains of

October began a steady diminution set in, showing that it was want that brought them upon the hands of Government:—

Works.	The number on the works a day.							
	Average.				Highest.			
	Men.	Women.	Children.	Total.	Men.	Women.	Children.	Total.
Public Works Department works	1,934	997	76	3,007	5,756	3,628	175	9,559
Minor Irrigation	1,552	544	34	2,230	2,275	826	91	3,192
Buckingham canal	396	330	4	730	1,298	1,180	32	2,510
Salt factories	571	210	31	812	1,531	620	124	2,275
Local fund	393	240	8	621	1,338	1,156	59	2,553
The above were on different dates and cannot be totalled.								
The highest total on any single day (week ending 23rd May 1891)	...	...	...	...	8,438	4,294	206	12,938

26. The Executive Engineer in his report of June last (appendix No. 4) to the Superintending Engineer (a copy of which he sent me when I called for his report on the receipt of Board's order, dated 12th September 1891, Mis. No. 7430), criticises in paragraph 24 the policy adopted holding that departmental agency is more costly than contract, and that it need not have been employed to the extent it was, while contract works were fully available. There is no other answer to this than that the Revenue officers on the spot who were constantly on the move about the works, both contract and departmental, and the Commissioner himself thought that the departmental agency was necessary; it is within the knowledge of the Revenue officers that contractors did refuse to take coolies who came to them unless they were professional workers and a contractor could not well act otherwise. Mr. Burlton loses sight of this and chiefly of the necessity of keeping the able-bodied and the weak from falling into worse condition, the 3 per cent. of weakly persons being no index of what the class might otherwise have been in numbers. And as he observes "(departmental) labour must be provided irrespective of the state of the ground and a contractor would wait for rain to soften the ground." But the coolies could not wait nor could the authorities unless they wanted to see the villages deserted and the infirm and young come upon gratuitous relief.

27. The Executive Engineer also complains of the forestalment of funds and reduction of work amount for the following year and the recoil of this on the laborers and on the contractors who had given advances to coolies. That is likely enough; famine or distress is bound to derange normal conditions, the first consideration is to tide over the critical time.

28. Besides the above, there were a good many contract works in the district to which the able-bodied resorted so long as the contractors could engage them. The salt works which were being carried on in the sea-coast taluks afforded labour between the months of April and October 1891. And finally there were the canal works under the supervision of the Buckingham Canal Executive Engineer which gave employment to numbers on the seaboard of the district. The Irakam island work in the Nellore taluk and the Pulicat diversion referred to in Board's Proceedings, dated 17th July 1891, Mis. No. 3726, supplemented the relief agencies in the Ponnéri taluk, but the change in the season and the ample supply of labour at head-quarters did not necessitate the transmission of coolies from large distances on payment of daily batta.

29. In the beginning of September 1891, as soon as the salt-pans' work came to a close in the Chingleput taluk, it was proposed to start a canal diversion some-engage the coolies then set free; but as the north-east monsoon would have interrupted its prosecution, the Kelambakam-Vendalur road work was selected instead and started on the 9th September. It closed with the year 1891 and provided labour to 500 to 700 people. Rs. 13,136 of the total estimate of Rs. 17,440 was worked out to the debit of Provincial funds, there being no balance

at the disposal of the Local Funds to debit the amount under section 5 of the Famine Code. This work was conducted very satisfactorily under the supervision of the Local Fund Engineer. The rates allowed were those in force on works under the Public Works agency.

30. (d) *Loans granted by Government for the purpose of digging wells.*—Wide publicity was given to this in all the villages, and the ryots were not backward in applying. A sum of Rs. 46,313 was distributed from January to the end of March 1891, and Rs. 3,49,088 were distributed during the year 1891-92. The six months succeeding the close of that year saw a further expenditure of Rs. 73,933. Thus the total expenditure from the commencement of the distress to 30th September 1892 aggregated Rs. 4,69,334 not including the amount of second instalments subsequently payable which amounted to about Rs. 50,000. On that date 2,499 wells were completed and 1,605 were under construction. The loans were obtained by over 4,600 families, which means assistance to about 25,000 persons besides the employment of work-people. As a general rule, the borrowers, as far as possible, employ their own materials and household labour for the purpose of burning bricks and doing the unskilled part of the work appropriating its value for their own relief.

31. Wells were taken in hand first in the Ponnéri and Tiruvallūr taluks where distress first made its appearance, and subsequently were extended to the other taluks as would appear from the following table. The work in Conjeeveram shows partly less necessity and partly resulted from more strictness in granting:—

Taluk.	Loans disbursed for wells under the ordinary and special well rules.				Wells completed.	Wells under construction.
	Between 1st January to 31st March 1891.	Between 1st April 1891 to 31st March 1892.	Between 1st April to 30th September 1892.	Total.		
	Rs.	Rs.	Rs.	Rs.		
Saidāpet	6,695	49,407	6,649	62,751	265	150
Ponnéri	17,160	66,807	10,451	94,418	523	311
Tiruvallūr	8,563	76,795	29,623	114,981	511	241
Conjeeveram	1,000	27,563	7,744	36,307	182	131
Chingleput	6,025	55,849	4,986	66,860	418	403
Madurantakam	6,870	72,667	14,480	94,017	600	369
Total	46,313	3,49,088	73,933	4,69,334	2,499	1,605

The frequent and persistent inspections that have been made, have prevented a large proportion of the above sums from being misapplied. Occasionally when the expenditure was apart from the legitimate purpose, the loans relieved distress in some other shape, namely, some five borrowers employed their loan in business the profits of which kept them alive during the season. Loans were also taken with the object of part going towards defraying Government revenue demands. Private debts were discharged, one grantee paid the loan into the hands of a dancing-girl and proceeded with her on a holiday trip to be set upon by robbers who eased them of their burden; another built a house; another purchased jewels for his wife; and another performed a marriage. But these cases of absolute misuse were so rare and the securities so safe that there has been no difficulty in either recovering the Government money or insisting upon the completion of the works agreed upon.

32. It may be said that while repair works afforded relief to coolies and agricultural laborers, the loans benefited the poorer pattadars and land-owners who, but for this timely and substantial assistance, would have been led to the transfer of their lands by sale or mortgage or to otherwise get themselves hopelessly involved.

33. Loans for cattle and seed-grain were not to be encouraged, for the main distress did not much involve the one or the other and the cattle, if really purchased, were difficult to maintain owing to want of fodder. In cases where their

need was imperative, great care had to be taken that the loans were not diverted from the purpose intended, for cattle borrowed from an adjoining land-holder or an exhibition of seed-grain from neighbourly granaries would easily have passed for the borrowers' own. And a loan of grain, with interest of one-fourth that quantity, is easily available from the village land-owners themselves, when the rainfall is propitious. The close of the year 1891, however, saw the distribution of the major portion of the expenditure shown below:—

Taluk.	Amount advanced.		
	From 1st January to 31st December 1891.	From 1st January to 30th September 1892.	Total.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
Madurantakam	6,502 8 0	3,225 8 0	9,728 0 0
Conjeeveram	1,295 0 0	...	1,295 0 0
Chingleput	4,725 0 0	1,854 0 0	6,579 0 0
Tiruvallūr	2,039 8 0	19 8 0	2,059 0 0
Ponnéri	1,877 0 0	197 0 0	2,074 0 0
Saidāpet	6,418 0 0	365 0 0	6,813 0 0
Total	22,887 0 0	5,661 0 0	28,548 0 0

34. (e) *Gratuitous relief.*—The north-east monsoon of 1890 having proved a failure, it was expected that the south-west monsoon of 1891 would set in early and also be plentiful, but the months from January to September yielded only 10·08 inches. The State aid provided labour, kept people to their homes and left the young, the infirm and the old under their usual guardians. [There were, however, exceptional cases, the aged, children, and sickly persons, without natural protectors or with these unable to fulfil their obligations, which had to come on the charity of Government at the commencement of April and the Commissioner ordered, as stated above, the grant of a grain dole to six persons in a village in the Chingleput taluk. Inspection and special registers opened at the time exhibited cases which required similar treatment. Towards the middle of April the Commissioner directed, as a tentative measure, the opening of four central kitchens in the district; upon which Sembakkam, in the Chingleput taluk, Puduvayal in Ponnéri, Peryapalaiyam in Tiruvallūr and Porūr in Saidāpet were selected as places from which a wide area of distress could be commanded. The following were the instructions issued:—

The kitchens should consist of two sheds, capable of giving resting or sleeping accommodation, one to 50 Pariahs and one to 25 caste people: the latter can be extended, if necessary, to hold 50, or new sheds can be run up. If a tope is available (other than the usual camping topos), the sheds should be among the trees. An enclosure will probably not be needed, for the paupers will be allowed to come and go at pleasure.

Admission should be by ticket to be given by Divisional officer, Tahsildar and Deputy Tahsildar. When a Stock Inspector is in charge of a kitchen, he may issue tickots. In the case of a person too feeble to walk to the kitchen, cart-hire may be paid or the village munsif may be directed to have him carried on stretcher.

The following directions are to be most carefully attended to. Only those are to receive tickets who are physically incapable of work and have no property of their own or relatives to support them. Ordinary professional beggars should be discouraged and excluded if it is obvious from their physical condition that they are easily supporting themselves on public alms:—

The paupers attending the kitchens should be fed twice a day at 8-30 A.M. and 4-30 P.M. with cooked food as noted in the margin (one hot meal and one cold meal). Establishments should be kept down as low as possible and details reported.

60 tolas ragi.
48 " dholl.
18 " salt.
12 " tamarind.

12 tolas chillies for men and women.
Half for children below 12.

By a subsequent order the segregation of lepers was directed and it was carried out by the construction of separate sheds.

35. The diet in these kitchens was regulated as above in imitation of the table prescribed in the Famine Code, but subsequently some alterations were found necessary. The people of the Chingleput district are generally eaters of rice which is the largest crop of the district. When prices rise, they take to ragi with a slight admixture of rice. The ragi prescribed in the Famine Code was, therefore, partly substituted by rice. The inmates complained of the chillies as excessive, especially in the absence of ghee or oil which the Famine Code did not provide and which a reference from this office at the District Surgeon's instance to the Board did not obtain. The quantity of salt was found deficient for a partly liquid meal and had to be increased. The final instructions to the Divisional officers were that a change in the quantity of condiments might be made, provided the expense did not increase. There was not, however, in the several kitchens much variation from the following scale:—

38 tolas of ragi flour (equivalent in husk to 47½ tolas).

10	tolas of broken rice
4·8	dholl.
2·2	salt
1·2	tamarind.
·6	chillies.
·6	onions.

The price per diet per day at the market prices of the time was between 1 anna 1½ pie and 1 anna 5 pies. It gave in the morning kulu (gruel) and kali (solids) in the evening.

36. As the distress became more intense, more kitchens were established in the following places on the dates against each:—

Ambúr	...	...	...	...	...	9th July 1891.
Karunguli	...	...	...	...	...	12th "
Acharavakkam	...	...	...	...	...	17th "
Vandalūr	...	...	...	...	...	18th "
Gollachavadi	...	...	...	...	...	18th "
Gummadipundi	...	...	...	...	...	21st "
Komakambedu	...	...	...	...	...	3rd August 1891.
Sriperumbudur	...	...	...	...	...	7th "
Tiruppsalvanam	...	...	...	...	...	8th "
Uttamerur	...	...	...	...	...	4th October 1891.

37. At Sembakkam, the first kitchen, destitute persons were found unwilling to seek admission. For the Collector's and Sub-Collector's experiences, Board's Proceedings, dated 2nd May 1891, No. 260, may be referred to.

There is a stigma attaching to the recipient of cooked food, whether a Pariah or casteman, which increases according as the caste rises and there were, besides, recollections of the famine camps of 1877 which, it was stated, were death to those who entered them. The change of name from Kanji doddi to Annachattram; the humane treatment accorded to the inmates and great care bestowed upon them; the general improvement in their condition; the perfect freedom from death and disease; in course of time did what, in the beginning, a good deal of persuasion could not do.

38. These early prejudices did, however, serve one good purpose; they kept out all people except those who would have died of starvation. Pariahs formed the largest portion of the kitchen population and the other castes who resorted to them were generally Enadies and Irulars (jungle tribes) and Pallies; there were also a few Kavarais, Vellalabs and Mussalmans. Caste details are not available for the district.

39. Four of these kitchens were placed in charge of Stock Inspectors sent to the district by the Board, one in charge of a Special Hospital Assistant and the rest were either in charge of special superintendents or local officials. There were caste cooks, the number of whom was regulated according to the number of inmates, and in rare cases a special peon or two were provided where the taluk establishment could not spare any. The village officers and menial servants assisted in the supervision and several kitchens had local committees to oversee the establishment and the expenditure.

These kitchens were visited frequently by the Revenue officers and District Sanitary officer and periodically by Medical subordinates.

40. The admissions were made by tickets which were issued by the Collector, Divisional officers, Tahsildars and the Kitchen superintendents. The physical condition of persons was made the test for the grant of tickets and a large number of children introduced at Karunguli by Mr. Mullaly, without regard to that test, was rejected (Board's Proceedings, dated 5th August 1891, No. 488, Settlement).

41. Light work was exacted, such as grinding grain, sweeping premises, &c., and in some cases cultivating the kitchen compounds with vegetables, &c. Grinding caused an appreciable amount of saving.

42. The annexed table gives all the particulars of the kitchens maintained :—

[illegible]

43. (f) *Relief by the postponement of the collection of revenue.*—When the fact of scarcity was first determined in January 1891, immediate orders were sent to stop collection of revenue, as already stated, on ascertained shavi and waste. Next the collection of kist on manavari lands was stopped. These lands are assessed at high dry rates owing to their capability of growing a rice crop without aid from irrigation sources. The rice crop of the north-east monsoon of 1890 having failed, it was a question whether remissions should be granted on these lands or not; the principle of the settlement being “in bad seasons when the crops fail they will never be entitled to remission.” No remissions were therefore granted on these lands, but in view of the disastrous failure, the collection of revenue was postponed for a year. The extent under this head was 19,000 acres in the district, nearly one-half of which is in Ponnéri and the rest in Saidápet and Tiruvallúr taluks.

44. As January to April were the kist months of the district and the poorer pattadars had not the means to pay and could not earn a livelihood, an order was issued for postponing collections from them. The general rule was that those paying Rs. 50 and under should enjoy the privilege unless they were able to pay similarly those paying above Rs. 50 if proved to be really without means had the benefit of it. The carrying out of this concession left large arrears uncollected; in fact it received far too liberal an interpretation, but is considered to have prevented the poorer ryots from encumbering or selling their lands or otherwise involving themselves in debts and difficulties.

45. (g) *Relief by Land Revenue remissions.*—Under this head remissions for partial crops when they yielded two annas and less; on mamool waste in tracts worst affected; of difference between wet and dry rates where, from want of water, dry crops were raised on wet lands, were the special items of relief. The entire amount compared with the two previous years will appear from the annexed abstract:—

	Fasli 1298.	Fasli 1299.	Fasli 1300.
Wet waste	2,564	59,139	101,075
Shavi	637	60,148	225,640
Tiruvacammi	403	951	5,784
Faslicammi	1	55	3,179
Miscellaneous	1,038	1,273	685
Total	4,643	121,506	336,363

46. (h) *Pay of menial village servants.*—In the taluks of the district except Tiruvallúr about 92 per cent. of the village menial servants were paid at one and two rupees each a month. Their condition always poor is in a year of distress even worse, while their duties had sensibly increased. By Government Order, dated 1st August 1891, No. 700, their pay was raised to a uniform rate of Rs. 3 each. This measure afforded relief to 2,324 families.

47. (i) *Forest reserves opened to grazing.*—Owing to the continued absence of rain, almost all parts of the district became dried up. Pasture was scarce, especially so in the months of May, June, July and August and the condition of cattle became miserable. All the reserves on the plains were therefore ordered to be thrown open for all cattle except sheep and goats, at a nominal fee, to the end of August. Permission was also given to cut and carry grass from the reserved forest free of charge. No statistics are available to show how far these privileges were availed of. There is no doubt, however, that many cattle which would otherwise have perished found means of existence in the forests.

48. Private charity from time to time afforded special relief. A gentleman from England, who wished to remain unknown, sent a donation of Rs. 1,000 for people who, from pride of caste or other considerations, were backward in availing themselves of the forms of relief provided by Government. The Madras Mahajana Sabha and a Simla Association sent Rs. 50 and 20, respectively, which, added to the 1,000 rupees abovementioned, were distributed personally by Divisional officers and

Tahsildars who rendered bi-monthly accounts of expenditure. The total amount spent was Rs. 1,013-12-0 in relieving above a thousand persons, leaving a balance still in hand of Rs. 56-4-0. The Mahajana Sabha also supplied a number of cloths for distribution to the ill-clad; and by the bounty of Raja Sir Savalai Ramasawmi Mudaliyar, Kt., c.i.e., 370 men, 680 women and 1,138 children, total 2,116 persons, were clothed and 482 cloths are still on hand. M.R.Ry. Narayanasawmi Naidu, a D.P.W. Contractor, furnished 80 yards of cloth in the Chingleput taluk. The public of Tiruvallúr town subscribed a sum of Rs. 175 to relieve the families of persons carried off by cholera in and round that town in the midst of the period of distress. The public of Chinnamedu, a village in the Ponnéri taluk, subscribed Rs. 50 for relieving the sufferers of that village. Similarly, the Chetties of Uttakottai, Tiruvallúr taluk, established a grain dole for 23 persons for two months and the ryots of Santavelur, also Tiruvallúr taluk, distributed a similar dole to 15 persons for three months. M.R.Ry. Elayalwar Naidu, ryot of Vadamadurai, Tiruvallúr taluk and member of the Local Board, distributed cooked food to 20 persons a day for several months during the distress.

49. *Disease and mortality.*—In spite of the drought, the season continued healthy from January to the end of May, the number of deaths during the period being considerably below the average. They increased slightly in June and July and largely in the subsequent months as the following abstract will show:—

Months.	Deaths in			Difference	
	1891.	1890.	Previous five years' (average).	Compared to 1890.	Compared to the average.
January	1,969	2,124	2,539	- 155	- 570
February	1,645	1,687	1,976	- 42	- 331
March	1,620	1,742	1,825	- 122	- 205
April	1,539	1,607	1,669	- 68	- 130
May	1,582	1,925	1,860	- 343	- 278
June	1,881	1,560	1,749	+ 321	+ 132
July	2,085	1,744	1,943	+ 341	+ 142
August	2,715	2,239	2,124	+ 476	+ 591
September	3,488	2,277	2,076	+ 1,281	+ 1,412
October	3,267	1,867	2,062	+ 1,400	+ 1,205
November	4,132	1,832	2,146	+ 2,300	+ 1,986
December	4,372	1,870	2,414	+ 3,002	+ 2,458
Total	30,795	22,424	24,383	+ 8,371	+ 6,412

The decided increase in the number of deaths in the latter part of 1891 which, as compared to 1890, amounted to 8,371 and, as compared to the average of the previous five years, to 6,412 points unmistakably to the existence of general suffering and insufficient nourishment. But the mortality of 1891 thus increased was but half the mortality of the famine year of 1877. The following statement exhibits in one view the number of deaths severally in the years 1877, 1890 and 1891 classified under the several diseases:—

Year.	Cholera.	Small-pox.	Fever.	Diar-rhoea.	Other causes.	Total.	Population as per census of 1891.	Ratio of deaths per mille of population.
1891	4,798	596	7,198	3,932	14,276	30,795	1,137,333	27
1890	410	622	6,193	2,689	12,510	22,424	1,137,333	19
1877	4,391	5,621	10,500	15,082	26,119	61,713	census of 1881 981,381	62
Difference as compared to 1890	+ 4,388	- 26	+ 1,005	+ 1,243	+ 1,766	+ 8,371	...	...
Do. do. 1877	+ 402	- 5,025	- 3,302	- 11,150	- 11,843	- 30,918	...	- 35

Except cholera every other disease shows diminished mortality in 1891 as against 1877. The falling off in small-pox is remarkable. Cholera alone accounts for more than half the aggregate increase of deaths in 1891 as compared to 1890.

It first made its appearance in June and assumed an epidemic form in August when it was found necessary to strengthen the hands of the District Medical staff. The Surgeon-General (*vide* Board's Proceedings, dated 14th August 1891, No. 520, Settlement), sent four Medical subordinates who were posted at places where they were most needed and with whose assistance the disease was prevented from spreading into the kitchens and eventually disappeared.

50. *Cattle mortality.*—The continuance of the drought caused scarcity of pasture and water and a sharp rise in the price of fodder. The straw of withered crops tended to sustain cattle for a time but not without impoverishing their condition which became more and more serious after May. The number of deaths of that month and June was more than double that of the corresponding months of the previous year; in July it trebled and in August quintupled. At this period the pariah population persisted in feeding on the carcases, and this was one of the causes of the cholera and diarrhoea then prevailing mortality. The rainfall towards the close of August caused the grass to spring up and brought water to wells and ponds, but the effects of the previous drought continued to the end of October. The highest mortality occurred in Madurantakam, Chingleput and Saidápet. The total deaths for the whole year aggregated 47,590 against 23,314 in 1890. The following table compares the recorded mortality during the year 1891 with that of 1890:—

of 1890 :

Year.	January.	February.	March.	April.	May.	June.	July.
1	2	3	4	5	6	7	8
1891	2,426	1,814	1,927	1,989	2,902	4,071	6,211
1890	1,921	1,630	1,605	1,721	1,537	1,904	2,698
Difference ...	+ 505	+ 184	+ 322	+ 268	+ 1,365	+ 2,167	+ 4,113

Year.	August.	September.	October.	November.	December.	Total.
9	10	11	12	13	14	
1891	11,394	9,912	2,529	1,590	625	47,590
1890	2,080	1,994	1,883	2,486	2,525	20,324
Difference ...	+ 9,314	+ 7,918	+ 646	- 896	- 1,700	+ 24,276

It will be observed, however, that the figures of October, November and December 1891 exclude deaths of cattle from starvation according to recent orders which as well as the improvement in the season accounts for decrease in those months.

51. As the result of the provision of this labour and charity and the postponement of Government demands, the mental and physical suffering of the people was certainly alleviated and not a single human death was directly attributed to want. Crime and emigration showed no sensible increase. About 4,100 wells came into existence in addition to some 15,000 already existing. The irrigation works which in the district were in a backward condition (*vide* Board's Proceedings, dated 24th February 1891, No. 102, Settlement), were largely put into better order and irrigation made more secure against future failures. If some ryots became impoverished, others with the help of loans have made their properties more valuable and under the postponement of kist were enabled to cling to their lands which would otherwise, to some extent, have passed out of their hands. The cultivation of 1891-92, when rain came, was limited only by its small supply; the remission allowed to ryots unable to cultivate from poverty amounted for the district to Rs. 274-12-0. As for the poorest of the population their physical appearance and their settlement or migration are the most obvious indications of their condition. I came into the district when the worst was over in October, and except among the old and

sickly in the relief houses and the jungle tribes in and outside them, I saw few traces of a bad time. There was then no occasion for wandering by any willing to work.

52. *Special establishment.*—A Special Assistant Collector was employed from September 1891 to January 1892, and a Special Deputy Collector was in charge of Ponnéri taluk from March 1891 to January 1892 and another Deputy in charge of the office of the Sub-Collector from September 1891 to January 1892, relieving that officer for inspection work. Eighteen Special Revenue Inspectors were employed for conducting inquiries into applications for loans. Three Special Sub-Magistrates were employed in Ponnéri, Tiruvallūr and Chingleput to set the Tahsildars at liberty to move about their charges. Appendix 6 shows the several hands employed. Some of the Special Revenue Inspectors then engaged continued on account of the heavy well work up to the close of September 1892 and some clerks in the taluks have remained up to date.

53. It does not fall to me to criticise the general conduct of operations for which I am not responsible and which were under the control of the Commissioner. But as the successor of Mr. Tremeneere I may be allowed to say that, in my opinion, the measures undertaken were justifiable at the time and justified in the results, the district being in the first stage of a scarcity that there was reason to hope would not deepen into actual famine but which clearly required the application of such aids to temporary support of the poorer population as were actually afforded. The agricultural laborers were kept near or in their villages so as to return to their ordinary work when the season allowed it; the work undertaken was almost entirely towards the improvement of agriculture and work was provided or exacted according to the various ability of the laborers. If there was any abuse of poor houses when first started that was promptly righted, and in my three months' acquaintance with them I am satisfied that they were worked with all possible circumspection.

54. The Commissioner made several visits to the district; the first in January, when he examined the state of things in the Tiruvallūr and Ponnéri taluks. In April he proceeded from the Chingleput to the Tiruvallūr taluk. In August-September His Excellency the Governor, accompanied by the Commissioner, came from the North Arcot into the Chingleput district *via* Ramagiri in the Tiruvallūr taluk and inspected two of the northern kitchens—Periapolliem and Puduváyal and the departmental relief works at Kalputtu and Tirukandalam in the Tiruvallūr taluk and at Sombottu in Ponnéri. He left the district *via* Red Hills and Sembium.

55. *Conduct of officers.*—I was in charge of the district for nearly three months out of twelve in which the relief operations were being carried on and my duty happily consisted, for the most part, in closing operations. Mr. Tremeneere, who was in charge for the preceding nine, said as below on his departure in October 1891:—

"Of the Divisional officers, the Sub-Collector has had the hardest work of all, but it has been distributed over three incumbents of the office; the burden and heat of it in March, April and May fell upon Mr. Holmes who was very active and useful. It is, however, Mr. Pinto, Deputy Collector, Tiruvallūr, whom I wish to bring to the special notice of Board and Government. He has been not only untiring in his exertions but what is far more important in relief operations, correct in his judgment. To him, of all the officers in the district, I feel under the greatest obligation.

"The Tahsildars* who have been most to the front are those of Ponnéri, Tiruvallūr, Chingleput and Madurantakam. Of these I wish to mention by name Arumugam Pillai, Tahsildar of Ponnéri, who has displayed the same qualities which distinguish Mr. Pinto. He has made most opportune use of State loans for wells as a method of combating and relieving distress.—*vide* Board's Proceedings, 14th October 1891, No. 652, Settlement, pages 4 and 5."

* Arumugam Pillai.
Narasimha Row.

Muhammed Ali Sahib Hazari.
Rhenius Pillai.

The Tiruvallūr Divisional officer has named certain officers in paragraph 22 of his report; the other Divisional officers are unable, or do not find it necessary, to single out any one in particular. So far as I know, an equal and high standard of work was cheerfully rendered by mostly all, and it is unnecessary for me to add to what Mr. Tremeneere has said. And I hardly think the occasion was of such magnitude as to justify my submission of a long list of the lower subordinates.

ENCLOSURES.

From J. ANDBEW Esq., Sub-Collector of the Chingleput District, to the Collector of the Chingleput District, dated 10th November 1892, Ref. on No. 1992 Index.

I have the honour, with reference to the orders noted in the margin, to submit the report on the conduct of relief operations in this division during the period of distress commencing from the 1st January 1891. Having joined the division only a fortnight ago, I have no personal knowledge of what was done, and my report is, therefore, based on the information I have been able to gather from the records of this office. My difficulty is increased by the fact that the late head clerk who was in charge of famine papers has been transferred to Tiruvallūr and my new head clerk only joined from your division ten days ago. No reports have been obtained from the Tahsildars except those now submitted, and I have hardly had time to study the whole matter. Having already received two urgent reminders for the report, I hasten to submit it as best I can with reference to the papers herewith and the bundle of season reports.

2. The rainfall during the north-east monsoon of 1890 having been extremely deficient, the effect on the rice crops of fasli 1300 was disastrous.

3. Of the three taluks in the sub-division, Conjeevaram, which has the advantage of the Pálár river channels, and the Kambakhal, which supplies many tanks, was in a fair condition and similarly also the western and southern portions of the Chingleput taluk irrigated by rivers, channels and river-fed tanks. The Tirupóráir firka, however, of the latter taluk, where the rain-fed tanks had become dry and where the crops had perished in consequence, was much affected. In Madurantakam, as in Chingleput, only one firka, viz., the Acharapákam firka, was seriously affected. The condition of the whole division demanded the grant of large remissions and that of the Tirupóráir and Acharapákam firkas required careful watching.

4. As a first measure of relief collection was postponed on all wet-waste and wet withered crops throughout the division. The villages of the affected tracts were constantly inspected by the Tahsildars and the Divisional officers to ascertain the condition of the crops and of the people.

5. About the middle of January there was some rain which was of considerable benefit to the standing crops. The Tirupóráir firka of the Chingleput taluk, however, received little or no rain. There was again some rain from the 11th to the 13th February 1891, which created a demand for ploughing labour and revived pasturage to some extent.

6. The situation was so far improved that nothing more was necessary than to push on the grant of loans for digging wells and this was done. Special Revenue Inspectors were appointed with a view to avoid delay in conducting the necessary inquiries on applications made and every endeavour was made for their prompt disposal. This, it was expected, would tide the division over till April when the Minor Irrigation, Public Works Department and Local Fund works were intended to be started. The markets were all well supplied, trade active and prices steady. The physical condition of the people did not appreciably fall below the normal and the laboring classes in and about Tirupóráir found work in the salt factory of Covelong and in clearing the Buckingham canal.

7. But this state of things did not continue long. The laboring classes had to endure greater hardships than usual especially in the seriously affected portions of the division, i.e., the Tirupóráir and Acharapákam firkas; but they showed no visible signs of emaciation. It was deemed desirable under the circumstances to provide work for them and minor irrigation works were ordered to be started in the end of March and the commencement of April 1891 in the said two firkas. These works served to gauge the distress, and the number and classes of people who resorted to the works were carefully watched. The condition of the people was carefully ascertained by constant inspection both by the Divisional officers and the Tahsildars, and it was found that, so long as Government work was assured to people in need of it, there was no difficulty in obtaining food.

8. The amount of inspection which the Tahsildar of Chingleput had to make rendered it necessary that he should be freed from magisterial work, and as the Taluk Sheristadar had to prepare for jamabandi, a temporary Sub-Magistrate was posted to Chingleput.

9. The prospects became more and more gloomy, and the Sub-Collector, Mr. Holmes, in April 1891, obtained lists of destitute persons from all affected villages, whose condition he carefully watched and reported upon. His inspection showed that considerable distress existed in the affected portions of the Chingleput taluk, some of the villages in which were inspected by the Collector and the Commissioner. In Sirudavoor, a village inspected by the Commissioner, he sanctioned the issue of a grain dole in six cases. The condition of the children in all the villages inspected was fair, and no signs of starvation were apparent. It was, therefore, considered that the time had not arrived for starting regular kitchens and that it would be sufficient to issue grain doles in isolated cases. To meet exceptional cases, however, the Commissioner authorised the starting of a central kitchen in the Chingleput taluk, and one was opened accordingly at Sembakam on 24th April 1891.

10. The demand for labour having increased gradually, additional works had to be started both by the Public Works and Revenue Departments in May 1891; steps were taken to ensure the admission of all people (whether able to perform a full task work or not) on these works and large numbers were employed thereon. The people were at first reluctant to go to distant works, and efforts were made to overcome the reluctance. Gradually, however, the works became popular and people freely resorted to them.

11. The kitchen at Sembakam had few admissions at first owing to prejudice on the part of the people. Due consideration was shown to the caste prejudice of the people. The six individuals to whom grain doles were issued as a special case at Sirudavoor were transferred to the kitchen at Sembakam.

12. To cope with increased work caused by the grant of loans, an additional establishment became necessary, and additional Revenue Inspectors and peons, as well as clerks for the taluk offices, were accordingly entertained in each of the taluks of Chingleput and Madurantakam.

13. The ample work provided by Government for the able-bodied, the kitchens to which the feeble could freely resort, the grant of liberal remissions which the people expected to obtain at the jamabandi, the grant of loans for sinking wells and the approach of the south-west monsoons encouraged the people in the affected areas and arrested the distress.

14. Jamabandi was in progress in May 1891 and it did not permit constant inspection of villages, relief works and kitchens by the Divisional officer. Mr. Holmes left the division on the 26th May and Mr. Mullaly joined on the 6th June, the Deputy Collector, Mr. Shanmugasundram Pillai, being in charge in the interval. Mr. Mullaly finished the jamabandi of Madurantakam and Chingleput, but could not inspect villages for some time, as he was incapacitated from doing so owing to an accident.

15. The south-west monsoon was a failure and this seriously told upon the condition both of the people and of the cattle, and the Conjeevaram taluk also came now to be treated as a partially affected taluk. A very large area, both wet and dry, was left waste and good deal of young crops perished.

16. The effect of the drought was most disastrous to cattle. There was but little pasturage and fodder sold at more than double the usual price; surface water generally disappeared and the supply had to be obtained from private wells. Disease increased and there was an increase in the mortality; nothing could be done for them beyond throwing open forest reserves and this was done at a merely nominal fee and advantage was taken of the concession.

17. The health of the people, however, remained good; but much distress was felt for want of drinking-water. The District and Taluk Boards did what they could towards deepening drinking-water wells.

18. There was a considerable rise in the prices of the staple food-grains—rice and ragi—and this told very much upon the poor. The prospects having become more gloomy, three additional kitchens were opened on the dates noted in the margin—two in the Madurantakam taluk at Acheravakam and Karunguly and one in the Chingleput taluk at Vandalúr.

19. The public health, which was good till June, suffered in that and subsequent months from cholera, and steps were taken to prevent the epidemic from spreading.

20. Mr. Mullaly left the division on the 30th July and he was succeeded by Mr. Raja. At this time distress had spread over nearly the whole of Chingleput and over about a third of Conjeevaram.

Arrears having accumulated in the office and it having been for the Sub-Collector to attend to both office work and relief duty, the Collector the Sub-Collector by getting a Deputy Collector appointed for office Mr. Iyer, who joined the office on the 14th September 1891.

21. At the close of July and during August there was slightly better except in Madurantakam, ploughing being the water-supply being improved. The rain proved of great benefit for other lands agricultural operations could not go on owing to the uncertainty of further rains. The drought was still

and East Conjeeveram. In Sriperumbadur of the Conjeeveram taluk it was found necessary to open a kitchen on the 7th August 1891.

22. The condition of the division at this time will become apparent from the following remarks then made by the Sub-Collector and by the three Tahsildars as quoted in Board's Proceedings, No. 555, dated 3rd September 1891, Revenue Settlement, Land Records and Agriculture:—

Sub-Collector.—"As the rains continue to hold off distress is deepening every day."

Madurantakam Tahsildar.—"The distress is ascending higher and higher." Even for washing there is difficulty in some villages to get water. The condition of cattle is deplorable everywhere for want of fodder and drinking-water. There is not a single village in the taluk where there has not been cattle death through starvation, and cattle died by hundreds; general prospects are getting worse and worse every day."

Conjeeveram Tahsildar.—"There has been no change for the better in the prospects of the season."

Chingleput Tahsildar.—"The increase in the number of coolies employed on Paikiluppai tank is due to the growing distress."

The jamabandi having closed, steps had to be taken for collection of arrears and a clamour was raised by the people complaining of oppression.

The Collector issued, therefore, an order that payment of arrears should not be pressed in the case of pattadars paying a beriz of Rs. 50 and less.

After the date of the remarks above quoted, there was some rain which improved prospects to some degree and enabled ploughing and sowing to go on in parts of the three taluks. The condition of the cattle also showed an improvement, except in Madurantakam, where large number of deaths occurred owing to want of pasture.

23. The prices of second-sort rice and ragi were, however, rising and the increase in scarcity began to tell on the old and infirm. Cholera was also raging severely in all the taluks of the division. The condition of the Madurantakam taluk was going from bad to worse; some of the people at Utteramerur and the neighbouring villages were emaciated and a kitchen had to be opened at Utteramerur on the 4th October 1891.

24. Some rain fell in October which removed all anxiety with regard to drinking-water and considerably improved pasture. Cholera abated and the distress was considerably lessened. It may be stated that from this time forward the state of the season showed a gradual improvement and the number of inmates in the several kitchens having fallen off rapidly, the kitchens

Sriperumbadur,	8th November 1891.
Utteramerur	20th " "
Acheravakam	21st " "
Sembakam	24th " "
Vandalur	5th December "
Karunguli	22nd " "

were closed one after another on the dates given in the margin. Things improved to such an extent by the end of December that the Sub-Collector wrote as follows concerning the state of the division: "Distress is not felt in any part of the division now."

Except in regard to the high prices of food-grains, there is no matter of special importance or interest in connection with season." The Special Deputy Collector attached to this office was relieved at the end of December, and with his relief the special establishment temporarily sanctioned for this office discontinued. Particulars of the exact dates on and the period for which the several special establishments were entertained and discontinued are not readily available in this office. I request they may be obtained from the Treasury Deputy Collector.

Conjeeveram Tahsildar's Arzi, No. 2447, 9th Oct. 1892.
Chingleput Tahsildar's Arzi, No. 1644, 28th Sept.
Madurantakam Tahsildar's Arzes, Nos. 1027, 4th Oct. 1892 and 1044, 8th Oct. 1892.

24. I submit, herewith, the statements from the Tahsildars in their arzis noted in the margin giving the statistics which were called for by Mr. Manavedan Raja on receipt of your first call for the report in its Reference on

65 R., dated 24th September 1892, copy of which is herein enclosed (will follow).

25. As stated at the beginning of this report, I have no personal knowledge of the famine, and in the two days I have had at my disposal since I handed over charge of the division, I have found it impossible to go into the matter as I would wish. It is impossible, therefore, to bring to notice such officers as did particularly good work during the season. I suggest that this report be sent to Mr. Manavedan Raja who was acting from 30th July to the end of the famine.

CHANDRA AIYAR Avargal, B.A., Deputy Collector, Saidapet
for of the Chingleput District, dated Guindy, 14th November 1891.

In the margin, I have the honour to submit the following statement for the division during the calendar year 1891.

At the end.—Anxiety commenced towards the close of the monsoon. The rainfall under this monsoon was not so good as in the previous year, and the result was that the irrigation tanks did

not receive the required supplies. Owing, however, to the slight rains that fell from time to time having been timely, the crops maintained their vitality till November, but the absence of the required rain in December sealed their fate. The note of warning was then sounded by Mr. Hammick, the then Collector of the district, who, in his circular, Reference on No. 36 Eng., dated 12th December 1890, put the local officers on their alert and forthwith ordered a thorough village inspection. The taluk of Ponnéri was the first to suffer and I directed my attention to it first. I started for Ponnéri immediately and vigorously toured in that taluk, visiting in less than a week upwards of 40 villages. I met with a large number of people more or less in every village that I visited who, owing to the failure of rain and the consequent loss of crops, were obliged to depend on daily labour for their means of livelihood, but as the demand for labour had slackened with the bad season, they applied to me for work. It was generally apprehended that if adequate employment was not promptly afforded they would have to desert their homes in quest of work elsewhere. As my personal inspection of the villages and the people impressed me that their apprehensions were not altogether unfounded, I thought it desirable to bring the matter to notice at once instead of waiting till my inspection of the taluk was completed. Accordingly I reported in my Reference on No. 2952-Ver., dated 28th December 1890, that the need for putting in hand some works of public utility was urgent and suggested that the minor irrigation works proposed for the following year (1891-92) should be put in execution at once; that the Public Works Department should be asked to start some of the major works in their charge; and that an allotment should be sanctioned for advancing loans under the Land Improvement Act. Mr. Hammick approved of these measures and obtained the Board's sanction to them. After completing my inspection of the Ponnéri taluk, I returned to Saidapet in the beginning of January and began to tour in that taluk. Soon afterwards, Mr. Clogstoun, the Commissioner of Revenue Settlement, Land Records and Agriculture, paid a visit to the Ponnéri taluk and I went there to meet him and explained to him what parts I had visited and in what condition I had found them. After inspecting a large number of villages in the Saidapet taluk, I submitted detailed reports on the condition of both Ponnéri and Saidapet in the middle of January 1891—vide references marginally noted. I reiterated my proposals mentioned above as regards Ponnéri taluk, but with regard to Saidapet, I did not consider the condition

1. Reference on No. 21 Eng. dated 14th January 1891.
2. " " 21 " " 15th " "

of the people was such as to call for similar action. As the supply of drinking-water for men and cattle had become scarce in several parts both in Ponnéri and Saidapet, I applied also for a grant for the purpose.

3. Mr. Tremenhoe, who had by this time succeeded Mr. Hammick, considered that the first measure of relief needed was to stop the collection of revenue on wet waste and wet withered crops. This was accordingly done. He also suggested to the Board that the means of employing labour

* Board's Proceedings, dated 23rd January 1891, No. 33, Revenue Settlement, Land Records and Agriculture.

proposed above by me should be utilized to the full. The Board approved of these proposals, but did not consider that for a month to come there would be any large influx of labour to the Public Works basing its conclusion on the experience gained in 1886, when the season was similar and similar relief works were opened by Government in the immediate neighbourhood of Madras. In the meanwhile Mr. Tremenhoe paid a visit to the Ponnéri and Tiruvallūr taluks and saw things for himself. The result of his inspection was, in the words of the Board of Revenue, (vide its Proceedings, No. 42, dated 26th January 1891, Revenue Settlement, Land Records and Agriculture) to confirm fully the reports of the Divisional officers. The work of the diversion of the Arni river was started on the 30th January 1891 departmentally, instead of by contract, with a view to gauge the distress. The rules of the Public Works Department were relaxed so as to admit the employment of ordinary unskilled labour. I was told off to Ponnéri to it. I was asked by Mr. Tremenhoe to submit daily reports and was doing so till the close of February when I was relieved and Mr. Oldfield put in charge of the work. The number of persons who resorted to the work was small at first, but rose to several hundreds in a short time. The rates of wages were at first 3 annas for a man and 2½ annas for a woman, and subsequently reduced to 2½ and 2 annas respectively; but this reduction did not affect the number of persons resorting to the work. The existence of distress was now too plain to be disputed. In addition to the works executed by the Public Works Department, all the useful minor irrigation works in both the taluks were taken in hand one after another and completed as fast as possible. Loans under the Land Improvement Act were freely given and the sinking of wells was specially encouraged.

4. There were slight showers of rain in Ponnéri in January, and in both the taluks in February, but beyond slightly improving the pasture and benefiting the crops under wells, they were not productive of much good. A small fresh came down the Arni river and gave an impetus to ragi cultivation. The prices continued to be steady and the condition of the people remained unchanged. In addition to the numerous minor irrigation, salt and Public Works Department works which were employing numbers of people, the cutting of withered crops, the preparation of land for the transplantation of ragi and baling water for its irrigation, the

cutting of grass for sale in the Madras markets and the like afforded further sources of occupation. The work of repairing the embankment of the Arni river was also started by the Public Works Department soon afterwards and carried out departmentally. Towards the end of March Shunmugasundrum Pillai was appointed as Special Deputy Collector and relieved me of the entire magisterial charge of Ponnéri taluk, and also a portion of my revenue work of that taluk, such as relief operations, advance of loans, minor irrigation and collection work. It was now expected that by providing ample occupation to those in need of it, the people might be enabled to tide over the bad season until the next south-west monsoon and that no further measures of relief would be required.

5. The situation, however, became more disquieting in April. Rain continued to hold off. Pasture was drying up and water-supply diminishing. The stock of shavi, which formed the fodder for cattle, was rapidly running out. The poorer classes (Pariahs and a small section of the Sudras) in the Saidápet taluk fell back on unusual food, such as *Mucaragu* and seeds of grass. Cholera broke out in certain places and there were also a few cases of small-pox and fever. As a measure of prevention, the Commissioner of Revenue Settlement, Land Records and Agriculture, ordered the opening of a few central kitchens. One was accordingly opened at Puduvoiyal in Ponnéri taluk on 25th April 1891, and another at Pórá in the Saidápet taluk on the 2nd May 1891. A Special Sub-Magistrate was appointed for the Ponnéri taluk to relieve the Tahsildar of his magisterial duties and set him free for inspection work. The former was placed in charge of the kitchen at Puduvoiyal. That at Pórá was at first placed in the charge of the Village Munsif of Rámapuram under the supervision of the Deputy Tahsildar of Poona-mallee and then under a Stock Inspector. At first great difficulty was experienced in inducing even the lowest orders of the people, viz., the Pariahs, to resort to the kitchens, but the objections put forth were gradually overcome by persuasion and firmness. Pariahs were the first to accept cooked food and were in due course followed by a few caste people. A favorable south-west monsoon would have dispelled the distress and obviated the need for any further extension of relief measures, but this was not to be. By the end of June prospects became more gloomy. The long expected rain held off and prices began to rise. Cattle became debilitated and great difficulty was experienced in watering them. The drinking-water wells having become dry, there was considerable scarcity of water in several villages. Distress was thus deepening. As pasture had dried up and fodder became very dear, all forest reserves in the plains were thrown open to grazing at a merely nominal fee, and advantage was taken of this concession in those reserves where there was any grazing worth the name. In July, the distress became more acute. The numbers on the Public Works and in the kitchens rose. More departmental Public Works had to be opened in Ponnéri and arrangements were made for starting a departmental work in Saidápet also. The number of kitchens, too, was increased in both the taluks. Additional grants were made by the District and Taluk Boards for deepening drinking-water wells and ponds, and these were supplemented by a grant from Provincial funds later on. Prices steadily rose, and in view to alleviate the sufferings of the village menial servants, the sanction of the Board and Government was applied for and obtained for increasing their pay from one to three rupees per mensem. Cholera broke out and the mortality among men and cattle increased. The distress thus reached its height towards the close of July.

6. Towards the middle of July, owing to Mr. Mullaly's illness, I was deputed to inspect the parts of the Conjeeveram taluk which had then begun to be affected. After touring here for about a fortnight and inspecting and reporting upon the condition of the affected parts of the taluk, and suggesting the opening of a kitchen at Sriperumbadur, I returned to Saidápet by the beginning of August. There were now some falls of rain, which were most welcome, and led to a slight improvement in the prospects of the season. His Excellency the Governor paid a visit to the Ponnéri and Saidápet taluks towards the close of August. Rain continued to fall in September, though in small quantities, but began to pour in in October. A decided change for the better then set in. Things began to wear a more hopeful look. Pasture revived. Water-supply for men and cattle improved. Agricultural operations were resumed, though late. The number on the works and in the kitchens began to fall off. Kitchens and relief works were consequently closed one after another and almost all the relief operations except the grant of loans for wells came to an end by the end of December. Prices, however, continued to rule high, and all cause for anxiety was not completely removed until the south-west monsoon of the current year set in in June last.

7. *Various measures of relief adopted.*—Having thus given an outline of the various operations, I shall now describe in some detail the several measures of relief adopted.

Opening of public works—Ponnéri taluk.—The first thing done to relieve the sufferings of the people was to start some public works which would give employment to the laboring classes who were the first to feel the pinch on the occurrence of scarcity. The Arni river diversion was the first work started by the Public Works Department departmentally. Scruples were entertained in some quarters that people might not flock to it in large numbers; but these doubts were soon set at rest. The work was opened on 30th January 1891, and the fact was notified in different parts of the taluk. The result was that in a few days the number of laborers that resorted to it rose to several hundreds. I was visiting the work every morning and sending daily reports about the laborers. I was doing so till the close of February 1891. The Pariahs were the first to come

but were soon followed by numbers of Sudras. People came from a distance of 8 miles and more. The work to be done being purely earthwork was very suitable as a famine relief work. The hour of admission to the work was at first 7 A.M., and any laborers who went after that hour were not admitted; as this worked hardship in the case of laborers who had to come from a distance, I spoke to the Sub-Divisional officer in charge of the work and got the time of admission extended to 8 A.M. Subsequently this restriction was given up as work was exacted on the task work system and it did not matter when the coolies commenced work and when they finished it. The coolies were divided into gangs and each gang had a given quantity of work to do. On finishing it they earned their daily wages of 3 annas per man and 2 annas per woman. They were not required to do more work and would not earn a pie more if they did. The object in view was on the one hand to discourage the "Upparavar" class (professional coolies) who could find work elsewhere and earn more per day and who did not therefore like the system of daily wages, and on the other to encourage other classes who were driven to seek employment on the work by the adverse season. The presence of the former class of people on the work in spite of the above disadvantages under which they labored afforded a clue to the actual state of affairs. The increase day by day in the number of laborers of other classes who were unaccustomed to carry loads of earth on their heads and would be the last persons to do so if they could help it was equally significant and pointed to the same conclusion. The rates of wages were subsequently reduced to 2½ annas a man and 2 annas a woman and yet the number of laborers on the work did not fall off. It thus became evident that the opening of the work was not a moment too early. Payments of wages were at first made weekly, but I found that this was very inconvenient to the laborers who had to live from hand to mouth. On my representation Mr. Tremenhoe addressed the Board in regard to daily payments. The Department of Public Works, however, found it difficult to make payments daily. In the meantime I was relieved of the charge of relief operations in Ponnéri taluk and I therefore do not know what transpired afterwards. I believe bi-weekly payments were subsequently introduced. It would appear from the Ponnéri Tahsildar's report that after the completion of this work the following were taken up by the Department of Public Works departmentally one after another:—

- (1) Arnea river embankment.
- (2) Kortalayár river embankment.
- (3) Palayagummudipundi tank repair.
- (4) Seliyambedu tank repair.
- (5) Buckingham canal diversion near Chintamani.
- (6) Rottumbedu tank repair.
- (7) Kuruviaraguram tank repair.
- (8) Sombattu tank repair.

Task work system was that generally in vogue in all the departmental works. The Tahsildar, however, reports that the piece-work system was to some extent introduced in work No. 5, but that it did not find favour with the ordinary coolies, as it placed them at the mercy of the head cooly.

Saidápet Taluk.—The only work started departmentally in this taluk was Tirumushi embankment repair. This work attracted persons not only from Saidápet but also from the adjacent villages of the Conjeeveram taluk and was largely attended. The work was commenced in the beginning of August and closed by the end of December 1891. The system of exacting work and paying wages in this work was the same as in the other works above referred to.

8. In addition to the above works carried out under departmental management, several other works were executed by contract by the Department of Public Works. The Buckingham canal silt clearance work, the extensive manufacture of salt, and the construction of platforms for its storage also afforded means of employment to thousands of people.

9. *Local Fund Works.*—Besides the ordinary road maintenance works, the Madras to Kathi-vakkam road was recoated at a cost of Rs. 20,000.

10. *Minor Irrigation Works.*—A number of works were put in hand and executed in Ponnéri and Saidápet taluks at a cost of Rs. 14,798 and Rs. 9,664 respectively. Additional irrigation maistries were employed to expedite the progress of the works. The contractors of these works were made to agree to the condition that all who sought employment on the works should be allowed admission and paid their wages daily. In some places advances were made to the coolies and as soon as they were worked out they were renewed. These arrangements worked well and gave satisfaction to the laborers. When prices rose high in June, the soil became hard and the earnings of the coolies diminished in consequence, the prescribed rate of one anna per cubic yard of earthwork was raised to 1 anna 3 pices.

11. The works above enumerated were intended solely to give employment to such of the people as were in need of it and willing to do cooly work. But there were others who, though undoubtedly in want, had their own scruples about going to, and working on, a relief work in

company with all classes of people including Pariahs. These persons found employment on the sanitary works carried out from Local Funds near their homes and the wells sunk by means of State loans. The aggregate number of persons who found occupation in the various kinds of works above detailed is not readily available in the records of this office. But the information will be easily accessible in your office, as the necessary returns were being sent to you direct by the several departments.

12 *Well-sinking*.—The advancement of loans under the Land Improvement Act was a most important measure of relief during the recent distress. It was productive of good in various ways, it afforded employment to those in need of it, it enabled the ryots to permanently improve the irrigation of their lands and place it on a secure basis, it enabled them, during the time of scarcity, to raise some crop or other and thereby replenish the exhausted food supplies; above all, it met to a great extent the want of the people in respect of drinking water, the scarcity of which was keenly felt in many places. Saidápet and especially Ponnéri are well suited for sinking wells, and the opportunity of the late distress was taken advantage of by the ryots to avail themselves of the concessions offered by Government and to push on well-sinking to the fullest extent. Special Revenue Inspectors were employed to expedite the progress of the work and the taluk establishments were also strengthened. In Ponnéri Rs. 83,646 were advanced and 1,144 wells constructed. Of these, 292 are of substantial construction and the rest are what are known as mud wells. The latter are of peculiar structure and cost very small sums but last for several years. The ease and rapidity with which they can be constructed, coupled with the small outlay involved, led to their being largely constructed. In Saidápet Rs. 53,880 were advanced from January to December 1891 and 374 wells constructed or were under construction within that period. Repairs to 33 wells were also completed or were under progress. Most of the wells in Saidápet were pukka built wells, while a few were pits dug in hard soil with or without revetments.

13. *Local Fund Sanitary Works*.—These works mostly were the digging of pits in ponds and the construction of pot wells and intended primarily to improve the supply of drinking water; but they also afforded employment to several persons at the same time. Rs. 3,613 in Saidápet and Rs. 1,976 in Ponnéri were spent on these works. These amounts, however, include contributions made by the villagers in the shape of labour to the extent of Rs. 422. The village sites were also cleared of prickly-pear and other bushes and were otherwise improved at a cost of Rs. 724 in Saidápet and Rs. 74 in Ponnéri.

14. *Kitchens*.—The distribution of cooked food was the only form of gratuitous relief afforded by Government. Two kitchens were opened in Saidápet and 3 in Ponnéri. The objections urged by the people to avail themselves of this form of relief were many and varied. They were mostly based on their own personal experiences of the famine of 1876 or on what they had heard regarding it. The task of persuading them to enter the kitchens was thus rendered very difficult. One of the objections taken was to the use of copper vessels for cooking purposes and the people would not readily believe when they were told that mud vessels alone were used. Very great fear was entertained that once they entered the kitchens they were never to return home alive and multitudes of instances were quoted of whole families who resorted to the kitchens in the last famine having perished there. The impression also prevailed that once they were admitted into the kitchens they could not leave them without permission even though the food did not agree with them. These notions were dispelled gradually by persuasion and advice. The very name of *Kanji Thoddi* (கஞ்சிதட்டி) by which the kitchens were popularly called was very hateful to the people and even some of the Pariahs were afraid that by going to a kitchen they might be outcasted by their kinsmen. The name was therefore altered to "*Anna Chattram*" and the officers concerned were prohibited from using the name *Kanji Thoddi*. The tenacity with which the natives cling to their homes even when starvation stares them in the face can be realized only by those who have had to do with famines and famine-stricken people. They openly said that they preferred death from starvation in their own homes to going to a kitchen and dying there (which they believed to be almost a certainty) because in the latter case their relatives or even castemen would not be near at hand to dispose of their dead bodies: the importance they attached to the presence of their kinsmen on the occasion and to the disposal of their bodies with the usual rites was so great. It will be amusing to know that a person in the village of Perungudi (225) in Saidápet taluk, who had 15 souls to protect on an income of Rs. 3 only per mensem and whose objections to go to a kitchen were explained away one after another by me in person, exclaimed at last that if he should leave the village there would be none there to treat cases of snake-bite and the people would suffer in consequence. The excuse will strike any one as silly, but the man was quite sincere when he made this statement.

15. When these things are considered, a fair idea may be formed of the difficulties that the local officers had to contend against in persuading people to resort to the kitchens. I had to personally visit parcheri after parcheri (for it was there that distress was most keenly felt) and

to explain to the people in all manner of ways the advisability of their availing themselves of the concessions offered by Government. The diet at first prescribed for adoption in the kitchens was—

60	tolas ragi	} For a man or woman. Half these rates for children under twelve.
4·8	" dhol	
1·8	" salt	
1·2	" tamarind	
1·2	" chillies	

These rations were intended for two meals (one hot and the other cold) to be distributed at 8 A.M. and 4-30 P.M. respectively. But as objection was taken to a pure ragi meal, an admixture of broken rice was subsequently permitted and the scale of diet altered as follows:—

38	tolas ragi flour (equivalent in husk to 47½ tolas).
10	" broken rice.
4·8	" dhol.
1·8	" salt.
1·2	" tamarind.
1·2	" chillies.

It was subsequently left to the discretion of the Divisional officers to alter the scale in any manner they pleased, provided that the cost of the original scale was not exceeded. Accordingly, the following scales were adopted in different kitchens:—

Porur kitchen—	Gollanchavadi kitchen—	All kitchens in the Ponnéri taluk—
38 tolas ragi flour.	38 tolas ragi flour.	38 tolas ragi flour.
10 " broken rice.	10 " broken rice.	10 " broken rice.
4·8 " dhol.	4·8 " dhol.	4·8 " dhol.
2·4 " salt.	2·4 " salt.	2·6 " salt.
1·2 " tamarind.	1·2 " tamarind.	1·2 " tamarind.
·8 " chillies.	·6 " chillies.	·8 " chillies.
	·6 " onions.	

The morning meal was in a liquid form called *kulu* and the evening meal in the form of solid balls called *kah*. The morning meal had the accompaniment of a *chatney* and the evening one of sauce. To this diet it is reported that the kitchen superintendents in Ponnéri added a quantity of vegetables and edible leaves once or twice a week from the gardens they had formed in the kitchen compounds with the aid of the inmates. The people of Ponnéri being nearer Nellore took to this ragi meal more kindly than their brethren of Saidápet. Eventually, however, it was found that the ragi diet agreed with the inmates marvellously. Rice was, however, given to children very badly emaciated and to others to whom it might be recommended by Medical officers. Such cases were but few. Children at breast showing signs of getting deficient milk were given goat's milk. There was a case of delivery in the Porur kitchen and special care was taken of the mother and child during the first ten days after delivery. They continued to do well so long as they were in the kitchen.

16. The accommodation provided in the kitchens consisted of two sheds, one for caste people and the other for Pariahs. There was a cooking shed besides. In the kitchens in Saidápet I had opened separate sheds for lepers whom I kept segregated from the others. I do not know if there were any lepers in Ponnéri kitchens and whether similar arrangements were made there, and the Tahsildar in his report makes no mention of them. The food was first distributed to the caste people who were allowed to eat it anywhere in the kitchen. This arrangement was much to their taste and rendered the kitchens popular. In Saidápet kitchens I provided the inmates with inexpensive palmyra leaf mats for bedding purposes during the rains of September and October 1891. Cloths received from Sir Savalai Ramasami Mudaliar and other private individuals were also distributed among the people in the kitchens.

17. The inmates kept marvellously good health. There was not a single death in any of the kitchens. Vaccination of the unvaccinated was duly carried out and medical relief was promptly rendered when required. Special medical subordinates were attached to some of the kitchens. The sanitation of the kitchens was scrupulously attended to and the premises were duly and frequently disinfected during the prevalence of cholera. Light labour, such as grinding ragi, planting garden, &c., was exacted from such of the inmates as were capable of doing work. The inmates chiefly consisted of Pariahs and as distress became more acute a few caste people also came to the kitchens. These latter were composed of Vanniahs, Yadhavas, Chetties, Erulars and Villis.

18. The periods for which the kitchens existed, the persons who had charge of them, the number fed in each and the aggregate cost are detailed below:—

Saidápet Taluk—(1) *Porur Kitchen* was opened on 2nd May and closed on 24th December 1891. It was managed by the Village Munsif of Ramapuram for the first few days, then by

Stock Inspector Hassan Ali Sahib, then by the Deputy Tahsildar of Poonamallee, then by Srinivasa Pillai of the Board's office, and finally by the above-said Hassan Ali Sahib: 13,330 diets were given and the kitchen cost in all Rs. 998-4-0.

(2) *Gollanchavadi Kitchen*.—Opened on the 18th July and closed on 11th December 1891; was under the charge of Stock Inspector Hassan Ali Sahib throughout: 7,498 diets were distributed here and the aggregate outlay amounted to Rs. 540-11-0.

Ponnéri Taluk.—(1) *Piduvoyal Kitchen*.—Opened on 25th April 1891 and closed at the end of January 1892. It was in the charge of the Special Sub-Magistrate. The Tahsildar does not give particulars for each kitchen, but reports that 1,281 persons were relieved in the three kitchens and the aggregate outlay came up to Rs. 3,700.

(2) *Gummudipundi Kitchen*.—Opened in July and closed by the middle of December 1891. Stock Inspector Chockalinga Pillai was in charge of it throughout.

(3) *Tirupalavanam Kitchen*.—Opened in August and closed by the middle of December 1891. One Veeraraghava Aiyar of the Board's office held charge of it throughout.

19. *Other Measures of Relief*.—In addition to providing ample employment to those who were willing to work, advancing large sums of money at low rates of interest to those who could and would borrow and affording gratuitous relief in the shape of cooked food to those who were willing to accept it, the Government also granted relief to the land-owning classes by allowing large remissions of revenue and permitting collections to be made without pressure. In Ponnéri Rs. 76,842 were remitted in fasli 1300 on account of waste and shavi and Rs. 27,836 in fasli 1301, besides large concessions in the matter of charging water-rates. The remissions granted in Saidápet were as follows:—

					Season remissions.		Waste remissions.		
					RS.		RS.	A.	P.
Fasli 1300	..	..	..	..	49,857		30,717	12	0
" 1301	..	..	..	..	21,154		72,608	0	0

In the marginally-noted orders the collection of the revenue was ordered to be made without pressure. The cultivation of tank-beds with cucumbers was permitted free of assessment

Reference on No. 2650—Eng., dated 17th July 1891.
" on " 405—Eng. PerL., dated 14th Aug. 1891.

(vide G.O., No. 1047, dated 14th February 1891, Revenue). When I say that the forest reserves were also thrown open for grazing on the payment of a nominal fee, I exhaust the measures of relief afforded by Government.

20. *Private Charity*.—The policy governing the relief operations was, however, such as must necessarily leave a number of people of the middle class unprovided for. These people would not go to the works or to the kitchens and the only form of relief acceptable to them was the grant of money or grain doles. These, however, were contrary to orders issued. The only way then in which help could be afforded to these people was by private charity, which, I am glad to state, asserted itself in time. An anonymous donation of Rs. 1,000 was placed at the disposal of the Collector by some charitable gentleman who wished to remain unknown. This was placed at the disposal of the Divisional officers for distribution among the class of persons above described. Grants for the purchase of seed grain were also made out of that money. Local subscriptions in aid of these people were also started in Ponnéri and made use of for saving the lives of many destitutes. The Mahajanasabab and one Mr. Krishna Row of Trivandrum gave Rs. 50 and 10, respectively, for similar purposes. Many persons of respectable family but reduced to destitution also received aid from some charitable person or other in their villages in the usual unostentatious way in which charity is administered by the Hindus in every day life.

21. *Manner in which Relief operations were conducted*.—Considering the magnitude of the task before them, I should say that the several officers who were connected with the relief operations discharged their duties in a creditable manner. Public works were started one after another with rapidity; well-sinking was pushed through with energy; water-supply was improved wherever possible with the limited funds available; kitchens were opened where necessary without delay. In spite of other work of a pressing nature, such as the inspection of large areas of withered crop, the census and the jamahandi and the like, the Revenue officers toured incessantly making inspections of every village and promptly rendering help to those who stood in need of it or by sending them to the kitchens or to the works or, in the case of destitutes who would not go to either, by giving them money doles out of private donations above referred to. The result was that there was not a single case of death from starvation. The case was, however, different with the cattle. The great scarcity of water which prevailed, coupled with the absence of any pasturage and the dearth of fodder, inevitably led to great mortality among them. The opening of forest reserves was not productive of much good, as there was hardly any grazing in them. Whatever was possible was done to improve the supply of water, but it was not sufficient to prevent the mortality. The Tahsildar of Saidápet makes special mention of the Stock Inspector Hassan Ali Sahib who was at first in charge of the kitchen at Porur and then of that at Gollanchavadi. No doubt he managed his duties better

than the man at Porur, but I do not consider that his services were such as to merit any special recognition. The Tahsildar of Ponnéri brings to notice the good services of a Special Revenue Inspector and of the Hospital Assistant at Ponnéri. As I am not personally aware of the nature of the services rendered by them, I am not in a position to give my opinion in the matter.

22. *General Remarks*.—The distress which we have successfully managed to tide over indicates in my opinion the necessity for forthwith providing ample labour the moment the season gives cause for anxiety. It is safer, I consider, to err on the side of opening public works too early than too late, for prevention is better than cure. It is the timely steps taken on the present occasion that accounts for the absence of any loss of life from starvation. As remarked by the Tahsildar of Ponnéri, the opening of several relief works and kitchens in central villages on a small scale is more useful than the concentration of relief in one particular place on a large scale. The former course prevents the breaking up of homes and facilitates the speedy return of the people to their villages and resumption of agricultural operations in the event of a useful rainfall. The distress just over is not without its advantages. Most of the irrigation works, major and minor, have been put in order and the grant of loans under the Land Improvement Act was encouraged to the utmost. These permanent benefits would not have accrued in so short a period but for the distress.

23. I enclose the reports of my Tahsildars. There are several points in which these are defective and on which I should have liked to call for further information. But as my report is wanted urgently, I do not wish to delay it.

ENCLOSURE No. 3.

From A. PINTO, Esq., Deputy Collector, Tiruvallūr Division, to the Collector of the Chingleput District, dated Saidápet, 13th November 1892, No. 1164.

With reference to your letter, No. 821-S.L.R., dated 20th September 1892, I have the honour to submit the report called for.

2. The period of scarcity in this division can be said to have commenced in January 1891 and ended with December 1891, thus embracing a period of twelve months, but the watching of the season and the grant of loans continued practically till the 20th September 1892.

3. The famine operations during this period consisted in—

- (1) Constantly visiting villages to ascertain the condition of crops and the remissions needed, condition of people, state of food and water-supply and condition of cattle;
- (2) Carrying out minor irrigation works from Government funds or water-supply works and road works from Local Funds and Major Irrigation works by the Public Works Department;
- (3) Granting loans under the Land Improvement and Agriculturists' Loans Acts;
- (4) Opening and managing relief kitchens; and
- (5) Administering any private relief entrusted to the Revenue officers for distribution.

4. *Touring and the facts ascertained*.—The north-east monsoon of 1890 was at first a fair one and the crops were generally above the average till about the end of November when the monsoon seemed to be coming to a close without further prospects of rain and the crops, except those under springs, river channels, river-fed tanks and wells, began to wither. There was little

* Rice, seers 10 the rupee.
Ragi, seers 13-2 the rupee.

or no supply in rain-fed tanks; the price of 2nd-sort rice was approaching the scarcity rate* though that of ragi was still much below, and apprehensions were entertained of the failure of standing crops when the then Acting Collector, M. Hammick, Esq., called on Tahsildars and Divisional officers to make a thorough inspection of villages and to report fully on the condition of crops and people. The touring was performed and completed on 5th January 1891, and the results were reported in my letter printed with Board's Proceedings, No. 33, dated 23rd January 1891, Revenue Settlement, Land Records and Agriculture. It showed that the northern-neighbourhood and Nagulapuram and 10 other villages in that tract were the worst affected; that large tracts of wet crops under rain-fed tanks failed; that nearly 200 out of 224 Government villages appeared to require remissions estimated at Rs. 75,000; that well-to-do people had shut up their stores of grain; that the poorer population had given up rice-eating owing to the rise of price and taken to ragi; and that the people depending on daily hire had begun to feel the distress. As yet the cattle were in fair condition having had shavi fodder to live upon and no want of drinking-water. Food-supply was also available having been imported from Madras and other parts. Great activity was shown by ryots in saving crops, which were not past hope, by baling wells were available, the crop was cut down to feed cattle with, the land was reploughed and a dry crop raised with the aid of wells. The tracts most affected were: (1) the Kadur tract being lying to the north of the Cortalliyar and south of Peradam; and (3) the Periapalayam tract in continuation eastward of the Uttukottai tract up to the boundary of the taluk on the north, east and south.

5. While the state of things continued thus, there were some welcome showers of rain on the 19th and 20th of January 1891; but they were not general and were confined to the worst affected parts. The portion of country to the south of the Cortalliyar had merely a drizzle; the affected parts towards the north had a fall from 2 to 3 inches. This rain saved the standing crops that were yet green, the rest having already become shavi. It had also the effect of keeping the prices of food-grains from rising higher for a short time. Some of the big tanks, such as Nagalapuram Segappu yeri, Pandur tank and Panappakkam tank, received supply varying from 10 to 30 days. Pasturage improved in parts favoured by the rain. But the subsequent drought necessitated the continued inspection of villages. This was done throughout the period of distress, and weekly special season reports were submitted showing the condition and the relief required.

6. In the week ending 21st February 1891, I found that the ordinary beggars complained loudly of want of support at Uttukottai and Santavelur. The latter village belongs to the Kadur tract where Public Works Department relief works had just been started. I counselled the well-to-do inhabitants of the place to establish a grain dole from private funds and they subscribed a fund enough for 15 persons for three months. At Uttukottai, the well-to-do inhabitants established a similar dole from private funds for 23 persons for a little over two months. In March I found the situation in the Periapalayam tract alarming and submitted my opinion that major irrigation works should be taken in hand there without further delay. In April to July the distress attained its height. In August 1891 there was a fair quantity of rain and agricultural operations were taken in hand. The distress may be said to have declined from about the end of this month when His Excellency the Governor visited this division and rode over long stretches of land ploughed up or sown. In the early part of September 1891 there was again a lack of rain; at the end of that month and in October there was a copious fall; in November and December there was fair rain and all relief operations except the granting of loans under the Land Improvement Act were brought to a close. In Board's Proceedings, dated 15th February 1892, Mis. No. 1610, this district was removed from the list of affected areas.

In January to April 1891 the inspection included the azimaesh of withered crops and waste ending in the actual remission of Rs. 63,935 for waste and shavi in fasli 1300 (1890-91). In January to May 1892, there was similar inspection of waste and shavi of fasli 1301; in this year the shavi was comparatively small being only Rs. 12,640, but the waste owing to the uncertainty of the season and the liberal terms offered by the Board of Revenue, which will doubtless be separately reviewed in the janabandi report, amounted to Rs. 27,255, the whole aggregating Rs. 39,895 against Rs. 63,935 in the previous year.

7. The north-east monsoon of 1890 was the chief failure of the period; the subsequent south-west monsoon was also for the most part a failure. Added to these, were the indifferent south-west monsoon of 1890 and the moderate north-east monsoon of 1891, thus giving out and out a period of 12 months of distress to those living from hand to mouth. The distress pressed severely on small pattadars; ordinary daily coolies and farm labourers dismissed by landlords from inability to retain them any longer. It also extended to tribes living on wild roots and greens along the foot of hills, such as Enadies and Irulars.

8. The object of the inspections was to search out real distress in order to apply the necessary remedial measures without waste on the one hand or neglect on the other; two things made the arriving at a just conclusion a difficult matter. The people had (1) one cheering recollection of the money dole of 1877 which they highly prized and (2) a horror of the relief camps of that season. They much overstated their case in the hope of getting a money dole again and declined cooked food in relief kitchens owing to the repulsive recollections of the relief camps of 1877. The one induced a belief in great distress; the other negatived the same. It was necessary, therefore, to steer a safe middle course in drawing conclusions from such facts and check every statement with other facts or events before accepting them. Every man or woman of and above middle age had some melancholy story to tell of the disease and death suffered in the relief camps of 1877. Their disinclination had deepened into prejudice and even superstition. The name of the relief camp had to be altered from Kanjitotti into Annachattaram to make it less shocking. The ration had to be served in the shape of a liquid meal in the morning and solid in the evening instead of solid both times. Chillies had to be reduced and salt had to be increased. The result was that no disease broke out nor deaths occurred in our relief kitchens which in time became unobjectionable and even popular to such a degree that admissions had to be refused with great difficulty. Caste people held back as long as possible and would not come to the kitchen till they had exhausted all other means which were comparatively more numerous to them than to the non-castes.

9. Really destitute people had at their command various makeshifts which they tried before coming on Government relief: they at first fell to the seeds of mavaragu, a weed that grew abundantly over shavi. It generally always exists, but is removed when the crop is worth weeding. When the crop withered the weed was left alone; it flowered and seeded affording gratuitous food to the destitute. The next resort was to various other seeds of grass: ari vrathan, mattanka, narival and kudraikolumbu. Another resource was the ant-holes which were invaded for the sake of the grain and grass seeds stored by the ants therein. Later on the bamboo seeded and afforded food to some destitute people. The flower of iluppai, the seed of the Korakkapalle, the fruit of the prickly-pear,—all came in aid of the poor, each in its turn.

10. People not accustomed to hard labour usually resorted, therefore, to every expedient possible in preference to labour on a relief work, and if they happened to lose their physique before they took to work, they became fit for gratuitous food. Irulars and Enadies and some Pariahs are generally of this class and they formed a respectable proportion of our kitchen population.

11. *Relief works.*—At the end of December 1890 a sum of over Rs. 2,000 out of the ordinary minor irrigation works allotment remained to be worked out. This amount was expended and an immediate further allotment of Rs. 5,348 was sanctioned principally in the worst affected parts and worked out in January—March 1891, and Rs. 14,437 were sanctioned and worked out in 1891-92. In carrying out these works, the plan adopted was of selecting works at or near affected parts and entrusting their execution as a rule to a well-to-do ryot or ryots of the village who sympathized with the sufferers. This plan generally worked well, full value of work was exacted, the requisite relief was afforded and our minor irrigation works were improved where they needed improvement for their own sake.

12. No special need arose for outlay under water-supply in January to March 1891, but subsequently water began to fail to an alarming degree when the Local Board sanctioned and carried out an allotment of Rs. 1,419-5-0 in 1891-92 in meeting this want. A village road from Triuvallur to Allikuli was also sanctioned principally as a relief work and carried out to the extent of Rs. 924 in 1890-91 and Rs. 409-3-7 in 1891-92. The other outlay from Local Funds was of an ordinary kind and not specially intended for the relief of distress.

13. But by far the most important relief works were the major irrigation works undertaken by the Public Works Department. The northernmost parts of the taluk known as the Kadur tract having been the worst affected, the repair of principal tanks here was undertaken in February 1891; in the Uttukottai tract similar

Kadur tract.			
1. Kadur tank.	12. Sengarai tank.		
2. Arudur tank.	13. Kalpedu tank.		
3. Pandur tank (No. 266).	14. Kakavakkam supply-channel.		
4. Santavelur tank.	15. Sennankaranai tank.		
5. Ambur tank.	16. Makkambakkam tank.		
6. Kambakkam.	17. Periapalayam tract.		
7. Varudayapalayam.	18. Vadamadurai tank and supply-channel.		
8. Moppurpallai tank.	19. Maduravasal tank.		
9. Kolladam tank.	20. Tiruvilai tank.		
10. Uttukottai tank.	21. Tirukkandham tank.		
11. Palavakkam tank.	22. Panayanjeri tank.		

works were taken in hand in April 1891; and in the Periapalayam tract also in April 1891. Details of these works have doubtless been furnished by the Public Works Department. The duties of the officers of this department were limited to searching out distress and referring the sufferers to the relief available. The tanks, &c., repaired in each of the three tracts under departmental agency by the Public Works Department are noted in the margin.

14. *Granting of loans under the Acts.*—One of the most important items of relief administered directly by this department was the granting of loans under the Land Improvement and the Agriculturists' Loans Acts. This work was commenced in January 1891 and continued till 30th September 1892. In this period Rs. 80,526 were disbursed as loans under the ordinary rules; Rs. 34,455 under the special well rules; and Rs. 2,089½ for seed-grain and cattle. Separate reports have been submitted in detail regarding these operations. Suffice it therefore to note here that 511 wells were completed and 241 were under construction, leaving 205 not commenced on 30th September 1892. The relief afforded by these loans was manifold; the borrowers were enabled to work at their own wells wherever possible and by saving a portion of the loan by their personal labour to appropriate it for their own livelihood; the suffering poor including well-builders found labour at these wells and were to a certain extent relieved; the borrowers were further enabled to raise dry crops and save wet crops where necessary and possible. Over 1,000 families obtained these loans and the numbers relieved might be roughly estimated at 5,000 souls the least.

15. *Relief kitchens.*—When the north-east monsoon of 1890 failed, it was generally expected that the south-west monsoon of 1891 would be ample; in order to avert any actual starvation, however, a relief kitchen was opened first at Periapalayam on 29th April 1891. It was intended solely to relieve those unable to work, such as the weak and the infirm, the aged and the children, the physical condition of the applicant being the chief criterion for admission. This relief was not carried on in strict conformity with the Famine Code rules. The recipients of food were allowed to come and go away when and where they liked; they were mustered and fed at the time of meals; two sheds were provided for their shelter—one caste and the other non-caste—for any one that chose to stop in them. Cooked food was not strictly regulated by the Code rules. The morning meal was changed from a solid to a liquid one, because the first comers from their prejudice to the relief camps of 1877 feared that the regulation food—solid both times of day—was different to what they were used to at their homes and was harmful to them, at all events in their then condition of semi-starvation. The change from kali (solid cake of ragi flour) to kulu (a liquid preparation of the same) was therefore ordered and was liked by the people. They also complained that the sanctioned dietary gave them too much of chillies, especially when their food was not tempered with ghee or oil. The quantity of chillies (1½ tolas) was therefore reduced to half the quantity, and with the value of the other half, onions and salt were substituted.* People on low condition were put on rice diet, and infirm children on milk diet. For medical relief, a special medical officer was

* Kitchen dietary as actually in use

38	tolas, ragi flour.
10	" broken rice.
4-8	" dholl.
2-2	" salt.
1-2	" tamarind.
6	" chillies.
6	" onions.

stationed at Periapalayam where the kitchen population was the largest and contained a small proportion of sick. At Ambur, the Sattiavedu hospital assistant occasionally visited the kitchen and afforded any requisite medical aid, and at Komakambodu the Periapalayam special medical officer did similar duty. It is gratifying to record that not a single death occurred at these kitchens and the permission to leave the sheds when they liked dispensed with the necessity for latrine accommodation.

16. The Periapalayam kitchen opened with 8 persons in the morning and 10 in the evening. The highest attendance was 35 men, 111 women and 210 children,—total 356; and the average 17.80 men, 35.65 women, and 79.80 children,—total 133.25. The number of meals given (in cases of children taking two meals as one) were altogether 40,208 from the beginning to the close of the kitchen (24th November 1891), a period of 6 months and 26 days. The entire cost was Rs. 1,448-4-1, being 6.91 pies per meal or As. 1-1-82 per head a day. This is the principal kitchen where special diet for the sick and infirm and also for the children was allowed, which tended to a slight rise of cost.

17. When the south-west monsoon of 1891 was found to have failed on the 9th July 1891, the second kitchen was started in the Katur tract and was maintained till the 24th December 1891 when it was closed. The number of meals given here were 20,026½ and the cost of Rs. 703-7-8, being 6.74 pies per meal or As. 1-1-48 per head a day. The highest attendance at this kitchen was 9 men, 72 women and 146 children,—total 227; and the average was men 5.22, women 26.09, children 56.23,—total 87.54. The general result is a slight decrease of cost at this kitchen compared to that at Periapalayam.

18. The third kitchen was started at Komakambodu on 3rd August 1891 and closed on 9th December 1891. The highest attendance here was 19 men, 44 women and 84 children,—total 147; and the average attendance 10.32 men, 19.47 women, and 27.31 children,—total 57.10. The number of meals given here were 8,545½ and the cost was Rs. 391-2-8, being 8.78 pies per meal or As. 1-5-56 per head a day. The increase of cost here, about 2 pies per meal extra, compared to that at Periapalayam and Ambur, was owing to two causes—

- (1) The site of this kitchen being an isolated one and surrounded on all sides by shrotriem villages, the village servants engaged, being themselves semi-starved, had to be fed.
- (2) Laxity of management by the officer in immediate charge which was duly detected and noticed.

There were North Arcot kitchens in the immediate neighbourhood of Uttukottai, Varadaya-palayam, Sattiavedu and other parts, and it was mutually arranged with the North Arcot authorities for the admission of our ticket-holders there. This dispensed with the necessity of opening more kitchens.

The admissions into the kitchens were by tickets granted after careful enquiry by the Divisional-officer, Tahsildar, Deputy Tahsildar, and in rare cases by the kitchen superintendents. The recipients of food were periodically inspected and any undeserving cases were excluded.

19. In this connection I should bring to favorable notice the bounty of Raja Sir Savalai Ramasawmi Mudaliar, Kt., c.i.e., of Madras, who sent cloths for distribution to the inmates of each kitchen which enabled them to be decently clothed.

20. *Administration of a private relief fund entrusted to me for distribution.*—A sum of Rs. 200 out of an anonymous donation of Rs. 1,000 from England was placed at my disposal by the Collector for affording relief to those persons who from pride of caste or other prestige refused labour on relief works or cooked food at kitchens and could not be succoured before it was too late. Two hundred and forty-five persons were relieved from this fund.

21. *Disease.*—Cholera broke out in the taluk on various occasions, but was obstinate between 7th August and 21st December 1891, when 401 deaths occurred in 78 villages, most of them being close to Tiruvallur town. The epidemic broke out during the Bhavaniamman festival at Periapalayam in July—August 1891 having been imported there by the Madras pilgrims. The villages in the vicinity of Periapalayam were visited and attended to by Mr. Apothecary Verghese in charge of the relief kitchen at Periapalayam and those in the neighbourhood of Tiruvallur by Senior Apothecary Mr. Fonseca. Both worked hard in putting down and

- (1) Lutchmiah Naidu.
- (2) Swami Dasan.
- (3) D. David.

stamping out the disease in their respective circle. The hospital assistants in charge of the (1) Tiruvallur, (2) Nagalapuram, and (3) Sattiavedu dispensaries also did their best—the first mentioned before Mr. Fonseca arrived and after he left, and the other two in their respective circle throughout the year.

Fever also appeared in parts of the taluk, but the mortality from it was not great.

Not a single death was directly attributed to starvation, except perhaps that of a woman who was mad and refused food. She was found in a village,* but the village munsif, an old and stupid man, caused her to be deported to an

* Shrotriem Damarapakkam.

adjacent village. She was found on the road side almost in nudity and was immediately removed to the adjoining Komakambodu kitchen where she was fed and clothed and then sent on to Tiruvallur for treatment where she died. She was incoherent and unable to give any account of herself. The village munsif was immediately suspended. He remained under suspension for six months and I should have dismissed him but for the difficulty of getting any other man for appointment in his place, the post carrying no salary and being more a burden than a prize.

There is however no doubt but that the poorer people must have lived on insufficient food and

	Deaths.	
1891	4,554	that this led to disease and to increased mortality, for the aggregate deaths in the year 1891
Average for 5 previous years	3,775	exceeded the annual average of the previous five
Excess	779	years by 20.63 per cent. and the highest of
Highest mortality in previous 5 years	3,852	that period by 18.22 per cent. (vide abstract
Excess	702	annexed).

22. *Conduct of officers*—Has throughout been exemplary. Every one did his duty to the best of his ability without calling forth a single complaint of fraud or dishonest misbehaviour. I have pleasure to place on record the specially praiseworthy work done by the late Tahsildar N. Narasinga Rao. He was most active and assiduous in the performance of the task assigned to him. He spared himself no pains and was ever ready when duty demanded his presence. While travelling on duty in August 1891, he fell with his cart and broke his arm. He was subsequently transferred on temporary promotion to Salem. When he returned, he took ill after a fatiguing journey from the northern part of the taluk and died on 13th April 1892 after a short illness of three days. His death was, I believe, accelerated by over-work. The late Collector, J. H. A. Tremeneere, Esq., appreciated his services (vide his letter printed with Board's Proceedings, dated 14th October 1891, No. 652, Revenue Settlement, Land Records and Agriculture), and you have recorded a favorable remark regarding him, in your No. 1204-Ver., dated 22nd April 1892. Of the revenue inspectors, Special Revenue Inspector Venkatakrishna Mudaliar deserves special mention. He did a great portion of the land improvement enquiries, and his work and report were of a very trustworthy character. As kitchen superintendent, D. B. Venkatasubba Rau subsequently promoted to the post of Taluk Sheristadar and now acting as Stationary Sub-Magistrate, Saidapet, deserves special mention. He was in charge of the Periapalayam kitchen when His Excellency the Governor visited it in August 1891, and his Private Secretary J. D. Rees, Esq., recorded a remark "very nice" in the visitors' book. Stock Inspector Viswanathayya was in charge of this kitchen prior to Venkatasubba Rau and worked exceedingly carefully in conducting the relief. Stock Inspector Rungiah Naidu was in charge of the Ambur kitchen; he worked with a zeal and interest equally praiseworthy. Mr. Apothecary Fonseca and Mr. Apothecary Verghese deserve special mention for having successfully combated with cholera while on special duty in this division during the distress.

ABSTRACT of mortality in 1891 as compared to the previous five years.

Tiruvallur taluk.

Months.	Number of deaths in					Average for 5 years ending with 1890.	Number of deaths in 1891.	Increase or decrease in 1891.
	1886.	1887.	1888.	1889.	1890.			
January to July	1,920	1,966	2,241	2,100	1,963	2,038	1,960	— 78
August	389	336	377	355	404	372	425	+ 53
September	314	322	280	381	300	337	412	+ 105
October	322	338	288	362	322	336	437	+ 101
November	361	403	300	313	313	338	691	+ 253
December	396	436	330	341	264	354	699	+ 345
Total	3,702	3,851	3,816	3,852	8,656	3,775	4,554	+ 779
<i>Diseases.</i>								
Cholera	..	69	355	44	44	102	416	+ 314
Small-pox	20	40	63	65	57	47	51	+ 4
Fever	1,007	944	858	1,137	1,232	1,036	1,284	+ 248
Bowel complaints	461	436	409	468	262	407	444	+ 37
Injuries	72	78	92	48	76	73	73	—
Other causes	2,142	2,284	2,049	2,090	1,985	2,110	2,286	+ 176
Total	3,702	3,851	3,816	3,852	8,656	3,775	4,554	+ 779

ENCLOSURE No. 4.

From C. H. B. BURLTON, Esq., Executive Engineer, Chingleput Division, to the Superintending Engineer, V Circle, dated 10th June 1892.

In continuation of my letter No. 829, dated 29th May 1892, and with reference to Chief Engineer's circular No. 2046-C, dated 18th April 1892, communicated with your No. 311-C.M. of 22nd April 1892, I have the honour to submit the report regarding famine operations in this division from the commencement, viz., February to December 1891.

2. *General state of the season and programme of works*—Owing to the failure of the north-east monsoon and consequent scarcity of water in the rain-fed tanks, the revenue authorities considered the condition of the district critical, and in February 1891 arrangements were made to commence relief works in the north of Tiruvallūr taluk, a locality chiefly dependent on rain for its water-supply. Moreover, with the notable exception of the Pālār anicut system tanks, the supply to those dependent on rivers was not satisfactory, particularly in the case of Chembrambakam tank, where highest level for the year 1890-91 was 13·75 feet, and in 1891-92, 16·35 feet below F.T.L. The Pālār anicut system tanks, however, fed by Kambakal channel, surplussed twice after the north-east monsoon of 1890. Conjeeveram taluk was therefore safe, and relief works were not considered necessary in the neighbouring taluks or in fact anywhere except in the North Tiruvallūr at the beginning of 1891. A few months later, however, operations were extended southwards; then the south-west monsoon failed and there were relief works in every taluk in the district, while in Tiruvallūr taluk there was a departmental relief work for each of these following tracts:—Periapalayam, Uttukottai and Kambakam. In Ponnéri taluk the same coolies, numbering at one time 1,405 people, marched from one place to another; but everywhere else the works were brought almost to the very doors of the people. The north-east monsoon, however, had the effect of stopping all relief operations. It was not a good monsoon, but it answered that purpose.

3. The following is a list of the tracts in which relief works were opened with the month corresponding to each:—

Name of tract.	Month of opening.
<i>Tiruvallūr taluk.</i>	
1. Kadur Kambakam tract	February 1891.
2. Uttukottai tract	April 1891.
3. Periapalayam tract	May 1891.
<i>Ponnéri taluk.</i>	
4. Ponnéri taluk	February 1891.
<i>Chingleput taluk.</i>	
5. Manambadi tract	April 1891.
<i>Madurantakam taluk.</i>	
6. Acharavakam tract	April 1891.
<i>Saidāpet taluk.</i>	
7. Tirumushi tract	July 1891.
<i>Conjeeveram taluk.</i>	
8. Kuvam Mappedu	July 1891.

4. Departmental works in large numbers were opened consecutively in each of the above centres at the request of the Revenue Department; to meet whose wishes special upper subordinates were posted to the division, a man being required for each tract.

These subordinates were placed under the immediate orders of the Public Works Department officers, in whose sub-division the tract happened to be, with the exception of Sergeant Cherry at Manambadi from 6th April 1891 to 31st May 1891, who was under the direct orders of the Executive Engineer.

5. *System of payments*.—Each subordinate had an imprest account and drew cash from the nearest treasury by cheque sent to him direct by the Executive Engineer. Cheques in recoupment of imprests were sent on receipt of report that the accounts had been submitted to the sub-divisional officer. As the accounts had to be passed in the sub-divisional office, sometimes to be corrected and sometimes to be returned to the subordinate for revision, and as, when after finding their way finally to the divisional office, they had to be audited there, it is needless to say that the cheques were very much in advance of the accounts and it took some months after all famine work had been stopped to audit and close the accounts; but, as payments were ordered to be made at least twice a week, it was of paramount importance to keep the subordinates in funds, and thus this system which is open to considerable objection had of necessity to be resorted to.

In spite of the promptitude with which imprests were recouped, there were in certain cases complaints of delay in paying coolies. All such complaints, however, were more or less frivolous except in an isolated case at Vadamadurai, where there was some delay occasioned by illness of the subordinate in charge (*vide* G.O., dated 29th September 1891, No. 2603 A-W., and G.O., dated 23rd October 1891, No. 2786 W.) The largest imprest given to a subordinate was Rs. 1,600. This was allowed under the special sanction of the Government of India (*vide* G.O., dated 24th October 1891, No. 2808 W.)

6. The following table shows the amount of each subordinate's imprest from February to December 1891:—

Tracts.	February.		March.		April.		May.		June.		July.	
	Number of times recouped.	Imprest.	Number of times recouped.	Imprest.	Number of times recouped.	Imprest.	Number of times recouped.	Imprest.	Number of times recouped.	Imprest.	Number of times recouped.	Imprest.
1	2	3	4	5	6	7	8	9	10	11	12	13
1. Kadur-Kambakam tract	..	550	4	700	6	700	2	800	3	1,100	7	1,000
2. Ponnéri taluk	1	550	3	1,000	4	1,000	4	1,000	5	1,000	3	1,600
3. Manambadi tract	..	..	..	..	..	950	2	950	3	1,000	4	1,000
4. Acharavakam tract	..	..	..	..	..	700	3	700	4	1,000	7	1,000
5. Uttukottai tract	..	..	100	1	600	4	600	3	700	3	700	..
6. Periapalayam tract	..	..	100	4	500	3	500	2	800	2	800	..
7. Tirumushi	..	..	..	..	..	..	..	..	..	..	..	500
8. Kuvam Mappedu	..	..	..	..	..	..	..	..	..	..	..	800

Tracts.	August.		September.		October.		November.		December.	
	Number of times recouped.	Imprest.	Number of times recouped.	Imprest.	Number of times recouped.	Imprest.	Number of times recouped.	Imprest.	Number of times recouped.	Imprest.
	14	15	16	17	18	19	20	21	22	23
1. Kadur-Kambakam tract	2	1,000	5	1,000	3	1,000	..	1,000	..	..
2. Ponnéri taluk	3	1,000	2	1,000	1	1,000	..	1,000	..	..
3. Manambadi tract	3	1,000	3	1,000	1	1,000	..	1,000	..	..
4. Acharavakam tract	7	1,000	8	1,000	8	1,000	..	1,000	..	..
5. Uttukottai tract	1	700	2	700	2	900	5	1,000	..	..
6. Periapalayam tract	1	800	2	800	2	900	4	900	1	900
7. Tirumushi	1	1,000	3	800	2	800	3	800	3	800
8. Kuvam Mappedu	2	800	4	1,000	1	1,000	1	1,000	..	500
				800	5	800	3	800	3	1,000

7. The fluctuation of an imprest may be taken as fair gauge of the rise and fall of the coolies. Taking x as the number of coolies $\frac{x}{2}$ in rupees would give an imprest amply sufficient for bi-weekly payments. Each subordinate was supplied with an iron cash-chest.

8. The maximum rates of wage per diem were 3 annas for a man, 2 annas for a woman and 1 anna 6 pies for a boy or girl. Subsequently, however, a proposal was made to change the rates from 3 to 2½ annas for a man and 2 to 1½ annas for a woman; but these changes were not exacted, that is to say in the case of the rate for earthwork being 1½ annas per cubic yard a man done subject to a certain minimum wage. The minimum rates were paid to people working their best, but who could not do more than 75 per cent of a task, namely 2 annas 3 pies for a man, 1 anna 6 pies for a woman and 1 anna 2 pies for a boy or girl, such people were usually employed in removing prickly-pear and such light work; but people malingering were paid at the further reduced rates of 1 anna 1½ pies for a man, 9 pies for a woman and 7 pies for a boy or girl under G.O., No. 1020 W., dated 13th April 1891. People who were in a weakly state were paid as follows:—2½ annas for a man, 1 anna 6 pies for a woman, and 1 anna 2 pies for a boy or girl.

9. But such cases were very few. In fact, out of a total expenditure of Rs. 96,807 on departmental relief works, Rs. 2,817 sufficed to pay weakly persons.

10. *Tools*.—The following table shows particulars of tools issued :—

	Mamooties.	Crowbars.	Pickaxes.	Bill-hooks.	Axe felling.	Iron rammers.	Saw head.
1. Kadur-Kumbakam	400	250	150	20	25	25	2
2. Ponnéri taluk	100	115	50	5	5	30	..
3. Manambadi	..	..	..	..	..	70	..
4. Acharavakam	150	150	75	..	..	50	..
5. Uttukottai	200	49	125	..	..	..	..
6. Periapalaiyam	70	45	45	..	..	..	..
7. Tirumushi	75	50	50	..	..	20	..
8. Kuvam Muppada	50	50	50	..	..	20	..

Tools were kept in the personal custody of temporary storekeepers under the subordinates on the works.

11. They were also issued as required from the divisional stores to works carried out by Civil Agency. The following are particulars of tools supplied to the Revenue authorities :—

	Mamooties.	Crowbars.	Pickaxes.
Tahsildar { Madurantakam	100	..	25
{ Chingleput	400	100	100

12. All tools were returned to store except those marginally noted which are due from the Uttukottai tract.

13. The deficit which is, it is hoped, only temporary is due to the overseer at the time of his transfer being too ill to collect tools given by him in charge of village munsifs, from whom, however, he obtained receipts and many of the tools originally given have since been recovered. The Collector is being addressed with a view to recover the remainder.

14. *Preparation of estimates*.—To keep pace with the works special subordinates had to be put on estimating duty, so that, when one work was finished, there might be another available. Thus labour was continuously supplied, but, owing to the comparative failure of the north-east monsoon, it was decided not to stop the preparation of estimates, the magnitude of which is becoming enormous, and in another month the estimates of untouched works suitable for relief purposes will probably amount to 4½ lakhs.

The following table gives particulars of estimates prepared up to 31st March 1892 :—

	Details of estimates.						Total amount of estimate prepared and their value.	
	Sent for execution.		Sent for execution but not commenced.		Not sent for execution.			
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
1	2	3	4	5	6	7	8	9
1. Tiruvallūr	40	RS. 1,02,727	4	RS. 17,170	12	RS. 28,810	56	RS. 1,48,707
2. Chingleput	17	45,580	17	34,595	39	78,170	73	1,58,345
3. Mount	6	6,060	3	1,145	1	830	10	8,035
Vāyalūr project	..	..	..	..	1	43,000	1	43,000
Total ..	63	1,54,367	24	52,910	53	1,50,810	140	3,58,087

15. The duty of selecting the works devolved on the Revenue Department and each selection was based on its suitability to the convenience of people living in what were considered affected localities. It might, however, happen that such and such work was an important one

and that it had been sanctioned before a famine was thought of because it was necessary and in the case of works given out on contract such was invariably the case. As regards departmental works, however, for which estimates were specially prepared with the object of employing people wanting work, it was just a chance whether the money would be usefully spent or not, for the work was for the good of the people and not the people for the good of the work. With this object works were chosen and an upper subordinate with writer, lascar, storekeeper, &c., was appointed to each tract containing one or two works. The coolies were formed into groups of from 4 or 5 to 20 persons under gangmen, to whom payments were sometimes made for every person in his gang himself included, but sometimes the coolies were paid individually, tasks were marked out and the work measured before pay day which was generally twice a week; but this question was always settled by the Collector. At first weekly payments were made on some works and bi-weekly on others, then for several months from May bi-weekly payments were ordered on all works till the season improved when the payments were again weekly; but in some cases daily payments had to be made to new-comers, for instance, and persons in weakly condition. There were, however, comparatively few weakly persons and the sum paid to such people did not exceed one-thirty-third of the total spent on labour for departmental works, on which the total number of such people at work amounted to—men 14,651, women 1,494 and boys or girls 436. Full details are given in statement No. 1 from which it will be seen that the total for all the days on which departmental work was carried out amounted to 531, 11, of which 380,395 were men, 140,046 women and 11,070 children; total 531,511 persons. These were engaged on the following descriptions of work :—

- | | |
|---------------------------------|-------------------------------|
| (i) Digging and carrying earth. | (iv) Clearing prickly-pear. |
| (ii) Tamping. | (v) Repacking older vetments. |
| (iii) Sectioning. | |

17. The annexed statement gives particulars of the numbers of works separating them under the piece-work system from those under departmental agency, the total expenditure exclusive of establishment, tools and plant amounting to Rs. 1,21,761 :—

Name of taluk.	Works executed under		Value of work turned out.	
	Piece-work system.	Departmental agency.	Piece-work system.	Departmental agency.
1. Tiruvallūr	19	25	Rs. ..	Rs. ..
2. Ponnéri	11	11	..	..
3. Chingleput	..	6	..	..
4. Madurantakam	..	17	..	..
5. Conjeevaram	6	2	..	..
6. Saidāpet	4	2	..	..
Total	40	63	24,954	96,807
			1,21,761	

18. All periodical reports required were promptly attended to. The subordinate in charge of each work submitted daily reports to the Executive Engineer, while weekly and fortnightly reports were submitted as follows :—

- | | |
|-----------------------|--|
| I. Weekly | (a) To Collector. |
| | (b) Copy to S.E. |
| | (c) Copy to Secretary to the Commissioner of Revenue Settlement and Director of the Department of Land Records and Agriculture |
| II. Fortnightly | To Chief Engineer through Superintending Engineer. |

19. The initial accounts of all outlay on works were maintained in accordance with the ordinary procedure laid down in the Public Works Department Code. All payments for coolies were supported by nominal muster roll and ten-day reports and for all petty miscellaneous payments vouchers in the ordinary Public Works Department form were obtained.

20. The outlay on famine relief works was charged in the divisional accounts to a suspense head "Famine relief" and the same adjusted monthly by credit to suspense head Famine relief and debited to (a) Civil Department for all abnormal charges or loss on the works and (b) Works concerned under the respective heads of service for the normal outlay.

21. The required extra establishment for the divisional office was applied for early but sanctioned late; consequently it was not possible always to prevent work falling into arrears.

22. During the latter part of the official year Government sanctioned the system of paying coolies by cashier and two cashiers were accordingly posted as follows:—

- (i) To pay for Ponnéri and Periyapálaiyam tract coolies.
- (ii) To Acharavakam tract.

23. A statement No. 3 of excess establishment due to famine labour employed in the division since the commencement of the relief operations is herewith attached and the Government have since decided that the excess establishment should be debited to the Civil Department.

24. The effect of organizing relief works cannot be said to have been an unmixed blessing. The proportion of weakly persons was only one one-thirty-third part of the total number employed, and weakly persons only derived special benefit; for the rest being able-bodied would readily have found employment under contractors. Contract works as well as departmental works were put in hand wherever asked for by the Collector. Consequently allotments were exceeded several months before the close of the official year and additional funds had to be provided; but repair works once commenced could not be stopped, therefore the funds allotted for this official year are required to pay for work commenced last official year and no new earthwork, save such as channel clearances and anything else absolutely necessary, has been commenced. The effect of this on some contractors is serious, for their coolies have received advances, but, owing to want of work, the contractors are unable to easily recoup themselves. Departmental works must necessarily be more expensive than works done by contract or piece-work agreement for the following reasons:

(1) A special establishment has to be maintained consisting of a supervisor or overseer, with writer lascar, storekeeper and head coolies.

(2) Labour must be provided irrespective of the state of the ground, and, if the soil is hard, a high rate has to be given. A contractor would wait for the rain to soften the ground.

25. And as the able-bodied would have found work with contractor the sole advantage derived from incurring all this extra expense lies in giving support to weakly persons so few in number that their total earnings amounted to only Rs. 2,817. There is moreover now a re-action on those able and willing to work in that we have now no work to give them, the year's allotment having been forestalled.

26. In August and September, the Right Honorable the Governor accompanied by Mr. Clogstoun, Famine Commissioner, visited the following relief works in progress:—

August 31st, Kalpattu tank of Uttukottai tract; Tirukandalam tank of Periyapálaiyam tract.

September 2nd, Sombattu tank in Ponnéri taluk.

27. The management of all works in Tiruvallūr and Ponnéri taluks was ably conducted by the late Lieutenant Milne, Assistant Engineer in charge of Tiruvallūr sub-division, and I would also bring to notice the good services rendered by Mr. Berlie, then Sub-Engineer, now Honorary Assistant Engineer in charge of the Mount sub-division.

28. The undermentioned subordinates employed either on estimating or on relief works gave satisfaction:—

Sergeant J. Cherry	...	...	...	...	Supervisor.
U. Venkata Rao	...	...	...	...	Overseer.
S. Sankarasubba Annavi	...	...	...	...	Do.
Mr. H. E. LaFontaine	...	...	...	...	Do.
Sergeant P. King	...	...	...	...	Do.
P. Moses Pillai	...	...	...	...	Do.
Munusawmy Mudaliar	...	...	...	...	Supervisor.
Ramanujam Pillai	...	...	...	...	Do.

While the services rendered by M.R.Ry. V. S. Rajagopala Chariar in the efficient management of the accounts were very valuable.

Indorsement by A. M. FOORD, Esq., Executive Engineer, Chengleput Division, dated 1st October 1892, No. 2862.

Copy forwarded to the Collector with reference to his No. 821, dated 20th September 1892.

APPENDIX V.

List of famine relief works executed by Public Works Department in 1891.

Description of work.	Amount spent.	Amount previously spent on piece work.	Remarks.
<i>Saidpet taluk.</i>	RS. A. P.	RS. A. P.	
1. Maduravoyal tank	1,518 4 10	..	
2. Tirumushi do.	3,768 1 2	..	
One work	426 15 2	..	
Total ..	5,713 5 2	..	
<i>Ponnéri taluk.</i>			
3. Diversion of Narayanavaram river ..	3,665 4 8	2,148 10 9	
4. Do. do. embankment. ..	748 1 8	1,467 1 1	
5. Kortalayár river flood banks	3,476 5 5	..	
6. Pralayambakam tank	1,316 0 1	..	
7. Gummudupundi do.	2,634 1 2	..	
8. Rettambadu do.	2,634 5 0	..	
9. Tirunagaram do.	589 4 9	..	
10. Seganiam do.	821 5 9	..	
11. Sombattu do.	1,998 3 6	..	
12. Medur do.	3,729 15 10	..	
One work	161 10 5	..	
Total ..	21,174 10 3	..	
<i>Tiruvallūr taluk.</i>			
13. Kambakam tank	1,246 15 1	469 13 0	
14. Kadur do.	872 4 10	675 10 0	
15. Uttukottai	2,214 5 0	..	
16. Vadamadurai	4,073 15 0	..	
17. Do. tank supply channel	2,186 13 7	..	
18. Santhanelur tank	954 8 0	..	
19. Ambur	1,628 9 0	..	
20. Arattur tank	1,499 13 2	..	
21. Pandur do.	706 13 6	..	
22. Kalpattu do.	714 10 4	..	
23. Tirukandalam tank	1,298 3 8	..	
24. Pandur channel	3,518 9 3	..	
25. Panayneri tank	1,999 4 3	..	
26. Sengarai do.	632 12 0	..	
27. Sinnakaranai do.	687 11 9	..	
28. Tholunadu irrigation channel and Koyavakam tank supply. ..	2,613 14 3	..	
29. Tirunilai tank	613 15 8	..	
Seven works	2,119 13 10	..	
Total ..	29,483 0 2	..	
<i>Chingleput taluk.</i>			
30. Manambadi tank	3,917 7 8	..	
31. Anur tank	2,738 0 6	..	
32. Medayattur	603 11 11	..	
33. Poo Iluppai	3,286 5 0	..	
34. Sirudamur	1,695 10 8	..	
One work	411 9 9	..	
Total ..	12,632 13 6	..	
<i>Conjeevaram taluk.</i>			
35. Mappedu tank	3,242 6 2	..	
36. Koovam do.	4,714 14 9	..	
Total ..	7,957 4 11	..	
<i>Madurantakam taluk.</i>			
37. Neelakantapuram tank	550 12 6	..	
38. Alikaranakkam do.	587 15 10	..	
39. Do. tangal	905 9 5	..	
40. Tenpakam tank	1,288 10 1	..	
41. Panettunallur do.	692 1 8	..	
42. Arappedu do.	1,434 10 10	..	
43. do. chitteri	545 7 3	..	
44. Chittamur tank	1,257 10 5	..	
45. Sottupakam	784 13 9	..	
46. Orattur tank	2,413 11 11	..	
47. Do. tangal	1,860 10 6	..	
48. Padri tank	1,160 2 2	..	
Five works	1,602 8 6	..	
Total ..	15,084 12 10	..	
Grand Total ..	92,045 14 10	4,761 2 10	
			Tirumushi supply channel 426 15 2 Attupakam tank 161 10 5 Varadiapoliem tank 225 6 6 Uttukottai tank supply channel 24 7 0 Palanakkam tank 482 14 4 Mepperpully do. 462 2 6 Kolladam do. 388 11 6 Budur do. 50 7 6 Mukkoambakam 485 12 6 Perunthandlam tank 411 9 9 Minal tank 252 3 7 Tenpakam tangal 309 6 7 Kilwaruvathur tank 385 13 11 Melmaruvathur do. 467 2 1 Indalur do. 187 14 4



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ENCLOSURE No. 6.

List of Special Establishments entertained in the Chingleput District.

Number and names of offices.	Where stationed.	Salary.	Date of entertain-ment.	Date of discharge.
One Assistant Collector ..	Collector's office, Saidápet ..	Rs. 585	5th September 1891.	11th January 1892.
Two season clerks, one on Rs. 25 and another on Rs. 50.	Do. do. ..	75	12th August 1891 ..	February 1892.
Two peons on Rs. 7 each ..	Do. do. ..	14	9th September 1891.	January ..
A Deputy Collector on Rs. 250 with an establishment costing Rs. 109.	Ponnéri	359	March 1891 ..	Do. ..
A Deputy Collector on Rs. 600 with an establishment costing Rs. 66.	Sub-Collector's office ..	666	September	Do.
Eighteen Revenue Inspectors on Rs. 40 each with a peon for each on Rs. 6.	{ 3 in Madurántakam 2 in Conjeeveram 3 in Chingleput 3 in Tiruvállur 4 in Ponnéri 3 in Saidápet 2 in Madurántakam 1 in Conjeeveram	828	February	September 1892.
Twelve clerks, 5 on Rs. 20 and the rest on Rs. 15 each.	{ 2 in Chingleput 2 in Tiruvállur 3 in Ponnéri 2 in Saidápet	205	March	7 Clerks on Rs. 15 still continue, others dispensed with by September 1892.
Six Irrigation maistries on Rs. 25 each.	1 for each taluk	150	February	December 1891.
Eight lascars on Rs. 6 each ..	2 for Tiruvállur and Ponnéri taluks and one for each of the other 4 taluks	48	Do.	Do.
Three Special Sub-Magistrates on Rs. 70 each with an establish-ment, costing Rs. 54 for each.	{ 1 in Ponnéri 1 in Tiruvállur 1 in Chingleput	372	April 1891	February 1892.
Six Stock Inspectors .. ..	.....	..	March	December 1891.
Six Medical Subordinates ..	.....	..	August	November ..

RESOLUTION—dated 11th January 1893, No. .

Recorded, pending the preparation of the general famine report.

(True Copies and Extract.)

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

Copy to the Collector of Chingleput

Exd. W. H. French.

1893.

Board of Revenue

(Revenue Settlement, Land Records
and Agriculture),

MADRAS.

Printed January 24th.

Proceedings, 10th January 1893, No. 11.

Recording, pending the preparation of the
general famine report, report on famine operations
during the late season of distress in Chingleput.

92
BOARD OF REVENUE (REV. SETT., L. RDS. AND AGRI.), 18TH FEB. 1893, No. 65.

PROCEEDINGS OF THE BOARD OF REVENUE

(REVENUE SETTLEMENT, LAND RECORDS AND AGRICULTURE).

READ—the following letter from C. D. MACLEANE, Esq., Collector of Nellore, to the Secretary to the Commissioner of Revenue Settlement, Land Records and Agriculture, dated 27th January 1893, No. 1288-Tour:—

I have the honour to submit the report on relief operations in Nellore district, called for in Board's Proceedings, Mis. No. 7430, dated 12th September 1892. Copies are enclosed of the reports of the Divisional and other officers who superintended the operations personally.

2. CHARACTER OF DISTRICT—*Position, &c.*—The Nellore district lies to the north of Madras between north latitudes $13^{\circ} 29'$ and $16^{\circ} 00'$ and east longitudes $79^{\circ} 07'$ and $80^{\circ} 19'$. It measures 170 miles from north to south and 70 miles from east to west and is bounded on the north by the Kistna district, south by Chingleput and North Arcot districts, east by the Bay of Bengal and west by Cuddapah and Kurnool districts. The area is approximately 8,760 square miles and population 1,463,736 as per the 1891 census. In 1881 the population was 1,220,236, the increase being over 19.95 per cent. For purposes of present report, the district may be divided roughly into the tracts north and south of the Pennér river; the former consisting of the Government taluks of Ongole, Kandukúr, Kanigiri, Kávali, North Atmakúr, Udayagiri and the zemindari divisions of Podili and Darsi; and the latter consisting of the Government taluks of Nellore, South Atmakúr, Gúdúr, Rápúr, and the zemindari divisions of Venkatagiri and Pólúr. It is with the former tract chiefly that the main body of the present report deals though technically the whole of Atmakúr was included under the operations of the Famine Code, and the failure of the Pennér seriously affected agricultural operations in the delta taluks of Nellore and Gúdúr.

3. *Rainfall.*—The statement below gives the monthly rainfall of the district for 14 years beginning with the famine year 1876-77 and ending with the year 1889-90. The official year has been taken as representing best the crop rainfall. Excluding the famine year, the average rainfall of the district for 13 years beginning with 1877-78 (omitting the year before that as quite abnormal) is 35.92 inches. A reference to the rainfall statement shows that the years 1880-81, 1883-84, 1884-85, 1887-88 were good years, 1879-80, 1882-83, 1885-86 and 1886-87, normal years, and 1878-79 and 1881-82 not good years and 1888-89 and 1889-90, bad years, the rainfall in the last two being very deficient. The north-east monsoon during the last

two years of the above series was decidedly unsatisfactory and the crops which were chiefly dependent on it were below the average :—

Months.	1876-77.	1877-78.	1878-79.	1879-80.	1880-81.	1881-82.	1882-83.
1	2	3	4	5	6	7	8
1. April	IN. 0.04	IN. 0.7	IN. 0.57	IN. ..	IN. 0.16	IN. 0.30	IN. 0.22
2. May	1.31	6.67	1.00	4.23	0.71	1.30	0.77
3. June	1.73	1.46	0.70	2.17	1.58	2.45	1.43
4. July	1.02	1.02	4.95	2.53	0.99	0.74	1.40
5. August	3.83	0.78	5.63	3.31	3.04	3.81	1.83
6. September	0.85	5.13	5.23	2.16	2.48	3.86	1.84
7. October	0.22	11.11	4.85	12.67	8.81	1.02	5.94
8. November	1.47	4.48	2.65	11.02	24.66	11.91	19.08
9. December	..	2.60	2.87	0.11	2.23	2.16	2.26
10. January	0.18	..	0.90	0.11	0.17	1.43	0.04
11. February	0.34	..	0.22	..	..	..	..
12. March	1.74	..	0.42	..	0.13	..	0.06
Total ..	12.73	33.72	29.99	38.31	44.96	28.47	34.87

Months.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	Average for 13 years, 1877-78 to 1889-90.
	9	10	11	12.	13	14	15	16
1. April	IN. 0.26	IN. 0.23	IN. ..	IN. 0.07	IN. ..	IN. 0.31	IN. 0.49	IN. 0.22
2. May	0.09	0.11	0.61	3.23	0.54	3.13	0.45	1.76
3. June	2.43	1.50	1.71	1.77	1.92	1.01	2.07	1.66
4. July	2.23	0.86	2.37	3.72	2.04	2.54	3.35	2.28
5. August	2.40	2.54	0.79	3.66	2.81	2.23	3.04	2.77
6. September	2.11	3.32	3.14	3.64	4.31	2.06	3.98	3.31
7. October	20.69	12.93	3.54	14.31	17.61	6.75	9.15	9.95
8. November	6.05	15.61	12.57	4.81	18.65	9.28	1.89	10.54
9. December	2.72	4.78	7.25	1.64	3.98	1.70	4.51	3.00
10. January	0.81	0.01	0.03	..	0.41	0.03	0.02	0.30
11. February	..	0.10	..	..	..	..	..	0.08
12. March	0.08	0.44	0.34	0.03	..	0.12	0.24	0.15
Total ..	39.87	42.43	32.35	36.25	47.27	29.19	29.24	35.92

4. *Prices.*—The following table compares the prices of the 4 principal food-grains (yearly district averages) that prevailed in the famine year and during the 10 years ending 1890-91. Not reckoning some fluctuations, the prices show a gradual rise from the year 1881-82, and during the two years 1889-90 and 1890-91 they ranged higher than in any previous year, omitting the famine year :—

Names of food-grains.	Famine years, 1876-78.		1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.
	1876-77.	1877-78.										
1	2	3	4	5	6	7	8	9	10	11	12	13
Second-sort rice	11.5	7.1	17.1	16.9	14.6	14.7	15.2	15.1	15.51	15.00	14.06	13.61
Cholam	18.6	8.9	29.9	31.2	24.2	23.9	24.6	25.83	26.02	23.40	23.05	23.90
Ragi	19.9	9.6	32.8	34.8	28.0	27.9	28.9	29.3	30.74	27.82	26.65	24.13
Cumbu	17.4	8.4	27.8	28.2	23.6	23.6	23.5	24.0	26.41	21.86	21.53	20.41

5. *Communications.*—The district is now well served with roads which connect all important places, and added to this there are the Buckingham canal to the east placing it within easy and convenient reach of the northern districts, the South Indian Railway in the south connecting the district with the Madras Railway, and

the Southern Mahratta Railway to the extreme north-west connecting the district with Bellary, Kurnool and Kistna districts.

6. *Liability to Famine.*—The district is from its natural position frequently liable to famine. In the first report written by me on this subject (letter in Board's Proceedings, No. 413, dated 29th December 1890), I made the following note on a rainfall statement :—

"For the purposes of rainfall, crops, and prices, the district may be divided roughly into north and south of the 15th degree of latitude. At and just below the 15th degree is the point where the general peninsular area of deficient rainfall impinges on the coast line, and this is, I presume, the reason why the Nellore district is so frequently visited with famine; there have been five famines in the present century. Fortunately, the Pennér delta, especially as recently developed, does something to redress the balance. I have added the Kávali taluk to the northern section on account of the rainfall figures which clearly show it to be a southward extension of the northerly coast area of medium rainfall."

The parts of the district most liable to distress from season are the taluks under the ghâts to the west. A survey report of 1863 quoted in District Manual contrasts the west and east, by saying that the former consists of "larger tracts of low scrub jungle, diversified with rocky hills and stony plains," and where the "villages are poor, topos rarely gladden the eye of the traveller, and pure water is almost an unknown luxury," while the coast taluks present a different aspect, and show "every evidence of prosperity, the villages being of fair size and generally containing several tiled houses, with handsome topos planted "in the neighbourhood and land available for cultivation eagerly taken up."

7. *STATE OF DISTRICT BETWEEN THE YEARS 1874 AND 1890—Years 1874 to 1877.*—The district suffered from floods in 1874-75 and from drought in 1875-76. The occurrences of 1876 and 1877 are too well known to require mention.

8. *Year 1878.*—In 1878-79 the district had a very good south-west monsoon followed by a north-east monsoon which was not so satisfactory, though it proved fairly good for dry crops. On the whole the district had in this year recovered its normal condition after the famine. The sanitary condition of the district showed great improvement, mortality being less than half of that of previous year.

9. *Year 1879.*—The next year 1879-80 with a rainfall of 38.31 inches was also favorable, though the north-east monsoon partially failed in December. Some tanks in the sub-division breached owing to heavy rains and large remissions had to be given. The sanitary condition of the district showed further improvement.

10. *Year 1880.*—The season of the next year 1880-81 was even better than in that previous, the rainfall in November being particularly heavy or 24.66 inches. The sanitary condition of the district was better than in the previous year, though mortality was a little higher.

11. *Year 1881.*—The next year 1881-82 was not a good year, though the north-west monsoon was satisfactory, the north-east monsoon proved a failure. In the sub-division alone the season was on the whole favorable, the dry crops being as usual better than wet. Cholera was totally absent during the year, but notwithstanding this mortality was higher than in the previous year, due to fevers of a bad type.

12. *Year 1882.*—In the year 1882-83, the south-west monsoon having proved indifferent, rains were much needed, and though the north-east monsoon began well, the heavy rains of November and floods in the Pennair caused serious injury to tanks and crops. The sanitary condition of the district was good and there was no cholera this year.

13. *Year 1883.*—The following year 1883-84 was a good one, both the monsoons having been favorable. The south-west monsoon was however not so good for wet as for dry crops. There was a heavy fall in October, but the subsequent rains were scanty and at distant intervals. The sanitary condition of the district was good though mortality was higher than in previous year, viz., 17,223 against 12,760 the increase being due to prevalence of severe types of cholera and fever.

14. *Year 1884.*—The state of season in 1884-85 was nearly the same as in the previous year except that owing to heavy rains in October some tanks breached

and caused damage to crops. The rainfall was on the whole good and the average yield of crops was for wet 12 annas and for dry 10 annas. Public health was generally good and no epidemics prevailed, though cholera threatened at one time. Mortality was slightly higher than in the previous year.

15. Year 1885.—The rainfall in 1885-86 was slightly below the average, but the season was on the whole favorable, except in the north of district especially Kandukúr, and the crops yielded fairly. The sanitary condition of the district was not however satisfactory and the condition of cattle was indifferent.

16. Year 1886.—In 1886-87 the rainfall was over the average, except in Gúdúr where it was far less than elsewhere. The south-west monsoon brought more rain than usual, but the north-east monsoon was unfavorable owing to the scantiness of rains subsequent to a severe storm in November 1886. Nevertheless both wet and dry crops, to which the season proved more favorable than in the previous year, thrived well, the average yield being in wet 16 annas for 47 per cent. and 8 annas for 38 per cent., and in dry average or middling for 80 per cent. The health of people was on the whole good, mortality being only about $\frac{2}{3}$ of what it was in the previous year. The condition of cattle also showed improvement.

17. Year 1887.—The rainfall in 1887-88 was much heavier than in previous years and the season was very favorable. The extent cultivated was 7,000 acres above that of the previous year, and the crops were good, the yield being 12 annas for wet and 10 annas for dry.

18. Year 1888.—The year 1888-89 was a bad one, the rainfall being below the average, viz., 29.19 inches. The condition of both wet and dry crops was indifferent and the extent cultivated was 20,000 acres less than in the previous year. The average outturn of crops was 8 annas for dry and 10 annas for wet. The north east monsoon rains were insufficient and the supply through the ancient channels in the latter part of the year was deficient. Owing to unfavorable season, the prices also ranged high during the year.

19. Year 1889.—The cultivating season in 1889-90 was as bad as the previous one, the rainfall being only 29.28 inches. The south-west monsoon was slightly better than in previous year, and the ryots in hopes of a good north-east monsoon cultivated large extents under wet, but met with disappointment ultimately, the monsoon having proved a complete failure. The average outturn of crops was 7 annas for dry and 9 annas for wet. Large remissions were given and the prices of rice and ragi ruled slightly dearer than in previous year while the other grains were cheaper.

20. STATE OF DISTRICT IN 1890-91 OR APRIL 1890 TO MARCH 1891.—*Rainfall under two monsoons.*—The registered rainfall in 1890-91 was 25.81 inches. Consequent on deficient rainfall, more especially in the southern taluks, the season was much worse than in the two preceding years, as will be seen from the following rainfall statement comparing the quantities registered in 1890-91, with the averages of the 10 previous years for all the 16 registering stations. It is noticeable that in the northern taluks the total fall registered was not far below the 10 year average, except in Pákala where average was exceeded; while in the southern and western taluks, the fall was a little more than half the average in some and less than half in others, Nellore being particularly bad. Monapolliem in Gúdúr taluk was nearly up to the average:—

Stations.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	10-Year average ending 1889-90 for 10 years
1. Darji	IN.	1.00	1.45	2.75	0.40	1.85	3.10	11.55	6.15	7.37	0.35	IN.	IN.	IN.	IN.	IN.	IN.	IN.
2. Kanigiri	IN.	0.30	0.50	0.70	0.60	1.90	3.35	8.05	3.35	3.90	1.80	0.30	0.70	0.42	13.99	25.34	27.31	27.31
3. Udayagiri	IN.	0.95	0.95	2.45	2.05	1.05	2.28	9.08	4.55	4.30	2.20	0.30	3.50	0.25	12.85	20.90	26.15	26.15
4. Atmakur	IN.	0.30	0.30	2.00	0.20	1.40	5.70	11.05	4.30	4.30	1.70	0.30	1.00	0.25	12.85	21.88	24.01	24.01
5. Ongole	IN.	0.30	0.30	2.00	0.20	1.40	5.70	11.05	4.30	4.30	1.70	0.30	1.00	0.25	12.85	21.88	24.01	24.01
6. Kandukúr	IN.	0.30	0.30	2.00	0.20	1.40	5.70	11.05	4.30	4.30	1.70	0.30	1.00	0.25	12.85	21.88	24.01	24.01
7. Pákala	IN.	0.30	0.30	2.00	0.20	1.40	5.70	11.05	4.30	4.30	1.70	0.30	1.00	0.25	12.85	21.88	24.01	24.01
8. Kávali	IN.	0.30	0.30	2.00	0.20	1.40	5.70	11.05	4.30	4.30	1.70	0.30	1.00	0.25	12.85	21.88	24.01	24.01
9. Ichapalle	IN.	0.30	0.30	2.00	0.20	1.40	5.70	11.05	4.30	4.30	1.70	0.30	1.00	0.25	12.85	21.88	24.01	24.01
10. Nellore	IN.	0.30	0.30	2.00	0.20	1.40	5.70	11.05	4.30	4.30	1.70	0.30	1.00	0.25	12.85	21.88	24.01	24.01
11. Kinnipattam	IN.	0.30	0.30	2.00	0.20	1.40	5.70	11.05	4.30	4.30	1.70	0.30	1.00	0.25	12.85	21.88	24.01	24.01
12. Gúdúr	IN.	0.30	0.30	2.00	0.20	1.40	5.70	11.05	4.30	4.30	1.70	0.30	1.00	0.25	12.85	21.88	24.01	24.01
13. Rápur	IN.	0.30	0.30	2.00	0.20	1.40	5.70	11.05	4.30	4.30	1.70	0.30	1.00	0.25	12.85	21.88	24.01	24.01
14. Venkatagiri	IN.	0.30	0.30	2.00	0.20	1.40	5.70	11.05	4.30	4.30	1.70	0.30	1.00	0.25	12.85	21.88	24.01	24.01
15. Monapolliem	IN.	0.30	0.30	2.00	0.20	1.40	5.70	11.05	4.30	4.30	1.70	0.30	1.00	0.25	12.85	21.88	24.01	24.01
16. Tada	IN.	0.30	0.30	2.00	0.20	1.40	5.70	11.05	4.30	4.30	1.70	0.30	1.00	0.25	12.85	21.88	24.01	24.01
Total ..	IN.	3.12	4.40	45.99	30.52	32.27	60.02	176.32	61.35	104.95	34.73	17.32	17.07	1.32	236.64	412.96	583.53	583.53
Average ..	IN.	0.19	0.28	2.87	1.91	2.02	3.75	11.02	3.83	6.66	2.17	1.08	1.07	0.08	14.79	25.81	35.47	35.47

21. *Sowings under two monsoons.*—Taking the indications of the south-west monsoon as their guide, the ryots cultivated large extents of wet and also took on darkhast considerable extents of fresh land. The abstract statement below compares the sowings in 1890-91 with the averages of the five previous years. It will be seen that the total dry extent sown exceeded that average in all taluks, while under wet there was a deficiency in all taluks except Nellore and Udayagiri. There was an excess of over 4,000 acres in Nellore taluk, due to the ryots having sown more than usual under the Nellore and Sangam anicuts. Taking the district totals under dry and wet, the actuals for former exceed the average by 7.78 per cent. while for the latter there is a decrease of 2.8 per cent :—

Taluk.	DRY SOWINGS.		WET SOWINGS.	
	April to March.		April to March.	
	5-year average.	Actuals for 1890-91.	5-year average.	Actuals for 1890-91.
1	2	3	4	5
Nellore	ACS. 21,563	ACS. 23,564	ACS. 100,242	ACS. 104,360
Gúdur	27,974	31,249	50,328	48,963
Rápúr	51,070	60,368	6,870	4,889
Atmakúr	101,157	111,988	22,436	19,842
Kávali	53,220	58,901	21,797	21,519
Udayagiri	63,188	69,798	2,536	2,577
Ongole	239,835	250,829	2,864	2,362
Kandlakúr	156,214	162,570	14,937	14,263
Kanigiri	82,831	93,012	934	794
Total	800,052	862,309	225,911	219,599

22. *Outturn under two monsoons.*—The north-east monsoon at end of 1890 was a failure and the crops of the year were indifferent in taluks and divisions north of Pennair, while in the southern and western taluks they were much worse except in tracts commanded by the anicut systems. The average outturn was about 9 annas for dry and 10 annas for wet. The following statement compares the outturn of all crops together including withered for each taluk and for the whole district, under a scale progressing by 4 annas, for two years in 1889-90 and 1890-91. The extent sown in 1890-91 was greater than in 1889-90 by 2.7 per cent., the increases occurring in Ongole, Kanigiri, Atmakúr and Kávali. It will be seen that of the total extent sown in the year under notice, taking the standing and harvested crops together, 826,032 acres or about 69.2 per cent. gave an outturn of 8 annas and above against 845,054 or 72.7 per cent. in the previous year; and 339,521 acres or 30.8 per cent. gave an outturn of 4 annas against 317,786 or 27.3 per cent. in 1889-90. The extent that gave a crop of 8 annas and above in 1890-91 was less than in previous year by 2.3 per cent., while the extent that yielded 4 annas was greater than in 1889-90 by 6.4 per cent., the increase under the second head appearing in Nellore, Rápúr, Kávali, Gúdur and Atmakúr, particularly the last two taluks :—

Taluk.	Extent.	Harvested.												Total.	
		Sown.		20 annas.		16 annas.		12 annas.		8 annas.		4 annas.			
		1889-90.	1890-91.	1889-90.	1890-91.	1889-90.	1890-91.	1889-90.	1890-91.	1889-90.	1890-91.	1889-90.	1890-91.		
		2	3	4	5	6	7	8	9	10	11	12	13		14	15
1															

23. *Prices throughout.*—The statement below gives the monthly prices in seers of 80 tolas per rupee for each Government taluk and division and for the four Zemin-dari divisions in 1890-91. Except in the northern taluks and divisions when prices generally became cheaper than at the beginning of the year, they showed a tendency to rise and were in December and March dearer than in the previous April. They were, however, still cheaper than the group scarcity rates prescribed in Board's Proceedings, No. 984, dated 17th July 1880, and much cheaper than the district scarcity rates given in same Proceedings. The rise in the price of rice was greater than in those of other food-grains, being marked in Nellore taluk, where it was a little above the group scarcity rate in November and December and nearly touched it in March:—

Taluk.	Names of food-grains.	April 1890.	May 1890.	June 1890.	July 1890.	August 1890.	September 1890.	October 1890.	November 1890.	December 1890.	January 1891.	February 1891.	March 1891.
1. Parsi ..	Rice, 2nd-sort ..	11-28	11-23	11-23	11-28	11-28	11-28	11-75	11-75	11-28	11-28	11-28	11-31
	Cholum ..	21-72	21-72	21-72	21-72	21-72	21-72	21-72	21-72	21-72	21-72	21-72	21-72
	Ragi ..	22-44	22-44	22-44	22-44	22-44	22-44	22-44	22-44	22-44	22-44	22-44	22-44
	Cumbu ..	19-68	19-68	19-68	19-68	19-68	19-68	19-68	19-68	19-68	19-68	19-68	19-68
2. Podili ..	Rice, 2nd-sort ..	14-10	13-45	13-16	12-77	12-22	12-22	12-22	12-22	12-22	12-22	12-22	12-22
	Cholum ..	21-72	21-72	21-72	21-72	21-72	21-72	21-72	21-72	21-72	21-72	21-72	21-72
	Ragi ..	23-80	23-80	23-80	23-80	23-80	23-80	23-80	23-80	23-80	23-80	23-80	23-80
	Cumbu ..	19-68	19-68	19-68	19-68	19-68	19-68	19-68	19-68	19-68	19-68	19-68	19-68
3. Kanigiri ..	Rice, 2nd-sort ..	12-50	12-22	11-91	11-28	11-61	11-63	11-65	11-28	11-28	11-28	11-28	11-65
	Cholum ..	23-53	23-53	23-53	23-53	23-53	23-53	23-53	23-53	23-53	23-53	23-53	23-53
	Ragi ..	26-14	25-94	26-14	25-94	26-14	26-14	26-14	26-14	26-14	26-14	26-14	26-14
	Cumbu ..	19-50	18-97	18-97	18-97	18-97	18-97	18-97	18-97	18-97	18-97	18-97	18-97
4. Udayagiri ..	Rice, 2nd-sort ..	25-34	24-88	25-34	25-34	25-34	25-34	25-34	25-34	25-34	25-34	25-34	25-34
	Cholum ..	27-79	27-20	27-20	27-20	27-20	27-20	27-20	27-20	27-20	27-20	27-20	27-20
	Ragi ..	22-96	22-96	22-96	22-96	22-96	22-96	22-96	22-96	22-96	22-96	22-96	22-96
	Cumbu ..	18-00	18-00	18-00	18-00	18-00	18-00	18-00	18-00	18-00	18-00	18-00	18-00
5. Addanki ..	Rice, 2nd-sort ..	18-15	18-15	18-15	18-15	18-15	18-15	18-15	18-15	18-15	18-15	18-15	18-15
	Cholum ..	22-22	22-22	22-22	22-22	22-22	22-22	22-22	22-22	22-22	22-22	22-22	22-22
	Ragi ..	22-50	22-50	22-50	22-50	22-50	22-50	22-50	22-50	22-50	22-50	22-50	22-50
	Cumbu ..	19-18	18-15	18-15	18-15	18-15	18-15	18-15	18-15	18-15	18-15	18-15	18-15
6. Ongole ..	Rice, 2nd-sort ..	14-10	14-10	14-10	14-10	14-10	14-10	14-10	14-10	14-10	14-10	14-10	14-10
	Cholum ..	23-53	23-53	23-53	23-53	23-53	23-53	23-53	23-53	23-53	23-53	23-53	23-53
7. Kandukur ..	Rice, 2nd-sort ..	14-10	14-10	14-10	14-10	14-10	14-10	14-10	14-10	14-10	14-10	14-10	14-10
	Cholum ..	23-53	23-53	23-53	23-53	23-53	23-53	23-53	23-53	23-53	23-53	23-53	23-53
8. Kaval ..	Rice, 2nd-sort ..	14-10	14-10	14-10	14-10	14-10	14-10	14-10	14-10	14-10	14-10	14-10	14-10
	Cholum ..	23-53	23-53	23-53	23-53	23-53	23-53	23-53	23-53	23-53	23-53	23-53	23-53
	Ragi ..	25-50	25-50	25-50	25-50	25-50	25-50	25-50	25-50	25-50	25-50	25-50	25-50
	Cumbu ..	14-84	14-84	14-84	14-84	14-84	14-84	14-84	14-84	14-84	14-84	14-84	14-84
9. Allar ..	Rice, 2nd-sort ..	25-92	25-92	25-92	25-92	25-92	25-92	25-92	25-92	25-92	25-92	25-92	25-92
	Cholum ..	14-57	14-57	14-57	14-57	14-57	14-57	14-57	14-57	14-57	14-57	14-57	14-57
	Ragi ..	22-66	22-66	22-66	22-66	22-66	22-66	22-66	22-66	22-66	22-66	22-66	22-66
	Cumbu ..	20-88	20-88	20-88	20-88	20-88	20-88	20-88	20-88	20-88	20-88	20-88	20-88
10. Nellore ..	Rice, 2nd-sort ..	24-44	24-44	24-44	24-44	24-44	24-44	24-44	24-44	24-44	24-44	24-44	24-44
	Cholum ..	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78
	Ragi ..	23-04	23-04	23-04	23-04	23-04	23-04	23-04	23-04	23-04	23-04	23-04	23-04
	Cumbu ..	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78
11. Kota ..	Rice, 2nd-sort ..	23-52	23-52	23-52	23-52	23-52	23-52	23-52	23-52	23-52	23-52	23-52	23-52
	Cholum ..	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78
	Ragi ..	23-52	23-52	23-52	23-52	23-52	23-52	23-52	23-52	23-52	23-52	23-52	23-52
	Cumbu ..	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78
12. Polur ..	Rice, 2nd-sort ..	23-52	23-52	23-52	23-52	23-52	23-52	23-52	23-52	23-52	23-52	23-52	23-52
	Cholum ..	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78
	Ragi ..	23-52	23-52	23-52	23-52	23-52	23-52	23-52	23-52	23-52	23-52	23-52	23-52
	Cumbu ..	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78	13-78

Taluk.	Names of food-grains.	April 1890.	May 1890.	June 1890.	July 1890.	August 1890.	September 1890.	October 1890.	November 1890.	December 1890.	January 1891.	February 1891.	March 1891.
13. Atmakūr.	Rice, 2nd-sort Cholum .. Ragi .. Cumbu .. Rice, 2nd-sort Cholum .. Ragi .. Cumbu .. Rice, 2nd-sort Cholum .. Ragi .. Cumbu ..	13-16 27-06 27-20 22-14 14-47 25-20 27-20 23-10 14-84	11-82 26-89 27-20 24-37 13-16 25-20 27-20 23-10 14-84	11-30 26-87 27-20 24-36 13-15 25-20 27-20 23-10 14-84	11-63 26-87 27-20 24-35 13-16 25-20 27-20 23-10 14-84	11-80 26-87 27-20 24-31 13-16 25-20 27-20 23-10 14-84	11-80 26-89 27-20 24-31 13-16 25-20 27-20 23-10 14-84	11-84 26-89 27-20 24-37 13-16 25-20 27-20 23-10 14-84	11-28 23-76 22-96 11-28 21-60 25-60 22-27 11-54	10-71 22-98 23-29 21-81 11-28 19-61 20-62 19-20 11-13 19-82 20-78 16-45 10-97 20-80 20-47 18-09	10-73 20-68 23-30 20-51 11-28 18-00 20-62 16-50 11-13 20-20 20-39 17-39 10-60 19-05 22-32 17-62	10-71 20-63 22-83 .. 11-17 16-68 21-67 17-32 13-19 20-20 21-12 18-09 21-15 23-28 18-80	10-90 25-50 24-65 .. 11-28 18-39 22-10 16-50 20-20 21-12 18-09 21-15 23-28 18-80
14. Rápúr.	Rice, 2nd-sort Cholum .. Ragi .. Cumbu .. Rice, 2nd-sort Cholum .. Ragi .. Cumbu .. Rice, 2nd-sort Cholum .. Ragi .. Cumbu ..	13-16 27-06 27-20 22-14 14-47 25-20 27-20 23-10 14-84	11-82 26-89 27-20 24-37 13-16 25-20 27-20 23-10 14-84	11-30 26-87 27-20 24-36 13-15 25-20 27-20 23-10 14-84	11-63 26-87 27-20 24-35 13-16 25-20 27-20 23-10 14-84	11-80 26-87 27-20 24-31 13-16 25-20 27-20 23-10 14-84	11-80 26-89 27-20 24-31 13-16 25-20 27-20 23-10 14-84	11-84 26-89 27-20 24-37 13-16 25-20 27-20 23-10 14-84	11-28 23-76 22-96 11-28 21-60 25-60 22-27 11-54	10-71 22-98 23-29 21-81 11-28 19-61 20-62 19-20 11-13 19-82 20-78 16-45 10-97 20-80 20-47 18-09	10-73 20-68 23-30 20-51 11-28 18-00 20-62 16-50 11-13 20-20 20-39 17-39 10-60 19-05 22-32 17-62	10-71 20-63 22-83 .. 11-17 16-68 21-67 17-32 13-19 20-20 21-12 18-09 21-15 23-28 18-80	10-90 25-50 24-65 .. 11-28 18-39 22-10 16-50 20-20 21-12 18-09 21-15 23-28 18-80
15. Gúdur.	Rice, 2nd-sort Cholum .. Ragi .. Cumbu .. Rice, 2nd-sort Cholum .. Ragi .. Cumbu .. Rice, 2nd-sort Cholum .. Ragi .. Cumbu ..	13-16 27-06 27-20 22-14 14-47 25-20 27-20 23-10 14-84	11-82 26-89 27-20 24-37 13-16 25-20 27-20 23-10 14-84	11-30 26-87 27-20 24-36 13-15 25-20 27-20 23-10 14-84	11-63 26-87 27-20 24-35 13-16 25-20 27-20 23-10 14-84	11-80 26-87 27-20 24-31 13-16 25-20 27-20 23-10 14-84	11-80 26-89 27-20 24-31 13-16 25-20 27-20 23-10 14-84	11-84 26-89 27-20 24-37 13-16 25-20 27-20 23-10 14-84	11-28 23-76 22-96 11-28 21-60 25-60 22-27 11-54	10-71 22-98 23-29 21-81 11-28 19-61 20-62 19-20 11-13 19-82 20-78 16-45 10-97 20-80 20-47 18-09	10-73 20-68 23-30 20-51 11-28 18-00 20-62 16-50 11-13 20-20 20-39 17-39 10-60 19-05 22-32 17-62	10-71 20-63 22-83 .. 11-17 16-68 21-67 17-32 13-19 20-20 21-12 18-09 21-15 23-28 18-80	10-90 25-50 24-65 .. 11-28 18-39 22-10 16-50 20-20 21-12 18-09 21-15 23-28 18-80
16. Venkatagiri.	Rice, 2nd-sort Cholum .. Ragi .. Cumbu .. Rice, 2nd-sort Cholum .. Ragi .. Cumbu .. Rice, 2nd-sort Cholum .. Ragi .. Cumbu ..	13-16 27-06 27-20 22-14 14-47 25-20 27-20 23-10 14-84	11-82 26-89 27-20 24-37 13-16 25-20 27-20 23-10 14-84	11-30 26-87 27-20 24-36 13-15 25-20 27-20 23-10 14-84	11-63 26-87 27-20 24-35 13-16 25-20 27-20 23-10 14-84	11-80 26-87 27-20 24-31 13-16 25-20 27-20 23-10 14-84	11-80 26-89 27-20 24-31 13-16 25-20 27-20 23-10 14-84	11-84 26-89 27-20 24-37 13-16 25-20 27-20 23-10 14-84	11-28 23-76 22-96 11-28 21-60 25-60 22-27 11-54	10-71 22-98 23-29 21-81 11-28 19-61 20-62 19-20 11-13 19-82 20-78 16-45 10-97 20-80 20-47 18-09	10-73 20-68 23-30 20-51 11-28 18-00 20-62 16-50 11-13 20-20 20-39 17-39 10-60 19-05 22-32 17-62	10-71 20-63 22-83 .. 11-17 16-68 21-67 17-32 13-19 20-20 21-12 18-09 21-15 23-28 18-80	10-90 25-50 24-65 .. 11-28 18-39 22-10 16-50 20-20 21-12 18-09 21-15 23-28 18-80

24. *Occurrences and measures at end of 1890.*—Measures were inaugurated in September 1890 for watching the state of season and the fluctuations in prices, and from the last week of November I instituted daily reports on prices for the head-quarter station. In the beginning of the next month I decided to defer making a special report to Board pending the results of December rains, which are generally expected and often turn the scale about season. On the 8th December 1890 I caused figures for prices to be posted in a prescribed form for submission to Board if necessary. On the evening of the 9th December 1890 there was a slight disturbance in the Nellore bazaar, in which the stall of a shopman was upset and some Rs. 5 worth of grain scattered on the ground. I then drew up a form for reporting on villages in detail. In Gúdur taluk where want of work was for the first time noticeable, a considerable number of minor works of water-supply were instituted in December, this being all that was then called for.

25. *Occurrences and measures in January 1891.*—In the second week of January the Divisional officers began their inspections of the affected villages and submitted reports on each village visited. The tracts in the district now considered "affected" by the failure of rainfall and supply to the tanks were "portions of Nellore and Gúdur taluks certainly; portions of Rápúr taluk and Venkatagiri and Pólúr divisions most probably; and portions of Atmakūr and Udayagiri taluks possibly." The extent and population of the affected taluks and divisions with the number of villages considered as affected in each excepting Udayagiri which was scarcely affected, are given below. In Nellore and Gúdur taluks the distressed villages consisted of the portions fed by rain-fed tanks and channels, while those commanded by the Nellore and Sangam anicut systems in the former together with those under the delta in the latter were practically safe, the crops there having been good. The affected villages in Atmakūr taluk were those situated in the portion of the taluk south of the Pennér, including a small portion to the north of it. The difficulty felt in most villages was the insufficiency of drinking-water owing to tanks and wells having dried up:—

Taluk or division.	Area.	Population.	Number of affected villages.
	SQ. MILES.	RS.	
1. Nellore	638	1,95,973	26
2. Gúdur	910	1,49,671	42
3. Rápúr	596	61,281	43
4. Venkatagiri	426	56,476	Whole division. Do.
5. Pólúr	355	56,868	
6. Atmakūr	638	1,01,184	
7. Kávali	648	82,975	

26. By the end of January the affected tracts were thoroughly inspected by the Divisional officers and by myself; Atmakūr and Udayagiri having been taken up by the Head Assistant Collector, part of Nellore by the Head-quarter Deputy Collector, Rápúr, Venkatagiri and Pólúr by the Náyudupet Deputy Collector, and Gúdur and part of Nellore by myself. There was some slight rainfall in the second fortnight of January which, it was evident from the Divisional officers' reports, was confined to the southern affected taluks, but was there almost general. These rains entirely changed prospects and much benefited the standing dry crops in Nellore, Gúdur and Rápúr taluks, and in Pólúr and Venkatagiri divisions. In Gúdur taluk some wet crops were also saved which would otherwise have perished. The rains were not sufficient to save the standing wet crops in other taluks.

27. *Occurrences and measures in February 1891.*—In the next month (February) also there were rains in all taluks and divisions which caused a further amelioration in the prospects of Rápúr, Atmakūr, Venkatagiri and Pólúr. The fall in Nellore and Gúdur was but slight and the effects of the rains were, therefore, imperceptible. No difficulty was felt by the laboring classes either in procuring grains or in finding work, but Board's permission was obtained to put in hand at once the minor irrigation works of the 1891-92 list and orders accordingly issued to begin repairs to a few works in Rápúr and south Atmakūr, where it was believed works were wanted.

28. *Occurrences and measures in March 1891.*—During the month of March there was no rain except in Rápúr, which had from $\frac{1}{4}$ to 2 inches in ten villages where rain was most required. The season prospects throughout the affected tracts showed improvement and ample employment was available to laborers on the fields. I addressed the Raja of Venkatagiri to start repairs to irrigation works in Pólúr and Venkatagiri divisions for April, May and June 1891.

29. *Failure in south of south-west monsoon of 1891—Localization of failure.*—The south-west monsoon of 1891 following a very partial north-east monsoon proved likewise a failure in the south and centre of the district and in Atmakúr taluk, and the effects of deficient rainfall began to be felt severely in those parts. The statement below compares the rainfall of the south-west monsoon (April to September inclusive) with the averages for 10 years for all stations. Columns 4 and 5 which give statistics for September month alone show the actuals to be above the average for seven stations; but the monsoon commenced later and the total quantity registered from April to September was below the averages for all stations, the deficiency being great for Nellore, Gúdúr, Rápúr and Atmakúr taluks, and for Pólúr and Venkatagiri divisions. The rains having been deficient and unseasonable, the crops were in consequence late. In August 1891 prices remained nearly as they stood in the beginning of the calendar year; but in September they advanced for all grain, the rise being large for dry grains and there was no fall in them subsequently. The merchants in anticipation of an unfavorable north-east monsoon then commenced to withhold their stocks in view to sale at enhanced rates. Rice passed the group scarcity rate in Atmakúr, Venkatagiri and Pólúr, while cholera was approaching it in Rápúr, cumbu in Venkatagiri, and ragi in Gúdúr, Rápúr and Pólúr. Though the failure of the monsoon affected all the southern and central taluks, Nellore, Gúdúr and Atmakúr alone continued to cause anxiety, while Rápúr, Venkatagiri and Pólúr were then recovering their normal condition. There was no cause for any anxiety in the north and north-west portions of the district (except Atmakúr) which were practically safe at this period:—

Registering stations.	April to September.		In September month.	
	10-year average.	Actuals, 1891-92.	10-year average.	Actuals, 1891-92.
1	2	3	4	5
1. Darsi	13.79	8.40	4.16	2.25
2. Kanigiri	10.71	8.50	3.12	2.90
3. Udayagiri	9.11	7.27	2.25	3.07
4. Atmakur	9.96	4.66	3.30	2.90
5. Ongole	15.30	8.45	4.54	4.10
6. Kandukur	12.21	10.45	3.88	5.15
7. Pakala	10.99	9.56	3.00	4.90
8. Kávali	12.75	9.50	3.74	4.80
9. Iskapalle	11.25	7.17	3.39	1.15
10. Nellore	9.94	7.95	2.88	3.75
11. Kistnapatam	10.12	6.14	2.05	2.82
12. Gudur	7.51	6.25	2.35	4.05
13. Rápúr	10.68	5.60	3.34	2.55
14. Venkatagiri	10.73	5.52	2.80	3.45
15. Monapalem	10.09	6.40	2.85	1.75
16. Tada	10.34	7.60	2.70	1.92
Total ..	176.48	122.41	50.36	51.51
District Average ..	10.97	7.65	3.15	3.22

30. *Measures taken.*—To relieve the distress in the affected parts Divisional officers were consulted in advance of demand and measures inaugurated for opening minor irrigation and water-supply works wherever absolutely necessary. Besides this, I submitted with this office letters, Nos. 1068 and 1588-Ver., dated 12th and 19th April 1891, a provisional programme of all classes of works for the four affected Government taluks and the two affected zemindari divisions, which in Board's Proceedings, No. 242, dated 24th April 1891, were considered to be ample for employing labour in

the affected tracts in the event of an emergency arising. The season in Gúdúr taluk having become particularly bad about the middle of July, and the Tahsildar having made a requisition for some urgent Public Works Department works with a view to provide labour for the distressed population, I consulted the Executive Engineer on the 22nd July 1891 as to the Public Works Department works to be started, and gave my opinion that the Kota Penaka tank (estimate 33,000) and some smaller works of estimates below 2,000 would require to be put in hand at once under section 38, Famine Code. The Executive Engineer about this time began inspecting the major works in Gúdúr taluk and reported to me that the estimate for Kota Penaka tank had not been passed but had been sent to the Superintending Engineer for urgent sanction and that those for two small works—Vákád and Kolanukuduru tanks—were ready. The situation in Gúdúr taluk not having shown any improvement by the beginning of August 1891, I requested the Engineer on 2nd August 1891 to start the Kota Penaka tank work and the Madamanur tank improvements at once in anticipation of sanction of estimates; the people in certain parts were then in urgent need of work. This was reported to Board in this office letter, No. 1783-Tour, dated 2nd August 1891. The Superintending Engineer objected to the initiation of large projects prior to the estimates being sanctioned, and the Board in its Proceedings, Mis. No. 4119, dated 7th August 1891, directed that all laborers, if any, employed on the Kota Penaka tank, should be transferred to smaller works available, the former being started departmentally under the task-work system and section 185, Famine Code, "if a continuance of drought renders it probable that the work can be carried to completion by famine labour." On the 10th August 1891, I withdrew my indent for Kota Penaka tank, and asked the engineer to note that the requisition for Madamanur tank remained in force—vide this office letter, No. 1805-Tour, dated 15th August 1891. In Proceedings, Mis. No. 4591, dated 25th August 1891, the Board approved the action being taken in this district, stating that the Madamanur tank work might be carried on on the contract system, but subject to introduction of the task system, should the numbers become considerable. On the 2nd September 1891, I gave orders for the opening of the following ordinary Public Works Department works as test works:—

- (1) Griddalur tank restoration in Rápúr.
- (2) Vási tank improvements in Atmakur taluk.
- (3) Vákád tank repairs in Kota division.

These were to be conducted under section 121, Famine Code, with a condition that all laborers should be taken and the contract form to be previously approved by me; the latter was, by mistake, not done. In addition to these the following works in connection with the Buckingham Canal afforded employment to all in need of work during the slack season:—

	Rs.
(1) The Irkam Island embankment	17,800
(2) Pulicat Chintamani diversion	42,600

The works last named were executed under the usual system and their existence was, as directed in Board's Proceedings, Mis. No. 3726, dated 17th July 1891, duly proclaimed in all villages of adjacent taluks and divisions. It is to be added that the Rajah of Venkatagiri carried out the usual season repairs to his irrigation works in Pólúr and Venkatagiri divisions and in the zemindari portion of Gúdúr taluk, and it is believed did so to much more than the usual extent.

31. *FAILURE IN NORTH OF NORTH-EAST MONSOON OF 1891.—Situation.*—The north-east monsoon commenced on the 11th October 1891 and continued steady for sometime though light, when a break of about a fortnight occasioned anxiety. The rainfall in October 1891 was, as below, for all stations compared with the 10-year averages for same month. Tada and Venkatagiri stations exceeded the average, and Rápúr, Gúdúr, Kandukur, Kávali and Pakala had over half the average, while the rest of the stations did badly, especially the North-west stations—Atmakúr, Udayagiri, Kanigiri and Darsi, and the East Coast stations—Nellore and Iskapalle. In this office letter, No. 1970, dated 6th November 1891, printed in Board's Proceedings, No. 736,

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dated 20th November 1891, I reported that much depended on the November rains which, "if fair and seasonable, might yet make up for past deficiency."

Stations.	10-year average.	Actuals, 1891.
Ongole	10.43	5.10
Kandukúr	8.67	5.92
Pakala	9.50	5.20
Kávali	11.47	7.75
Darsi	5.67	1.05
Kanigiri	6.43	2.70
Udayagiri	9.03	3.75
Atmakúr	10.05	2.90
Iskapalle	12.32	4.50
Nellore	11.23	3.00
Kistnapatam	10.65	5.42
Gúdúr	7.92	4.10
Monapalem	11.34	5.00
Tada	8.31	8.37
Venkatagiri	9.78	11.80
Rápúr	10.47	7.55
Total	153.27	84.11
Average	9.58	5.26

32. The situation in the district was, at the time of writing the above report, as follows. The district was doing fairly well, though the monsoon which re-commenced after the break referred to above, gave but light and scattered rains. In the third week of November there was $1\frac{1}{2}$ inches of rain throughout the district and the southern taluks quite recovered and the prospects therein and in Kávali were good. The rainfall was, however, generally deficient in the northern and north-western taluks where therefore much more rain was required. At this time also it was ascertained that the Nellore anicut had only one-half, Sangam anicut one-fourth, and Nellore tank one-tenth of their usual supply. The northern taluks, it is to be observed, had not had a succession of three bad seasons like the southern taluks had, the present very adverse season as it eventually turned out, being in their case the first of its kind. In the fourth week of November season prospects continued as above stated, but prices showed a tendency to rise. In the last week of November there was a sudden and extensive rise in prices consequent on the surplus stocks having been purchased for exportation by merchants from Bellary, &c. The monsoon had a further break, but commenced again on the 30th November 1891 and gave an average of about one inch of rain, which was general and beneficial, more especially to the northern and north-western taluks.

33. *Measures taken.*—I had already directed the Sub-Collector and the Tahsildars concerned to inspect certain localities and propose what measures of relief might be necessary. I also made arrangements for reporting to the Board in detail on the condition and prospects of the northern and north-western taluks. These were not hitherto treated as "affected" for the reasons reported in letter, dated 30th November 1891, recorded in Board's Proceedings, Mis. No. 7157, dated 10th December 1891.

34. In the middle of November 1891, the Government gave me three months' privilege leave on account of the state of my health, and I availed myself of this on 3rd December 1891, handing charge of the district on the same date to Mr. A. W. B. Higgins.

35. *Reports.*—In letter, No. 2609, dated 7th December 1891, printed in Board's Proceedings, No. 825, dated 23rd December 1891, the Sub-Collector, Mr. Mounsey, gave the following account of the condition and prospects of the Pamur taluk of the Kálahasti zemindari, situated in Udayagiri and Kanigiri taluks, consequent on the inspection ordered by me as stated above:—

"As far as I can make out, the unexpected ceasing of the monsoon combined with Komaties and others ceasing to sell just when rains became most unlikely, has

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accentuated a difficulty out of all proportion to what might be expected from the prices, from the stock of food-grains, and from the previous harvests. From my inspection of Kandukúr, Kanigiri and Chundi and from reports I find that the condition of the poorer classes, coolies, &c., is very much the same as in Pamur and arises from the same reasons. However, the general complaint is not poverty but inability to buy."

36. On the north-western taluks, the same officer observed: "I found much the same state of affairs as in Pamur but matters were and had been taken in hand by the zemindari officials and Taluk Board. . . . The Deputy Tahsildar's reports and their reports coincide with my own experience during inspection that the distress does not extend beyond the classes worst off. . . . Last year there was a good harvest and it is only since the expectation of no more rain has set in that merchants have ceased to sell and thereby to cause distress. Variga is the staple food of the poorer classes, and even now one inch of rain would make the prospects bright. Darsi generally is in a better condition than Podili, as I saw myself, they having had more general rain in November. The Deputy Tahsildar thinks that works need not be started for more than a month to come."

37. The Acting Collector in paragraph 17 of his first report, dated 8th December 1891, printed in Board's Proceedings, No. 824, dated 23rd December 1891, stated as follows:—"The southern taluks are now fairly safe, but in regard to the centre and north of the district it is impossible not to feel some anxiety, especially when the period for the close of the later rains is approaching. A good fall of 2 or 3 inches would still be sufficient to save the bulk of the standing crops. Owing to the utter inadequacy of the November rains the standing crops in parts of taluks had already showed signs of withering, and loss of crop over considerable areas will inevitably occur should the rain still hold off." He on the same date telegraphed to Board and Government that the prospects in the south had improved, but that the centre and north would suffer much if no heavy rains fell by the end of December, and that more works might be needed "throughout before long."

38. In recording the above, the Board observed that if the Collector found it necessary to start more works, the provisions of the Famine Code should be introduced.

39. *Further measures taken.*—The Acting Collector then furnished the Executive Engineer with a list of Public Works Department works included in the 12-month programme of relief works for 1892-93 with request to have estimates prepared and completed for them as early as possible.

40. On the 16th December 1891, the Acting Collector, after receipt of further reports from the Sub-Collector and Head Assistant Collector, applied, by telegram, for immediate sanction to begin the minor irrigation works of 1892-93, which sanction was accordingly granted in Board's Proceedings, Mis. No. 7399, dated 18th December 1891. This order was communicated to the Sub-Collector and Head Assistant Collector on the 21st December 1891, with instructions to give out such minor irrigation works on contract subject to a condition that allcomers should be taken. The Sub-Collector was permitted to direct the Sub-Magistrates to relieve cases of real distress from magisterial contingencies, and this was acted upon in Podili division. In addition to the institution of minor irrigation works, permission to cultivate beds of rain-fed tanks with dry crops (chiefly cholam) in the Sub-Collector's and Head Assistant Collector's divisions was, at the instance of the Sub-Collector granted, subject to payment on the extent cultivated of the highest dry rate of the village concerned without any claim to remission should the crop generally fail either by flood or drought. On the 19th December 1891, the Executive Engineer was advised that it was then too early to begin relief works and instructed to execute all works that might be taken up by him during the next six weeks in the portion of the district north of the Pennér under section 121, Famine Code.

41. The first application for grants of Rs. 10,000 in aid of each of the Ongole and Atmakúr Taluk Boards, whose reserves and balances were practically exhausted, for instituting minor works of water-supply and village sanitation in localities where no minor irrigation works could be started, was made in the Acting Collector's telegram,

dated 24th December 1891, with reference to paragraph 2 of G.O., No. 929, Revenue, dated 5th October 1891, printed in Board's Proceedings, No. 699, dated 30th October 1891. On a telegram thereon from the Board, the Acting Collector reported, by wire, dated 28th December, the then state of the Local Fund reserves and balances, and repeating his request for funds asked for general permission to start road and other works where most necessary. On the 28th December 1891, the Acting Collector sent up the following special season telegram to Government:—"Rain several villages. Atmakur taluk, 20th to 24th; 10 to 50 cents only now reported. Situation Head Assistant's division somewhat improved. Ongole and Kandukur remain much as before. Kanigiri, Darsi, Podili seem getting worse. Work much wanted both divisions. Am asking immediate grant 10,000 in aid of Ongole and Atmakur Boards, whose funds practically exhausted." On the same date he also asked the Board, by wire, for permission to start road and other works, where most necessary, at ordinary rates in anticipation of grants. On the 29th December detailed programme [Appendix I] of selected works to be done in the Sub-Collector's division during the next six months with their estimated cost was submitted with this office letter, No. 3754-Ver., disposed of in Board's Proceedings, No. 6, dated 4th January 1892.

42. *Rainfall by end of December.*—By the end of December the total rainfall for the district, for the north-east monsoon appeared, as in the following statement:—

Registering stations.	October to December.		Locality groups.
	Ten-year average.	Actuals, 1891-92.	
1	2	3	4
1. Darsi	12.64	2.15	N.W.
2. Kanigiri	14.80	3.60	
3. Udayagiri	22.27	5.05	
4. Atmakur	34.42	3.80	N.E.
5. Ongole	20.28	6.12	
6. Kandukur	20.60	6.17	
7. Pakala	18.95	5.25	E.C.
8. Kavalu	26.15	9.85	
9. Iskapalle	26.95	7.12	
10. Nellore	29.28	10.44	S.
11. Kistnapatam	21.90	11.84	
12. Gudur	21.65	8.90	
13. Rapur	28.04	11.10	
14. Venkatagiri	30.19	21.25	
15. Monapalem	25.76	14.33	
16. Tada	23.18	21.68	
Total	367.96	148.62	
District average	22.99	9.28	

43. *PREPARATIONS FOR MEETING HOT-WEATHER DROUGHT IN THE NORTH—A test work under Local Funds.*—In the beginning of January 1892, demand for work in Udayagiri taluk was great as evidenced by the influx of large numbers of laborers to the Udayagiri-Seetharampuram road which was then in progress as an ordinary Local Fund work. To gauge the extent of distress and the demand for labour in that part of the country, the above work was ordered to be executed temporarily as a test relief work, pending sanction of grants. It was commenced on amani on the 5th January and the work consisted of excavating metal and gravel. Having adopted the above measures, the Acting Collector proceeded on the 6th January 1892 on a tour of inspection through the affected taluks, with a view to organize further relief measures after personal consultation with Divisional officers and Tahsildars.

44. *Storage of hay.*—Owing to the depletion of the stock of fodder in the northern taluks, the District Forest-officer was directed to cut and stack hay in villages near the Veligondas in Udayagiri taluk for sale to ryots during the hot-weather. The ryots would not do the same, however, on their own account, notwithstanding issue of notices and much advice given. They appeared to be generally content to get enough

fodder for the day's use. The District Forest-officer cut and stacked 63½ tons of hay near Boggu Venkatapuram, of which 2½ tons were sold to the ryots for Rs. 22-8-0. The demand for fodder having diminished after the rains, the unsold hay was ordered to be sold for a reduced price.

45. *Programme of selected works, &c.*—On the 10th January 1892, the Acting Collector submitted, with his letter to Board, No. 15-Tour, a detailed programme of selected works of all kinds to be done during the next six months in Kavalu, Atmakur and Udayagiri taluks with their estimated cost [Appendix II], and reported in letter of same date (*vide* Board's Proceedings, No. 39, dated 18th January 1892) that "the season may now be considered to have been favorable in Polur, Venkatagiri and part of Gudur, fair in the rest of Gudur, Rapur and Nellore, unfavorable in Atmakur, Udayagiri, Kavalu, Kandukur, Kanigiri and the southern part of Ongole and bad in the northern part of Ongole (Addanki division), Darsi and Podili. Parts of Udayagiri and Kanigiri should, it is believed, come under the latter category, the crops there having failed entirely. It is still feared that there may be considerable loss of the later sown paddy crops under the Sangam and Nellore anicuts owing to the short supply of water in the river."

46. *Changes of kistbandi, &c.*—The land revenue assessment on ryotwari lands is usually payable in four equal monthly instalments in January, February, March and April in Ongole and Kanigiri taluks, and in February, March, April and May in the remaining taluks. On the 10th January 1892, the Sub-Collector, after inspecting the Addanki division, submitted report on the bad state of crops there with a view to partial or other remission being granted for dry crops. On the 11th January 1892, the Head Assistant Collector recommended a revised kistbandi of 6 annas for March, 6 annas for April and 4 annas for May for Atmakur and Udayagiri taluks. On the same date the Acting Collector supported the latter proposal in his letter to the Board of Revenue, No. 17-Tour.

47. The Acting Collector had, by this time, inspected portions of Atmakur and Udayagiri and reported in a telegram to Government, dated 11th January 1892, that the crops north of Nandavaram were in a poor state, that there was very great and urgent demand for work in Udayagiri taluk, and that many coolies from Addanki had gone to find work on the harvest in Kistna delta.

48. *Formal introduction of Famine Code.*—Government Order, No. 37, dated 12th January 1892, declaring the district as "affected" for purposes of the Famine Code reached the Acting Collector about this time in his Camp at Udayagiri, and he had already arranged to proceed further northwards to Kanigiri and Podili to open road relief works then under the task-work system. The Acting Collector on 13th January 1892 supplied the Executive Engineer with copies of programmes of selected works referred to in paragraphs 41 and 45 above with request to execute them under the task-work system on receipt of orders to do so in his department. On the same date the Acting Collector submitted to Board with his letter, No. 23-Tour (*vide* Board's Proceedings, No. 72, dated 30th January 1892), a rough estimate of the anticipated expenditure on works, gratuitous relief, and extra establishments, for a period of five months. In this he calculated the expenditure as Rs. 3,34,000 on works, Rs. 53,000 on gratuitous relief and Rs. 19,000 on extra establishments.

49. *Miscellaneous.*—On the 14th January 1892, the Acting Collector, in his No. 28-Tour, proposed to the Board a revised kistbandi of 6 annas for February, 6 annas for March and 4 annas for April for Kanigiri, Addanki and certain badly affected villages of Ongole taluk.

50. The test relief work on the Udayagiri-Seetharampuram road continued to be in progress under the amani system, and the numbers on the 16th January 1892 rose to about 4,000. The daily wages paid were for man 2 annas, woman 1½ annas, child 1 anna. The coolies came from about 34 villages within a radius of 10 miles from the site of work and the demand for work became increasingly urgent; but the sanctioned allotment of Rs. 1,000 given for the work having been exhausted, the work was closed on the 17th January after completing all payments and the fact reported

to Board in telegram, dated 18th January, with remark that the Acting Collector was ready to begin with 75 per cent. tasks and correct organization under the Famine Code as soon as funds were sanctioned.

51. By this time there were in progress a considerable number of water-supply works instituted by the Sub-Collector and Head Assistant Collector in selected villages of their taluks where scarcity of water was most felt; also several minor irrigation work repairs.

52. On the 21st January, the Acting Collector submitted his report, No. 43-Tour, under section 35, Famine Code, on the state of season in the district.

53. The Sub-Collector had for sometime been strongly urging a considerable extension of minor irrigation works in the three taluks of his division. The Acting Collector therefore submitted to Board, on the 24th January 1892, lists of such works to be done in those taluks. The estimated cost of these works, as reported by the Sub-Collector, amounted to Rs. 84,041 as shown below :—

Taluk.	Number.	Amount.
		Rs.
Ongole	22	37,081
Kandukur	25	42,030
Kanigiri	4	4,980
Total	51	84,041

On the 26th January 1892, the Board in its Proceedings, No. 63, sanctioned the revised kistbandi proposed by the Acting Collector for Atmakur and Udayagiri taluks. On the 27th and 28th January 1892, the Sub-Collector furnished reports on the state of crops in Kandukur taluk and recommended a revised kistbandi of 6 annas for March, 6 annas for April and 4 annas for May for that taluk also.

54. The Government at this period sanctioned a grant of one lakh of rupees, as noted below, for purposes of Local Fund road and miscellaneous works :—

G.O., No. 80, dated 22nd January 1892	Rs.
" " 124 " 1st February "	20,000
" " 152 " 8th " "	30,000
" " 152 " 8th " "	50,000
Total	1,00,000

The above appeared to be the limit up to which expenditure debitable to Local Funds for purposes of relief works could be incurred by the Collector, subject to eventual adjustment of the abnormal value of work done by deduction from Local Fund Public Works expenditure and by debit to Provincial revenues. It was therefore considered that specific allotment of funds beyond the above was necessary, but G.O., No. 407, Financial, dated 2nd April 1892, ruled otherwise and authorized the Collector to advance funds for sanctioned works and for kitchens, the opening of which had been approved by the Famine Commissioner.

55. *Stocks at this time.*—The prices of all food-grains ranged very high from December onwards, and this, added to the withholding of stocks by the merchants in view to sale at profitable rates on the distress deepening after a time, aggravated the difficulties of the poorer classes who were already hard-pitched for want of employment. Imports from Bangalore, Kistna and Cuddapah continued but not to such an extent as to keep prices down. Trade operations throughout the north of the district were therefore not brisk, particularly in Podili and Darsi divisions where the poorer classes experienced the greatest difficulty in obtaining food supplies. After a time imports became extensive and the complaint of want of stocks gradually disappeared, though prices on the other hand continued to range high. I give below a rough account of stocks in affected taluks as ascertained by the Sub-Collector and Head Assistant Collector at end of January 1892. The estimates were more or less guess work, and are in reality greatly under-stated :—

	Putties.
Ongole taluk	1,000 (paddy) and 1,600 (dry grains).
Kandukur taluk	2,000 (all grains).
Kanigiri taluk	2,000 (do.)
Darsi division	800 (do.)
Podili division	500 (dry grains) and 20 (rice).
Udayagiri	800 (all grains.)
Atmakur	40 (paddy) and 250 (dry grains).
Kávali	3,600 (do.)

56. *New officers.*—The Acting Collector's report under section 35, Famine Code, was disposed of in Board's Proceedings, No. 72, dated 30th January 1892, which recommended the early entertainment of one Special Assistant Collector and two Special Deputy Collectors with five Deputy Tahsildars. The Board had already proposed the appointment of a public works officer to assist the Collector in the management of Civil Agency works.

57. *First regular tasked work under Code.*—By the end of January considerable portions of Udayagiri and Kanigiri taluks and Podili division were inspected, and on the 30th January the first major road relief work under section 185 was started near Chinna Arikatla in Podili division, the Acting Collector Mr. Higgins, the Sub-Collector Mr. Mounsey, the District Board Engineer Mr. Scott and the Sub-Divisional officer Mr. Arbuthnot, having been all present to organize the gangs and institute tasks. On the same date the Acting Collector informed the Executive Engineer that the Sub-Collector's and Head Assistant Collector's divisions alone were then held to be affected and that regular relief works were required there only and not in the remaining divisions, and requested him to report what progress had been made in preparing estimates for the selected Public Works Department works included in the programmes referred to in paragraphs 41, 45 and 48 above.

58. At this time in Podili division the lower classes had been considered to be losing strength from insufficiency of food and the professional beggars and the wandering poor to be absolutely helpless owing to private charity having become contracted. To relieve a selected number of the above people in Podili and surrounding hamlets, the Deputy Tahsildar commenced the distribution of money doles on a small scale in the second fortnight of December and continued it up to the date of the Acting Collector's arrival thereon on the 26th January. This was held to be irregular in the absence of orders from superior authorities, and the Acting Collector therefore ordered the immediate discontinuance of gratuitous relief pending the opening of the Chinna Arikatla relief work, and issued a circular to the principal inhabitants of Podili village requesting them to aid the distressed till such time as Government works might be started.

59. *PERIOD OF TASKED RELIEF WORKS.*—*Tracts affected at beginning of February 1892.*—The affected area of this date comprising all the taluks and divisions north of the Pennair, less the portion of Nellore taluk situated therein, may be divided into (a) the portion seriously affected and (b) the portion generally affected. The former included the extreme north of the district for a width of some 30 miles, viz., the Addanki, Darsi and Podili and in the north-west some two-thirds of the Kanigiri and Udayagiri taluks and a small portion of Kávali taluk; while the latter comprised the rest of the Udayagiri and Kávali taluks and the whole of Atmakur, Kandukur and the principal division of Ongole taluk—*vide* map submitted with this office letter No. 94-Tour, dated 3rd February 1892.

60. The following statement shows the extent and population of the affected

Ongole	1½ per cent. each.	taluks with the average numbers estimated to require relief for five months.
Kandukur		The total affected area was about 5,080
Kanigiri	2 per cent. each.	square miles with a population of
Darsi		942,600, of which 1.63 per cent. was
Podili, Nearly	5 per cent.	estimated to require work daily. The
Udayagiri	2 per cent.	proportion of the population estimated to
Atmakur	1 per cent.	require employment was different for
Kávali.	½ per cent.	different taluks as shown in margin.

Podili being the worst affected tract, provision of employment had been made for 5 per cent., but in Kávali, the least affected, for $\frac{1}{2}$ per cent. only of the population :—

Taluk or division.	Area in square miles.	Population as per the 1891 Census.	Average number of persons estimated to require work daily.
Ongole	797	225,180	3,000
Kandukúr	787	148,623	2,000
Kanigiri	1,014	131,263	2,400
Podili	564	68,390	3,000
Darsi	616	84,810	1,600
Atmakúr	638	101,184	1,000
Udayagiri	880	100,208	2,000
Kávali	648	82,975	500
Total ..	6,814	79,42,612	15,400

61. In his fortnightly narrative, dated 4th February 1892, the Acting Collector reported that after personal inspection he found the "general agricultural situation in the seriously-affected tract to be a more or less complete loss of dry crops growing on dry lands with a moderate yield (4 or 8 annas) of sajja as first crop and of ragi now growing as second crop on garden lands under wells;" and that the condition of this tract would have been much worse but for the existence of wells therein. Raggi was being largely grown under wells, and the extent under that crop was proportionate to the supply in them, so that a withered crop of ragi was rarely to be found. The yield was estimated at As. 8. The seriously-affected area hardly gave any paddy crop. In the generally-affected area on the other hand cholam and ragi crop were standing (estimated outturn As. 4), and the garden lands thrived better than in the former, while under tanks some paddy crop existed.

62. *Occurrences in February.*—A second major road relief work was opened on 4th February at Vemulapád in Kanigiri taluk two miles from the foot of a ghat leading towards the Kurnool district. The Acting Collector, Sub-Collector and District Board Engineer were all present. The Famine Commissioner who arrived in the district on the previous day personally supervised the arrangements.

63. The gangs on the two works hitherto mentioned were in the beginning formed of 20 each, the tasks allotted being 75 per cent. of the normal as calculated by the District Board Engineer. The works were placed each under the executive supervision of a Sub-Overseer controlled by the Sub-Divisional officer and the District Board Engineer, and paying officers on Rs. 40 were appointed to each work. In the beginning the paying officers were allowed an imprest of Rs. 600 each with instructions to recoup it on submission of nominal rolls. The task of each gang was clearly marked out on the ground and for doing this task the coolies were paid the third-class wages prescribed in section 185, based on the value of ragi which was considered the staple food grain in both Podili and Kanigiri. On the 4th February the numbers on the two works were as under :—

Chinna Arikatla works	...	...	...	...	...	...	...	1,383
Vemulapád works	...	...	...	...	...	...	...	868

The Chinna Arikatla works, named after the name of the village at which started, served Podili proper, while the Vemulapád works, named similarly, served Kanigiri and also portion of West Podili. The work on both consisted of metal and gravel collection on the Ongole-Cumbum and Uhapalem-Vemulapád pass roads; also jungle-clearing and road-picking.

64. On the 4th February, the Executive Engineer having apparently considered the institution of works under the task-work system complicated and difficult, informed the Acting Collector that he had made arrangements for starting the work on Kaluvaya, Karedu and Kalavakur tanks on the piece-work system under section 119,

Famine Code, and inquired what rates were to be paid to the coolies and how they were to be calculated. In reply to the Board's Proceedings, No. 41, dated 19th January 1892, paragraph 5. above he was on 11th February 1892 G.O., No. 99, dated 26th January 1892, supplied with extracts from the marginally-noted papers as to the method of execution of Public Works Department relief works, and requested to execute them under the task-work and not piece-work system, to prepare a table of tasks for the purpose and to confer with the Acting Collector as to the order in which the proposed works should be taken up. The Executive Engineer conferred, but task-table was not drawn up.

65. On the 5th February the Assistant Collector Mr. W. E. Hall (now deceased) arrived in the district at Vemulapád and the above mentioned two works were placed under his direct control and superintendence. His head-quarters were fixed at Kanigiri and he was placed under the orders of the Sub-Collector to superintend relief operations in Podili, Kanigiri and Darsi. Practically his work lay in Pod alone.

66. The Acting Collector was on tour in Kanigiri and Podili in the beginning of February to see that the two works started therein were fairly settled. The numbers on the two works rose to 1,572 in Podili and 1,591 in Kanigiri on the 8th February. At that date, as a consequence of the experience gained, the Acting Collector, under instructions from the Famine Commissioner who was still in the district, introduced on both the works a modified system of tasking by which the gangs were to be of 100 each instead of 20, with tasks equivalent to only 50 per cent. of assumed normal instead of 75 per cent. The history details and aspects of the task-tables in recent use in this district having been fully reported on by me in this office letter No. 1178-Tour, dated 14th December 1892, I need not here set out the task-table then introduced. Attached to it was a note giving an indication how wages were to be calculated when increments of one-tenth (between third and first-class task) were earned by doing more than the allotted task, or decrements of similar extent were incurred by doing less than the allotted task (in paragraph 94 below).

67. On the 9th February the Acting Collector authorized the Sub-Collector "to stay the issue of coercive process until after the jamabandi in respect of all dry lands (except garden lands) in all villages situated in Addanki division and in Kanigiri and Kandukúr taluks and the worst-affected villages of Ongole taluk" for which he would apply dry remission, and reported to that effect to Board in letter No. 123-Tour of the same date.

68. On the 9th February 1892 Mr. O'Connell, Executive Engineer, was gazetted to be at the disposal of the Revenue Department for employment on relief works.

69. The country in and around Duttalur was at this time considered the worst-affected tract in Udayagiri taluk, and a large work capable of affording employment to considerable numbers was reported as necessary. Orders were therefore issued on the 9th February to the Head Assistant Collector and the District Board Engineer to open a third road relief work under section 185 at Duttalur on the 16th February. An Overseer and a paying officer, each on Rs. 40, were appointed in advance, and the Tahsildar of Udayagiri and the Sub-Divisional officer were directed to be present. The Acting Collector then visited Darsi and Ongole and returned to Nellore on the 11th February.

70. On the 10th February the Government in its Order No. 139 sanctioned the following extra establishment applied for by the Collector :—

Two Deputy Collectors, one for the Sub-Collector's and the other for the Head Assistant Collector's Division; five Deputy Tahsildars, one each for Ongole, Kanigiri, Udayagiri, Podili and Darsi. This sanction was utilized and the officers took charge on the dates set opposite to their names in the table below.

Names of special officers.	Designations.	Dates of joining.
1	2	3
Mr. W. E. Hall	Assistant Collector (now deceased) ..	5th February 1892.
Mr. K. D. P. Oldfield	Assistant Collector	30th May ..
C. Seshadri Row	Special Deputy Collector	19th February ..
Syed Mustafa Sahib	Do. do.	14th June ..
M. Subbarumiah	Do. Tahsildar, Podili	29th February ..
N. Ragava Charlu	Do. do. Kanigiri	24th March ..
V. Vardarajulu Naidoo	Do. do. Ongole	26th
A. Audinarayaniah	Do. do. Darsi	25th
R. Pannamuraj	Do. do. Udayagiri	12th
D. Venkiah	Revenue Inspector for loans	6th July ..
A. Subba Row	Do do.	25th August ..
C. Vardarajulu	Extra Deputy Shroff, Podili	20th June ..

71. On receiving a report from the Head Assistant Collector on the state of crops in Kávali taluk, the Acting Collector on the 11th February authorized that officer to stay coercive process in respect of dry lands (gardens excepted) until after jamabandi for any villages in his division for which he might consider dry remission necessary, and reported having done so to Board on the same date, recommending revised kistbandi for Kávali, the same as for Atmakúr and Udayagiri taluks.

72. On the 12th February 1892 the Board passed Proceedings No. 1540 Mis. on the Acting Collector's proposals for the extension of Minor Irrigation works in the Sub-division taluks, remarking that the lists were not exhaustive, and directing that the estimates should be submitted to it for sanction after careful examination and revision. The Acting Collector, who was now about to give over charge to proceed to Godávári district, suggested to the Sub-Collector the expediency of having the figures examined by Mr. O'Connell, the Executive Engineer, who might also, if necessary, inspect the ground and see whether the works were really useful.

73. On the 14th February the Acting Collector arranged with Mr. O'Connell to open as a task work the Kalavakur tank work in the Addanki division of Ongole taluk as soon as he received plans and estimates which had already been telegraphed for. This work was eventually opened in April, and there was never any great demand for labour thereon.

74. On the 15th February the Board in its Proceedings No. 1609 Mis. sanctioned the revised kistbandi proposed for Kandukúr taluk and on the 16th similar proposed for Kávali taluk—*vide* Proceedings No. 1649 Mis. It may be noted that the effect of the revised kistbandi in all taluks was that Rs. 85,702 as shown below was carried over from the past to the current official year:—

	Rs.
Atmakúr	27,462
Kávali	16,310
Udayagiri	8,381
Kandukúr	33,549
Total	85,702

75. On the 15th February Mr. Higgins delivered over charge of the district to the Sub-Collector Mr. Mounsey to join his new appointment as Collector of the Godávári district.

76. On the 15th February 1892 Government passed Order No. 152, Revenue, directing the inclusion of all works undertaken for relief purposes other than Local fund works under the head of Professional agency, and their execution under the Executive Engineer of the division.

77. On the 17th February 1892 the third road relief work at Duttalur was opened under the task-work system. The work was conducted under the same conditions as the first two and it consisted of broken metal and gravel collection on the Kaligiri-Udayagiri road. On the first day there were 402 coolies which rose to 497 on the second day. The Head Assistant Collector remained at the work till it was properly organized.

78. On the 17th February 1892 the Government issued Order No. 511W., Public Works, putting Mr. O'Connell on special duty for relief works and posting Mr. Hughes for Nellore division. On the 20th February 1892 the Government passed Order, No. 573W., Public Works, cancelling the Gazette notice of 9th February 1892 above-mentioned (paragraph 68), and stating that Mr. O'Connell would be in charge of the famine-relief works in the Nellore district, under the orders of the Executive Engineer of the division and the Superintending Engineer.

79. C. Seshadri Row took charge as Special Deputy Collector for Ongole on the 19th February 1892, and was from that date in charge of the ordinary duties of the Sub-Collector's office, the Sub-Collector being thus free to give the greater part of his attention to relief-work duty.

80. Owing to some harvest labour being available, the coolies on the Duttalur works struck work on the 19th, but the strike only lasted one day. The numbers on the roll were 363 which rose gradually to 823 on the 29th February owing to the cessation of harvest labour. The gangs on this work generally at first did 25 per cent. in excess of their allotted third-class tasks and received increased wages as per the scale of tenths.

81. On the 23rd February 1892 Gazette notice No. 41 cancelled Public Works notification of 9th February which had placed the services of Mr. O'Connell under the Revenue Department (paragraph 68).

82. On the 23rd February Mr. O'Connell wrote to the Superintending Engineer advocating piece work instead of task work on the large irrigation works. The Board disposed of this in Proceedings No. 259, dated 31st March 1892.

83. Surgeon-Major G. L. Walker inspected the coolies on Arikatla works in February 1892 and reported himself "very well satisfied with their condition." He inspected the north and north-western parts of the district in same month and did not find the condition of people bad.

84. Mr. Mounsey, the Sub-Collector, was in charge of the district from 15th February to 1st March 1892 inclusive. On the 29th February he forwarded to the Executive Engineer the estimates for minor irrigation works in the Sub-Collector's division referred to in paragraph 53 above, together with some others relating to Atmakúr, with request to revise and correct them after inspection. He also sanctioned Rs. 1,600 for instituting water-supply works in the worst villages of Addanki division, and instructed the Executive Engineer at the instance of the Commissioner that the Kalavakur work might be deferred till after some time when he would himself visit those parts.

85. *Occurrences in March.*—I returned from three months' privilege leave and resumed charge of the district from Mr. Mounsey on the 2nd March. On the 7th March I telegraphed to Government as below on the state of the district: "Situation unchanged in the north. Numbers on relief works appear to be increasing in extreme north. The late-sown paddy in centre of district is withering. Udayagiri had half inch of rain at beginning of month. Reports come of splendid crops in the south." The Sub-Collector proceeded on a tour through Kanigiri and Podili and reported to me after inspection that the kitchen ordered to be opened at Chinna Arikatla in Podili division in Board's Proceedings No. 2069, dated 29th February 1892, was unnecessary. The people had by this time probably improved in their condition after the opening of the Arikatla relief works.

86. About the middle of March the Executive Engineer Mr. O'Connell assumed charge of his new duties. Three Public Works Department subordinates were also appointed at the same time to assist him in the management of relief works, viz., Supervisor Babu J. L. Chutterjee, Supervisor Babu D. R. Mukerjee and Overseer Madge. These officers began their work by revising the estimates for Minor Irrigation works sent to Executive Engineer for scrutiny. The Special Executive Engineer having inspected some of the minor tanks whose estimates were forwarded to him by the Sub-Collector for check, reported on 17th March that the Minor Irrigation works proposed by the Revenue Department were unsuitable as relief works, that the cost of repairs had been overestimated fully 70 per cent., and that

the amount that could be usefully expended on Major works was but small. On the 18th March he reported again that the minor tanks being many and scattered, they should be executed as usual by the Revenue Department, as it was neither possible nor desirable to do them under Professional agency. On the 19th March the District Executive Engineer stated that the minor tanks could not afford much employment, and on the 23rd he inquired what was to be done in regard to them. He also stated that the Special Executive Engineer would, until it was decided to open relief works, be busy in revising the estimates for imperial tanks in affected taluks. He was replied to in person by me that the Minor Irrigation works must be done by his department under Government Orders, and that to meet the case of the smaller tanks section 121 could be applied under a form of contract to be first approved by me. These instructions were put in writing on 3rd April; see below.

87. The Acting Collector had in his letters quoted in paragraphs 49, 67 and 71 above already proposed the grant of dry remissions for dry crops. The Board generally approved his proposals in its Proceedings quoted in paragraphs 53 and 74 above and called for detailed proposals with rough estimates. "A very careful and almost fieldwar azmaish was locally made, and gross estimated amounts were reported to Board with scales proposed" for the sub-division taluks in my letters Nos. 357, 358 and 359, dated 15th March. On the 25th March 1892 I submitted with my letters, Nos. 480 and 484, detailed proposals with scales for the grant of dry remissions in Kávali, Atmakúr and Udayagiri taluks.

88. The three road relief works started in January and February continued to be in progress in March. The Arikatla work was directed to the east towards Kambalapad during the month. The numbers on this work increased during the month owing to influx of labourers from a village, Marripad, 14 miles distant, and to some of the coolies on Vemulapad works transferring themselves to this; the reason for the latter was that the wages paid in Arikatla (Podili) were higher than in Vemulapad (Kanigiri), ragi prices ruling higher in Podili. After the work was shifted towards the east, the numbers showed further increase, owing to the work-site being close to some large villages from which numbers came to work. On the Vemulapad works the numbers fell owing to prevalence of fever among the coolies. The Duttalur works continued to attract increasing numbers, but towards the close of the month there was a fall due to the severity of the weather. Shelter-sheds were then ordered to be erected for coolies to rest, though these were found from experience to have been scarcely utilized on the Podili works.

89. The following Minor Irrigation works, started about the end of December 1891, were all completed by the end of March 1892 under the agency of the Revenue Department. Subsequent to March this class of works was executed under the Public Works Department agency with reference to G.O., No. 152, dated 15th February 1892, above quoted:—

Names of works.	Amount of estimate.
RS.	
Atmakúr taluk—	
Gumparlapad tank	210
Navoor east tank	820
Patapad small tank	490
Prabhagiripatnam Mallareddy tank	150
Battulapalli tank	345
Kávali taluk—	
Tallur western tank	300
Kávali Papireddy tank	500
Masunur Akkapalem tank	555
Chinna Annalur Naidu tank	300
Do. eastern "	300
Ramavarappad tank	500
Bitragunta eastern tank	700
Chamadala large "	870
Gavaravaram Kotta "	470

Names of works.	Amount of estimate.
RS.	
Udayagiri taluk—	
Nayanigunta Rudra tank	995
Timmayapalem tank	975
Nandavaram Ramanayudupalli tank	700
Padamatinayunipalli Nerellagunta tank	495
Padamatinayunipalli Mallam Kondrazu tank	540
Ongole taluk—	
Ongole Panta tank	502
Valaparla Panta tank	80
Pulikonda "	486
Kandukúr taluk—	
Rajupolem big tank	1,291
Do. supply channel	164
Chakicherla Gogula tank	747
Potlur west tank	1,186
Chemiditapad Dulala tank	949
Chagolla small tank	546
Kanigiri—	
Kanigiri tank	800
Total	16,771

90. By the end of March 1892 the standing crops were chiefly those under wells which were generally thriving. Water in irrigation wells, however, stood at a very low level, and the supply of drinking water was running short. This difficulty was much felt in parts of Ongole, Kanigiri, Atmakúr, Udayagiri and Podili. The people were generally in good condition, except a small number on the Vemulapad relief works in Kanigiri taluk, Vemulapad being always a malarious and unhealthy locality. Small-pox and cholera were also prevalent in several places. The condition of cattle was deteriorating in Ongole, Podili, Darsi, Kanigiri and Atmakúr for want of fodder, which was generally scarce, though supplies were available for the more valuable stock. Prickly-pear experiments were tried but not with success.

91. *Year's outturn of food crops to end of March.*—The statement below gives the outturn of standing and harvested crops for each taluk and for the whole district for 1891-92. Taking the standing and harvested crops together, it will be seen that out of 1,112,620 acres sown with different crops, 348,040 or about 31.3 per cent. gave an outturn of 8 annas and more and 571,770 or about 51.4 per cent. yielded a crop of 4 annas and under, while the rest, 17.3 per cent., yielded no crop at all. The crop was therefore poor or nil on nearly 69 per cent. of the cultivated area. The percentages of the extents of 4 annas crop and under in each taluk to the total extents sown are as noted in margin. The loss or deficiency of crop was very great in all the affected taluks except Atmakúr, while the last, together with Nellore and Gúdúr, fared badly. Rápúr had a good yield. The abstract at the foot of the statement below compares the extent

	PER CENT.
Ongole	81.4
Kandukúr	87.5
Kanigiri	81.00
Udayagiri	71.8
Kávali	69.8
Nellore	61.8
Atmakúr	60.8
Gúdúr	55.6
Rápúr	12.00

sown and the outturn thereof under the two heads 8 annas and above and 4 annas and under for 1891-92 with corresponding figures for the two previous years with percentages. The extent sown in 1891-92 shows a deficiency of over 50,000 acres or 4.3 per cent. as compared to that sown in 1889-90, and of a deficiency of nearly 81,000 acres or about 6.7 per cent. as compared to that sown in 1890-91. The extent on which the outturn was 8 annas and above fell from 69.2 per cent. of the total cultivated area in 1890-91 and 72.7 per cent. in 1889-90 to 31.3 per cent., while the

extent that gave 4 annas crop and under rose from 27.3 per cent. in 1890-91 and 30.8 per cent. in 1889-90 to 68.7 per cent. :—

Taluk.	Extent sown.	Harvested.						Total.
		20 annas.	16 annas.	12 annas.	8 annas.	4 annas.	0 annas.	
1	2	3	4	5	6	7	8	9
Atmakūr	146,529	731	5,145	3,290	46,986	77,439	9,511	143,103
Kavali	88,151	41	1,671	6,304	16,626	37,910	21,186	83,708
Udayagiri	76,822	102	2,453	2,224	16,878	37,651	17,168	76,276
Ongole	250,177	..	879	707	42,771	136,191	64,664	245,212
Kandukūr	180,470	..	2,046	..	25,977	74,980	39,996	142,999
Kanigiri	84,486	..	..	1,164	9,436	73,886	..	84,486
Total	824,635	874	12,194	13,689	159,474	438,087	162,526	776,843
Nellore	125,613	16	7,414	168	34,502	36,049	14,377	91,525
Gūdūr	86,965	..	1,495	1,556	29,349	22,988	6,404	61,862
Bāpūr	76,407	..	..	..	64,232	9,591	1,307	75,130
Total	287,985	16	8,909	1,724	128,083	67,628	22,148	298,507
Total for District ..	1,112,620	889	21,103	15,413	286,657	505,715	174,674	1,004,350

Taluk.	Standing.						Total.
	20 annas.	16 annas.	12 annas.	8 annas.	4 annas.	0 annas.	
	10	11	12	13	14	15	16
Atmakūr	..	45	47	1,239	1,739	358	3,497
Kavali	..	57	7	1,307	920	92	3,383
Udayagiri	..	82	..	144	320	..	546
Ongole	..	78	193	2,008	2,743	..	4,995
Kandukūr	65	178	..	6,114	31,114	..	37,471
Kanigiri	..	..	..	..	..	..	..
Total	65	440	193	10,810	36,836	450	48,793
Nellore	424	821	..	4,766	13,895	14,342	34,088
Gūdūr	..	375	..	6,420	14,873	3,445	24,113
Bāpūr	..	..	..	825	452	..	1,277
Total	424	1,196	..	10,951	39,220	17,687	59,478
Total for District ..	489	1,636	193	21,761	66,056	18,137	109,479

ABSTRACT.

Year.	Total extent sown.	Extent on which the yield was		Percentage of	
		Eight annas and above.	Four annas and below.	Column 3 to column 2.	Column 4 to column 2.
1	2	3	4	5	6
1889-90	1,162,846	845,064	317,786	72.7	27.3
1890-91	1,193,563	826,032	359,521	69.2	30.8
1891-92	1,112,620	848,040	764,580	81.3	68.7

92. Occurrences in April.—On 3rd April I reduced to writing certain instructions already given to the Executive Engineer of the division for conduct of works under the Famine Code. The contract form for minor works had not been shown to this office (paragraph 30 above), nor the task-table for major works (paragraph 34 above); this office letters, dated 19th December 1891, No. 2003-Tour (paragraph 4)

above), and dated 13th January 1892, No. 32-Tour (paragraph 48 above), had given to the Public Works Department sanction in block for beginning at discretion all minor and major works on certain very large programmes. Under these combined circumstances the Collector was left without any control whatever over professional agency. I found it necessary, therefore, to advise the Executive Engineer in charge of the division, and through him the Special Executive Engineer, that in future Collector's sanction must be obtained prior to the opening of every individual work, which sanction would be given with regard to condition of locality, demand for labour, &c., in fact with regard to all the circumstances. It must be admitted, however, that prior to these instructions a large number of works had been started by the Public Works Department on the general letters above quoted, and though as the season turned out I consider no harm was done, yet it is evident that this was not a correct system under the Famine Code; it was this which caused among other things the irregularity of statistics complained of by the Board on several occasions—*vide* paragraph 17 of this office letter, dated 15th September 1892, No. 974-Tour, in Board's Proceedings, dated 7th November 1892, No. 726. On the same date I replied to the same officers regarding minor irrigation works—*vide* paragraph 86 above.

93. On the same date orders were issued to open the Kalavakur tank work in Addanki division and the Anantasagaram tank distributary channel work in Atmakūr taluk at the earliest possible date under section 185, Famine Code.

94. Having made the above arrangements with the Public Works Department, I left Nellore by train on the 3rd April 1892 for Vemulapad *via* Cumbum. On my arrival at the Vemulapad works on 5th April, it was brought to my notice that the written orders were not definite as to the mode of working the task-table in respect of increments and decrements of wages (paragraph 66 above). I decided that the one-tenth increments (one-tenth meaning one-tenth of the task and corresponding wage which lay between so-called third-class task and so-called first-class task) could be earned by the laborers up to five-tenths or so-called second-class task and wage as a matter of right; but that the decrements being fines must be controlled by the provisions of section 131, Famine Code, and be deducted from the wage under the orders of the highest officer present at the work only. This decision was merely the endorsement of the existing practice of the executive officers in charge of the works and of the mode in which they had interpreted the orders given in February. Rule 131 was regarded as one of the most cardinal, if not the most cardinal rule of the code, which there was no option but to follow, and the system here mentioned was continued down to July 1892. It may be added that it was considered that practically the provisions of the code given in the above section were deterrent enough to prevent the laborers from evading their due tale of work, and I am of opinion that throughout the hot weather they put in fully as much labour as could be reasonably required from poverty-stricken men and women—*vide* this office letter, No. 1126-Tour, dated 26th November 1892, in Board's Proceedings, Mis. No. 9184, dated 2nd December 1892. I proceeded on the same date to Podili to inspect the Arikatla relief works. The numbers on these two works on the date of my inspection were—

	Men.	Women.	Children.	Total.
Vemulapad	650	747	241	1,638
Arikatla	945	1,540	424	2,910

95. His Excellency the Governor, accompanied by the Famine Commissioner, arrived at Vemulapad on the 10th April and inspected the relief laborers in the evening and distributed to nearly 300 coolies selected from their number cloths sent for that purpose by Sir Savalay Ramasawmy Mudaliar of Madras. The next morning, 11th April, His Excellency proceeded to Chinna Arikatla in Podili division and similarly inspected the relief works in progress there, and after examining the condition of the people distributed to the needy about 600 cloths sent for that purpose by the

Rajah of Venkatagiri and Sir Savalay Ramasawmy Mudaliar. On the 12th April His Excellency passed on to Darsi where, in commemoration of the Governor's visit, the Rajah of Venkatagiri's officers distributed cloths and cooked food to the poor. On the 13th April His Excellency left Darsi for Kurichedu Railway station, where also he distributed cloths for the Rajah of Venkatagiri and left for Bezvada in Kistna district by the midday train. His Excellency noticed the anæmic condition of the laborers at Vemulapad and ordered a kitchen to be opened there, which was done the next day.

96. After the Governor's visit was over, I was in constant communication with the Public Works Department for setting the major and minor irrigation works to be executed by that agency on a proper basis. The form of contract finally drawn up for execution of irrigation works under section 121, Famine Code, is shown as appendix III. The use of this contract was limited to cases where the estimate was less than Rs. 2,000 and where the Engineer certified that the work could not be carried out under the task system—*vide* this office letter, No. 871-Tour, dated 15th August 1892.

97. The three road relief works, Arikatla, Vemulapad and Duttalur, continued during this period to attract increasing numbers. The strength of gangs on the 14th April was 2,950 on the first, 1,823 on the second, and 1,298 on the third. For the first a deputy paying officer on Rs. 35 was appointed, and orders were issued on 14th April 1892 to open "weakly gangs" on these works under note to section 24, Famine Code. The large development of the number of laborers on Arikatla works was due to the cessation of ragi harvest, the temporary exhaustion of the ordinary works of water-supply, and the fact of the work being shifted to the vicinity of some large villages; the last being a necessary consequence of the itinerating character of road-repairs work. The Duttalur works were also moving westwards at this time.

98. The Kalavakur tank work in Addanki division referred to in paragraph 93 above was started under the task work system on the 18th April under the personal supervision of the Sub-Collector and the Special Executive Engineer. On the 20th April the numbers on the work were 616. On the 21st April all the laborers, with the exception of 6, deserted, not liking the tasking system. They, however, returned on the 22nd and from that date the numbers rose.

99. About this time the numbers on the road relief works were over 4,000 on Arikatla works, about 1,800 on Vemulapad works, and over 1,500 on Duttalur works. The imprests of Rs. 500 being found inadequate, they were on the 22nd April raised to Rs. 800 and 750, respectively, for the first two works.

100. On the 23rd April the construction of a dry stone wall round the Udayagiri Durgam reserve was started as a relief work under the task system as an experimental measure under the supervision of the District Forest-officer Mr. Brougham, the Forester being in direct executive charge. A sum of Rs. 1,000 was placed at the District Forest-officer's disposal for this purpose. One gang was set to work on the first day and on the second a large number from the adjacent villages presented themselves and objecting to the task system demanded usual wages on ordinary contract. This was refused and they left the work. The people having subsequently re-appeared and asked for work, they were formed into gangs of 12 each and a task of 10 cubic yards to each measured, marked out and assigned to them. Over part of the boundary "leads" had to be allowed, stone not being available. The coolies were paid the third-class wages prescribed in section 185, but they generally did 50 per cent. in excess and earned wages up to the limit of second-class. The numbers on the work were never large, it having been purposely kept on a small scale, fearing that the work would be indifferently done and money wasted should the numbers exceed the limit up to which efficient supervision was possible.

101. On the 27th April the numbers on Arikatla works having risen to 3,320, a deputy paying officer on Rs. 35 was added, and the imprest for the work raised from Rs. 800 to Rs. 1,200. The laborers on Kalavakur works fell from 351 on the 27th to 87 on the next day owing to some heavy fines that were imposed. The numbers on the 2nd May were but 27. The task was stated to be earthwork, but was really partly limestone quarrying. The Assistant Engineer, under instruction from the Sub-Collector, reduced the task subsequently in proportion to the hardness of the soil and

restricted fining to cases of wilful neglect. The opening of the Anantasagaram tank work presented great difficulty. An attempt was made to work it under the task system, but it ended in nothing, as the coolies refused to work at third-class rates and demanded the piece-work system.

102. The wages allowed to relief work laborers under section 185, Famine Code, were till end of April based on the value of ragi flour, and from the beginning of May onwards they were calculated on the value of cholom, except on the Podili works where the ragi table was retained, the Sub-Collector having reported that cholom was not always procurable in Podili. The above change was introduced prior to receipt by me at Darsi of Board's Proceedings, Mis. No. 3821, dated 23rd April 1892. Cholom wages were at this time cheaper than wages based on value of ragi flour.

103. Season prospects continued the same in April as in the previous month except that at its close there was a favorable change in the weather owing to heavy rains in the south. In the north the weather was cloudy and gave hopes of early rain. Agricultural operations were chiefly confined to lands under wells and the crops thereon were generally thriving. Water-supply continued deficient, though much improved in many villages, in those of Podili division particularly, by the sinking of wells from Local Funds. This was done on an extensive scale. The condition of people generally varied from fair to good. The condition of cattle was worse than in March, pastures having dried up and fodder being scarce and dear. Large sums were sanctioned in Ongole taluk under the Agriculturists' Loans Act for the purchase of fodder.

104. *Occurrences in May.*—During the first week of May "weakly gangs" were, as already ordered, opened on the three road works in progress under my immediate observation. A light task, equivalent to 25 per cent. of normal, was exacted from the members of these gangs, in return for which they were paid third-class wages. There was generally a disinclination on both sides for the strong and weakly to part, showing the force of family ties. It was found in some cases on the Vemulapad works that the coolies left their weakly members in their own villages rather than bring them to the weakly gangs.

105. The Board had ere this submitted to Government the proposals for scale of dry remissions sent up from this district (paragraph 87 above), altering the scale to "full remission below 2-anna crop, full remission with a condition of collecting the whole next year in arrears, if season then good between 2 and 4 annas, no remission above 4 annas"—*vide* Board's Proceedings, No. 278, dated 7th April 1892. After correspondence this was held on 17th May to mean—full remission for 2-anna crop, less than that, and waste; conditional remission as above for crops between 2 annas and 4 annas; no remission for crops of 4 annas and above. I was in favour of the latter and more liberal interpretation of the wording of the scale, but it cost about Rs. 40,000 in increased remissions.

106. During May the Arikatla and Vemulapad works in Podili showed extensive development, which necessitated the raising of the paying officers' imprests for both the works to Rs. 1,500 and the appointment of deputy paying officers on Rs. 35 and 30, respectively, for the Vemulapad and Duttalur works. The rise on the works was due to the cessation of all agricultural and other operations. On the 29th May the repairs to Ongole Runga Row tank in the vicinity of Ongole were commenced under the terms of the special contract referred to in paragraph 96 above under the supervision of the Sub-Divisional officer and the Tahsildar of Ongole. The attendance on this day was 100 men and 60 women.

107. It will be seen from appendix IV that various water-supply works were instituted throughout the affected taluks during the period of distress. This was mostly at the present period. The works afforded the best relief in villages where neither road nor minor irrigation works could be opened. Local Fund money was extensively spent in digging and repairing wells in caste and pariah hamlets. The contracts for work were in all cases given to the villagers who themselves were interested in the proper execution of these works. Appendix V shows the scheme for pariah wells

in accordance with which the contracts were drawn; I enclose this as it was the one most frequently used. It was not found necessary in these to give rates higher than the ordinary estimate, as the people were working for their own advantage. I made an attempt to go further and inaugurate a policy of making the village community pay one-half or at least one-third of the amount of estimate as a condition of the work being executed. However, this part of the matter was dropped with a view to the severe season.

108. Surgeon-Major G. L. Walker continued in medical charge of the district till end of May 1892 and was succeeded by Surgeon-Major S. C. Sarkies.

109. I was on tour throughout April and May and returned to head-quarters at end of May to conduct the Nellore jamabandi, in which extensive remissions of half the demand had to be given owing to the failure of the Pennair.

110. On the day after my arrival in Nellore, viz., on 31st May, the returns just received showed a sudden and extraordinary rise in the number of laborers on each of the tasked works in different parts of the district. Between the 28th and 30th May the numbers rose from 12,739 to 15,345.

111. During May, excessive heat and high winds prevailed which burnt up the crops under wells, but there were fair and timely showers of rain in Kandukúr, Kanigiri, Udayagiri and Atmakúr, which brought slight freshes to the rivers, revived the standing crops and improved the water-supply. Field work was in progress in parts where rain had fallen. Prices showed but little change except in the third week of the month when there was a slight temporary rise. The condition of people was fairly good, except for prevalence of cholera in parts of the affected taluks. The condition of the working cattle was good. The rest varied from fair to bad. Fodder having continued scarce, the cattle were driven to wherever it was available, those of Ongole having been taken to Kistna district for the purpose.

112. *Occurrences in June.*—On the 1st June I wrote to the Special Executive Engineer to arrange for starting the Karédu tank repairs in Kandukúr and to make one more attempt to open the Anantasagaram tank work. On the 2nd I gave orders for putting in hand the Kondapi tank repairs in Kandukúr taluk. On the 3rd June I asked the Special Executive Engineer to confine the operations of two of his special supervisors to Ongole and Kandukúr taluks respectively. I also gave orders for the opening of a 4th road relief work under the task-work system on the Ongole-Cumbum road, 25 miles west of Podili above the Tadivaripalli ghât, appointing a paying officer and an overseer from head-quarters. This was considered necessary to prevent crowding on the other two Podili works which were becoming unmanageable. On the 3rd June I asked the Government to assign another Special Deputy Collector (paragraph 70 above) for the Duttalur works in Udayagiri, and he was at once appointed. On the 4th June, I wrote to the Special Executive Engineer to arrange the preliminaries for starting the Pákala tank repairs in Kandukúr taluk, and gave individual orders for putting in hand under the terms of the special contract (paragraph 96 above) the repairs to six minor tanks in Ongole, five in Kandukúr and four in Atmakúr. On the 7th June I opened communications with the Special Executive Engineer about starting Vasili embankment in Atmakúr taluk as a tasked work under section 185. It was attempted, but the coolies would not come on that system.

113. On the 18th June I received a report from the Head Assistant Collector saying that a second attempt to open Anantasagaram in Atmakúr taluk on the task-work system had failed. About this time, the portion of Nellore taluk lying west of the meridian of Jonnavada having caused some anxiety and as work was stated to be necessary there and also as it adjoined the affected portion of Atmakúr taluk, I requested the Executive Engineer of the division, who had subordinates on the spot, to start under section 185 the repairs to south Mopur tank in Nellore taluk; the coolies would not come. On the 23rd June the Special Executive Engineer reported to me the failure of a third attempt to open Anantasagaram. On the 27th June I instructed the divisional officers to exercise check on the minor irrigation works and watch the working of the new contract thereon and directed the village officers to

render every kind of help to the Public Works officers in executing such works. On this same date the Special Engineer sent me copy of an overseer's letter stating that most of the applicants for work on Anantasagaram tank were Muhammadans who declined to work with the Malas and the Madigas, and that the work could not therefore be done even on the piece-work system. On the 29th June I gave orders for striking off the Anantasagaram work from the returns.

114. At this period three road works in Podili division and one in Udayagiri taluk were in progress. The Tadivaripalli work was begun with two gangs on the 6th June, on which date also an imprest of Rs. 500 was given to the paying officer and he commenced making payments from 11th June. The work at Tadivaripalli consisted in the beginning of the collection of ratters for sheds and afterwards of collection and breaking of stone and gravel. Owing to distant locality and want of tools it was not possible to organize the work regularly till the 23rd. Payments were regular till 17th and thereafter fell into arrear owing to the rapid rise in the numbers. Between the 17th and 21st June, the numbers rose from 2,972 to 4,015. On the 21st the paying officer's imprest was raised from 500 to 750 rupees and on the 24th to 1,500. The Arikatla, Vemulapad and Duttalur works continued to draw increasing numbers, necessitating the increase of the imprests for the second and third to Rs. 2,000 each and the appointment of a third paying officer to each of the first two and of a second paying officer for the third work on Rs. 30 per mensem.

115. On the 14th June Syed Mustafa Sahib took charge as Deputy Collector for Duttalur. During the first fortnight this work had been moving east towards Vinjamur (a Kálahasti village), but in the second fortnight I took preliminary steps for moving it north to Pamur through Duttalur. Owing to prevalence of cholera on the two Podili road works above, two Hospital Assistants were sent from Nellore to adopt the requisite remedial measures. Each had a kitchen attached to it, to which the infirm beggars and the children under seven of laborers on works were admitted. A raised kitchen was opened at Pamur on 23rd June for the use of the old and infirm poor. On the 29th June the attendance at this kitchen was 152 in morning and 159 in evening. Towards the end of June the two Podili works moved to 4 and 12 miles west of Podili.

116. Besides the above the large Local Fund work, named Ongole Runga Row tank, and the Kalavakur tank work were also in progress. On the latter the numbers were rising in the first fortnight, but the rains stopped further expansion.

117. Towards the end of June the numbers on relief works were at their maximum, being over 27,000 against 15,000 at end of May (*vide* appendix VI).

118. The month of June was characterised by heavy and generally distributed rain throughout the parts treated as affected, the quantities registered in the several recording stations having exceeded the 10-year average. Rivers were in fresh and the tanks received good supplies. Ploughing and sowing were in progress and agricultural operations became brisk. The Pennair river was uninterruptedly in fresh from the 7th June onwards and topped the Nellore anicut for 16 days in that month. The Nellore tank received one-third supply and the drinking-water supply was greatly improved. Prices were generally steady throughout the affected taluks, the only noticeable feature being that ragi was stationary in Podili during this and the two previous months. The condition of people was good or fair except that cholera prevailed somewhat virulently in Kanigiri taluk. The condition of cattle greatly improved, pastures having begun to appear after the rains. The ploughing cattle were in good condition. The others continued to be fed on various leaves in Kanigiri, Podili and Udayagiri.

119. *SUCCESSFUL SOUTH-WEST MONSOON ESTABLISHED BEGINNING OF JULY 1892—Occurrences in July.*—On the 2nd July the Special Executive Engineer reported that nearly all the tanks in Kandukúr and Ongole taluks were now too full of water to admit of any further work being done and inquired whether there was any objection to giving on ordinary contract the repairs to Pákala and Karédu tanks in Kandukúr taluk, ordered in previous month to be got ready in advance for task-work if required. I deferred passing orders on this pending the further establishment of the monsoon

rains. On the 2nd July the Executive Engineer also reported that he could not start the Mopur tank work in Nellore taluk, the coolies having refused to work on the tank-work system for third-class wages.

120. As to the road relief works the numbers at Tadivaripalli became in beginning of July uncontrollable owing to rush of laborers from Kurnool district and from the Vemulapad works. The matter is fully dealt with in this office report No. 974-Tour, dated 15th September 1892. The Famine Commissioner visited the district coming from the Kurnool district on the 3rd July and remained in Podili division till the 9th July.

121. Nearly all tank works having been stopped in the first week of July owing to heavy rains I reported to Board on the 9th July that the special engineering staff was no longer necessary. Mr. O'Connell having very little special work to do, resumed charge of the Nellore division from Mr. Hughes on 13th July in addition to the special duty. He reported these changes to me on the 14th July, and on the 16th suggested the cancellation of contracts for the remainder of the work on the small tank repairs and payments in full to contractors for the quantity of work done up to date. He also proposed the execution of the Vasili embankment work on the ordinary contract system as no coolies would come for work. On the 17th July I left Nellore on a tour through Atmakur, Udayagiri and Kanigiri taluks.

122. The Arikatla and Vemulapad works in Podili division with Duttalur works in Udayagiri taluk continued to be in progress, but the numbers were now declining and giving signs of breaking up on account of suddenly improved prospects and also fear of cholera which prevailed during the month. For the Duttalur works a Hospital Assistant was sent to prevent the spread of cholera, while on the Podili works two Hospital Assistants had already been working. On the 16th July there was a strike on the Duttalur works and on the 19th they were empty (*vide* my letter to Board's Proceedings, No. 6415, dated 29th July 1892).

123. The repairs to Runga Row tank in Ongole continued to afford employment to a considerable number of persons, but after the fall of heavy rains the work was closed as a relief work on the 23rd July. The reservoir was dug five yards deep and the work almost completed. The supply-channel is now being repaired at a cost of Rs. 172.

124. On the 25th July the Duttalur works were re-started 8 miles to windward on the Pamur-Duttalur road with 2,455 on the rolls.

125. On the 27th July I approved the course mentioned by the Engineer for the settlement of payments, as a copious monsoon was now fully established.

126. On the 29th July the Government ordered by wire the transfer of all relief works to the Public Works Department. On the 31st July I issued detailed instructions to the Engineer for taking over the road works as per the orders of Government and reported having done so on the same date by wire and by letter No. 812-Tour.

127. The improvement in season prospects noticed in June continued also in July. The rainfall registered during the month exceeded the averages in the coast, southern and north-western stations, being particularly heavy in Rāpur, Venkatagiri, Pólur and Udayagiri. Supply of water both for drinking and for irrigation greatly improved. Prices showed little or no variation. The condition of people was good, but cholera was prevalent in all taluks and also small-pox slightly. The condition of cattle showed further improvement and pastures were everywhere plentiful. The number of laborers on relief works reached the maximum, viz., 27,431 on the 1st July, and from that date forward they rapidly declined and stood at 9,041 on the 29th July. The diminution was on all works.

128. *Occurrences in August.*—On the 4th August, the Board in its Proceedings, No. 548, directed the transfer of the accounting and auditing likewise for the road relief works to the Public Works Department. On the 6th August I was at Duttalur. On the 7th I wrote to the Engineer to measure up the work done on the road works and take over the financing and accounting therefor as per the Public Works Department rules and reported to Board on the same date that the Special Public Works supervisors were on their way to take charge.

129. The only large works that remained in progress during August were the Duttalur works in Udayagiri, the Kalavakur works in Addanki division, and the Arikatla and Vemulapad works in Podili division. Cholera continued to prevail on the above works and the District Surgeon suggested their closure. The local supervising officers were of the same opinion and the ryots also complained that the works drew labour off their fields and encouraged the spread of cholera. I, however, deferred taking action with reference to the Board's instructions not to close forcibly.

130. Even at the new site to which transferred, the Duttalur works found no demand, and on their emptying out on a third occasion I accepted the results and closed them on the 8th August, reporting the fact to Board in my letter, No. 850-Tour, dated 11th August 1892. The fact is that at this time the country everywhere except in a corner of Podili division, which is always a barren locality, was rapidly returning to its normal condition, and the fields required the labour. The rains at this time were almost excessive.

131. On the 13th the forest wall work was closed after $5\frac{1}{2}$ miles of the boundary wall had been completed by relief work labour. The total sum expended on this was Rs. 1,186, of which Rs. 553-8-0 will be debited to 33. Famine Relief.

132. I remained at the Duttalur works till the 14th and on the next day proceeded to Pamur. On the 18th I visited the Vemulapad works.

133. The Kalavakur tank work had a temporary rise on one day owing to the presence of professional Widders from Kāvali and Kandukur taluks, but they shortly after left the work finding the wages unremunerative. Demand for work having ceased and ample and remunerative employment being available in Kistna district and on the fields, the numbers rapidly declined to a very low figure. When at last the work emptied itself, I formally authorized the Assistant Engineer in direct charge of the work to close the same and requested the Executive Engineer on the 22nd to work out the remainder of the estimate on ordinary contract.

134. The Board having in July suggested that the overseer agency might be exacting less tasks at Duttalur than they were under orders to exact, I examined this question exhaustively on the spot at the beginning of August and reported in letter, No. 900-Tour, dated 25th August 1892, that nothing of the sort existed (*vide* paragraph 94 above).

135. The numbers on Arikatla and Vemulapad works showed rapid diminution and on the 27th they sunk to 27 on the former and 686 on the latter. On subsequent days there were none on either work. These, therefore, the last works in the district, were declared closed and reports to that effect made in my letters, Nos. 905 and 932 (Tour), dated 28th August and 4th September 1892.

136. Pursuant to the instructions issued by me on 31st July (paragraph 126 above) and 7th August (paragraph 128 above), the Assistant Engineer was occupied during August with the Local Fund Engineer in measuring up work, but he reported to me on the 28th August 1892 that he had up to that date taken over tools only and not material. Actual transfer therefore never took place, though two Public Works Department supervisors came on the works for the last fortnight.

137. Until the end of August I remained on tour in Kanigiri and Udayagiri taluks.

138. Surgeon-Major S. C. Sarkies, District Medical and Sanitary Officer, inspected the Podili works during August 1892 and found the laborers in "fairly good physical condition." He also visited the Podili kitchen and found about 25 inmates, nearly all of them being old and debilitated persons, with a few children.

139. The August rains were heavy and well distributed and were for the whole district more than three times the 10-year average. Taking the recording stations individually, Kanigiri, Ongole, Pākala, Kistnapatam, Gūdūr and Pólūr had over or

about 4 times the 10-year average; Kandukúr, Vellore, Rápúr and Venkatagiri over or about 3 times the 10-year average; and the rest over or about twice the 10-year averages. Agricultural operations were very actively pushed on and the standing crops were flourishing. Cumbu was ripe for harvest and looked excellent. Tanks and wells were either full or nearly so and rivers were in fresh and water-supply was ample. Prices in Ongole and Podili fell rapidly after the first week of the month. The condition of people was now normal, though cholera continued in the sub-division and in Udayagiri taluk. It was, however, abating. Cattle continued to improve and pasture was abundant.

140. *Occurrences in September.*—There were heavy rains again in September, particularly in the north-west and the east coast taluks. Quantity registered was over twice the 10-year average for whole district. The season continued very favorable to cultivation and sowings were extensive. Standing crops were in very good condition and cumbu yielded a good harvest. Prices fell rapidly, but were still much above normal rates. Cultivation of paddy under the anicut was unusually forward. Fever was prevalent and cholera was abating and the condition of people was otherwise good. The Vemulapad and Podili kitchens were closed on the 1st and 12th September 1892, respectively.

141. Throughout September I was on tour in Atmakúr and Udayagiri taluks.

142. I enclose statements shown as appendices VI and VII furnishing statistics of attendance on works and gratuitous relief for each week from February to September 1892.

143. *SUMMARY OF CERTAIN TOPICS—Relief kitchens.*—Relief in the shape of distribution of cooked food was kept throughout the scarcity of 1892 within very narrow limits, only children of laborers on works under 7 years of age and really disabled persons having been admitted to the kitchens. The formation of "weakly gangs" on each of the large relief works greatly kept down the numbers resorting to the kitchens. The kitchens instituted were all, Pamur excepted, attached to works. The following statement gives the particulars of kitchens:—

Number.	Name of kitchen.	Date of opening	Maximum number fed on any day.	Date of closing.	Expenditure.
1	Vemulapad	14th April ..	158 5th May.	1st September.	945
2	Podili	10th June ..	63 6th August.	12th do.	261
3	Vinjamoot	1st July	7	13th August.	35
4	Tadivaripalli *	3rd do.	68 5th July.	12th July ..	32
5	Pamur	23rd June ..	170 1st July.	26th August.	323

* Escaped entry in weekly returns.

144. *Grain and money doles.*—There was very little of this form of relief from Government funds except in Podili division where Rs. 84-6-1 were disbursed to relieve the really destitute and needy. A sum of Rs. 350, being portion of the contribution for the relief of the distressed by Maharaja Holkar, was placed at the Collector's disposal by the Board of Revenue for utilization in this district. As reported in this office No. 5197-Ver., dated 12th November 1892, in Board's Proceedings, Mis. No. 8805, dated 21st November 1892, the whole of this amount was placed at the Sub-Collector's disposal for the relief of deserving cases in his division. This together, with some funds received by Mr. Mounsey from his friends in England, was distributed to

destitute persons and gosha women. The following table shows how the Holkar contribution of Rs. 350 was expended in each taluk:—

Name of taluk.	Amount spent.		
	RS.	A.	P.
Ongole taluk	80	0	0
Addanki division	60	0	0
Kandukúr taluk	90	0	0
Podili division	116	10	0
Darsi do.	2	0	0
Post office commission	1	6	0
Total	350	0	0

145. *Zemindari works.*—At the end of December and early in January, the Acting Collector finding distress severe in Podili and Darsi zemindari divisions and in the zemindari villages of northern Government taluks requested the zemindars of Venkatagiri, Kálahasti, Chundi and Muttialpad to put in hand irrigation works with a view to afford employment to those in need. The three latter did practically nothing. The Rajah of Venkatagiri carried out some irrigation repairs in Darsi and Podili. On 23rd August 1892 and again on the 11th December 1892, I called for a return from Venkatagiri which would have shown the expenditure on these works in 1892, but the return was not furnished. I found on inspection that the zemindari works were open to the same objection as the earlier Public Works Department works (paragraph 92 above) in having a contract form which did not really and in practice secure the employment of the needy (*vide* fortnightly narrative printed in Board's Proceedings, No. 326, dated 2nd May and No. 375, dated 20th May 1892).

146. *Compensation for dearness of food-grains.*—No compensation was granted to Government servants on account of the dearness of food-grains, the prices of the two staple food-grains, ragi and cholam, in the northern affected taluks never having for any length of time ranged dearer than 1 rupee per 12 seers of 80 tolas weight, the limit prescribed by G.O., No. 41, dated 5th January 1877, communicated with Board's Proceedings, No. 215, dated 9th January 1877.

147. *Advances under the Loans Acts.*—The following were the numbers and amounts of applications sanctioned and paid under the Land Improvement and Agriculturists' Loans Acts in the six affected taluks from 1st April 1891 to 30th September 1892:—

Land Improvement Loans—	Number.	Amount. RS.
Ordinary well rules	264	38,405
Special well rules	129	12,507
Other improvements to lands	4	445
Total	397	51,357
Agriculturists Loans—		
Purchase of fodder	1,136	95,124
Do. of cattle	88	2,934
Do. of seed-grain	7	404
Total	1,231	98,462

The total amount sanctioned and paid under the two Loans Acts from 1st April 1891 to 30th September 1892 in all taluks together was Rs. 1,62,964 as shown below.

				1891-92.	1st April to 30th Sept. 1892.
				RS.	RS.
Land Improvement Loans	...	...	...	17,095	44,356
Agriculturists Loans	...	...	...	8,460	93,053
Total	...	...	...	25,555	1,37,409

The whole amount disbursed for the purchase of fodder, excepting Rs. 565 paid in Kandukūr taluk, related to Ongole taluk, where fodder having been very scarce and dear, large quantities from Kistna and Nellore were purchased and brought for use. Prior to the commencement of this scarcity, operations under the Loans Acts were very scanty. An impetus was given to operations under the Loans Acts, especially to well-sinking, by the continued drought which compelled the ryots to take loans. The loans paid for digging and repairing wells alone amounted to Rs. 50,912, the largest amount over Rs. 18,000 having been disbursed in Ongole taluk. The special well rules operations were not extensive in this district notwithstanding reduced interest, the greater restrictions being feared.

148. *Statistics of the south-west monsoon rains.*—The south-west monsoon rains were early, seasonable and most unusually copious. They began about the beginning of June just when the number of laborers on the major relief works was at its maximum and gave very heavy and generally distributed rains in June, July and August. About the end of June as before said, all rivers were more or less in flood and the Pennair was uninterruptedly running in considerable fresh from 6th June onwards. By the 11th July the Nellore tank had one-half supply and the Sangam reservoir was two-thirds full, and I was able to report in my special season telegram, dated 18th July, that the "country has throughout resumed its ordinary agricultural condition." The total rainfall from 1st April to end of September was nearly double the 10-year average for same period (*vide* rainfall statement below). The actuals for September 1892 are the highest recorded in the 10-year period except in the following cases, Atmakūr in 1886 and 1888, Kistnapatam in 1889 and Monapalem in 1890:—

Stations.	1st April to 31st August.		1st April to 30th September.		August month.		September month.	
	10-year average.	Actuals, 1892-93.	10-year average.	Actuals, 1892-93.	10-year average.	Actuals, 1892-93.	10-year average.	Actuals, 1892-93.
1	2	3	4	5	6	7	8	9
Atmakūr	18.8	8.85	9.09	13.20	1.80	4.65	3.21	4.35
Darsi	8.58	17.65	12.60	24.65	2.62	7.45	4.02	7.00
Gūdār	4.26	11.01	6.63	16.36	1.78	7.82	2.27	6.36
Iskāpalle	7.48	10.69	10.84	17.94	2.98	6.18	3.36	7.25
Kandukūr	7.97	11.32	11.98	21.95	2.36	7.15	3.35	8.45
Kanigiri	6.65	12.97	10.01	21.42	1.68	6.00	3.35	6.51
Kāvali	7.43	13.82	11.48	20.33	2.80	6.55	4.06	6.62
Kistnapatam	7.45	15.03	9.44	20.55	2.09	8.40	1.99	6.35
Monapalem	7.32	8.62	10.10	14.87	1.91	4.66	2.78	6.35
Nellore	6.51	14.40	9.17	22.70	2.29	8.60	2.06	8.30
Ongole	10.07	19.64	14.38	29.99	3.75	14.26	4.31	10.35
Pākala	7.03	17.49	10.30	24.91	2.41	12.15	3.27	7.43
Rāpūr	6.11	11.45	9.54	15.52	2.10	6.20	3.43	4.07
Tada	7.51	15.75	9.75	19.05	1.84	9.13	2.34	4.50
Udayagiri	6.53	14.00	8.91	18.50	2.05	6.10	2.85	4.01
Venkatagiri	7.41	15.79	10.20	19.80	2.68	7.40	2.79	4.01
Total	114.30	218.38	164.42	321.74	37.07	121.69	50.13	103.38
District average	7.14	13.65	10.26	20.11	2.81	7.60	3.13	6.44

149. *Prices.*—The following statement gives the monthly district average prices in 80 tola seers per rupee for all grains for each month from December 1891 to October 1892. The dry grains cheapened considerably, particularly cumbu; 2nd-sort rice, though it fell, continued dearer, while the dry grains were at the close cheaper than the group scarcity rates prescribed in Board's Proceedings, No. 984, dated 17th July 1890.

Food-grains.	December 1891.	1892.										Group scarcity rates.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	
Rice, 2nd sort ..	9.28	9.46	9.07	9.20	9.20	9.18	9.33	9.55	9.78	10.35	11.08	11.2
Cholum	14.00	12.96	12.82	13.28	13.51	13.46	13.94	13.51	14.48	16.69	18.37	14.7
Ragi	14.98	13.62	13.78	14.04	14.40	14.43	14.43	15.31	16.08	17.28	19.06	16.60
Cumbu	13.58	11.81	12.00	12.42	12.42	12.29	12.38	12.38	12.68	15.71	20.82	15.40

150. *Cultivation 1st April to 30th September 1892.*—The following is the statement of sowings for each taluk for the 6-month period, 1st April to 30th September, and for September month in the current year compared with the corresponding five years' averages. The total wet sowings during the 6-month period exceeded the average by about 92 per cent. and the total dry sowings by over 59 per cent. The total dry sowings in September exceeded the average by 58 per cent. and the wet sowings by over 33 per cent. The averages were exceeded in all taluks both under wet and dry, the increases under wet in Nellore and Gūdār taluks and under dry in Kandukūr and Ongole taluks being particularly large. The extensive development of wet cultivation in the first mentioned taluks was due to continuous freshes in the Pennair river. If the comparison had been limited to the 4-month period, April-July, the results would show in quite an extraordinary light—*vide* letter No. 893-Tour, dated 23rd August 1892, in Board's Proceedings, No. 614, dated 31st August 1892. However the whole season of possible sowings under south-west monsoon has been included:—

Taluk.	Sowings from 1st April to 30th September 1892.			Sowings from 1st April to 30th September, 5-year average.		
	Dry.	Wet.	Total.	Dry.	Wet.	Total.
1	2	3	4	5	6	7
Kanigiri	ACS.	ACS.	ACS.	ACS.	ACS.	ACS.
Udayagiri	59,834	571	60,405	50,336	333	50,669
Ongole	23,201	1,658	24,859	17,139	1,138	18,277
Kandukūr	136,608	2,170	138,778	97,290	946	98,236
Kāvali	135,240	12,902	148,142	61,150	5,446	66,596
Nellore	19,620	18,269	37,889	11,325	9,328	20,653
Atmakūr	13,772	83,102	96,874	7,759	47,839	55,598
Rāpūr	28,870	12,804	41,674	17,287	5,591	22,878
Gūdār	12,824	3,269	16,093	7,612	1,471	9,083
Total	13,639	32,227	45,866	8,732	14,901	23,633
Total	443,608	166,972	610,580	278,680	86,993	365,673

Taluk.	Sowings in September 1892.			Sowings in September, 5-year average.		
	Dry.	Wet.	Total.	Dry.	Wet.	Total.
	8	9	10	11	12	13
	ACS.	ACS.	ACS.	ACS.	ACS.	ACS.
Kanigiri	18,929	49	18,978	12,487	110	12,597
Udayagiri	7,201	199	7,400	7,673	215	7,888
Ongole	11,874	969	12,843	30,121	413	30,534
Kandukūr	76,752	9,890	86,642	18,080	3,704	21,784
Kāvali	9,917	5,601	15,518	6,910	5,625	12,535
Nellore	4,660	28,476	33,136	3,209	36,851	40,060
Atmakūr	8,694	4,857	13,551	7,455	2,056	9,511
Rāpūr	4,927	1,078	6,005	3,879	952	4,831
Gūdūr	6,744	16,294	23,038	3,123	9,423	12,546
Total	147,598	67,313	214,911	92,987	50,349	143,286

151. *Mortality.*—The following statement compares the mortality for whole district in each month from January to October 1892 with the averages of the 5 years ending 1891. The major portion of the deaths were due to cholera, small-pox and fevers, particularly the last mentioned. The deaths from cholera were very large in August, being over $2\frac{1}{2}$ times the average, and the cholera mortality for the whole period exceeded the average by 60 per cent. The numbers of deaths from small-pox exceeded the averages in each month during the above period, the disease having raged severely in April, May and June; recorded actuals for the 10-month period were 4 times the average. Fevers also carried away large numbers, the maximum deaths being due to this disease; the fever averages were exceeded in all months, and the total for the 10 months exceeded the corresponding average by nearly $31\frac{1}{2}$ per cent.; this disease prevailed severely in February, March and August. Columns 12 and 13 of the statement compare the total death-rates for each month with corresponding averages. The actuals exceeded the averages in all months except September, and the death-rates were high in January, February, March and August, particularly in the last month. This was due to prevalence of severe cholera and fever. The drought and scarcity must have greatly increased sickness; but, on the other hand, it is impossible to tell how far the excess figures in this paragraph are not due to improved registration. Apart from the increased attention paid to this subject in the last two or three years in the ordinary administration, the zemindari karnams (and there are numerically more zemindari than Government villages in the district) were particularly on their mettle owing to the presence of so many Government officials in zemindari tracts:—

Month.	Actuals of 1892.				
	Cholera.	Small-pox.	Fevers.	Other causes.	Total.
1	2	3	4	5	6
January	171	74	1,083	1,330	2,658
February	152	90	1,272	1,158	2,672
March	25	53	1,204	1,268	2,540
April	42	262	996	1,076	2,316
May	10	200	1,041	1,020	2,271
June	35	140	886	878	1,939
July	261	119	904	1,012	2,296
August	891	112	1,013	1,266	3,282
September	192	124	984	880	2,180
October	8	70	1,022	1,060	2,160
Total ..	1,787	1,273	10,394	10,932	24,386

Month.	Average for five years (1887—1891).					1892. Death-rate per 1,000.	Averages. Death-rate per 1,000.
	Cholera.	Small-pox.	Fevers.	Other causes.	Total.		
	7	8	9	10	11		
January	76	39	922	911	1,949	1.01	1.55
February	167	31	646	638	1,482	1.65	1.20
March	65	32	720	772	1,587	1.40	1.20
April	82	30	784	703	1,600	1.73	1.25
May	6	29	827	836	1,688	1.65	1.25
June	13	33	816	933	1,798	1.84	1.45
July	142	30	753	799	1,714	1.67	1.40
August	338	28	806	807	1,979	2.35	1.62
September	208	29	831	890	1,958	1.43	1.40
October	52	34	801	860	1,747	1.47	1.43
Total ..	1,119	313	7,915	8,131	17,478	1.67	1.43

152. *Crime.*—The following statement compares the statistics of crime for the period 1st January to 30th September 1892 with the averages of the same period for the four years ending 1891. There was no great increase of crime consequent on

distress, actuals of reported cases for 1892 being only 12 or about 2 per cent. in excess of the average. The number of dacoity cases exceeded the average by 4 and those of house-breaking by 24 or about 7 per cent. Under theft and riot there is decrease. The number of convicted cases exceeded the average by 86 or 43 per cent., the increases appearing chiefly under house-breaking and theft. The number of pending and undetected cases show a falling off by 73 or 18.5 per cent. The figures do not point to the existence of any severe distress and taking everything into consideration, I should say that crime was about normal during the past season. It is to be noted that the statistics relate to cognizable offences alone:—

Name of offence.	Total number of cases during period January to September.					
	Reported.		Convicted.		Others.	
	Four years' average.	1892.	Four years' average.	1892.	Four years' average.	1892.
1	2	3	4	5	6	7
Murder	9	9	3	5	6	4
Culpable homicide	1	1	..	1	..	..
Dacoity	1	5	..	..	1	5
Robbery	8	8	4	6	3	2
Theft	402	391	141	137	262	204
House-breaking	184	188	48	85	116	103
Riot	10	5	4	2	6	3
Total ..	595	607	200	286	394	321

153. *Dry remissions.*—The total amount remitted under this head for fasli 1301 ending 31st June 1892 was Rs. 1,70,166 as shown below. No dry remissions were considered necessary in Kávali taluk where the crops fared better.

Taluk.	Waste.	Shavi.
	RS.	RS.
Atmakúr	..	..
Udayagiri	407	2,921
Kandukúr	717	7,740
Kanigiri	2,105	9,514
Ongole	2,733	16,676
Total ..	23,184	104,094
Total ..	29,222	140,944

The amount of land revenue, the collection of which was suspended pending the results of this year's harvest, *alias* conditional remission, was Rs. 28,422-9-2 as under:—

	RS.	A.	P.
Ongole taluk	..	..	..
Kandukúr taluk	22,927	7	2
Kanigiri do.	4,415	13	0
Atmakúr do.	668	13	0
Total ..	28,422	9	2

Orders were issued in November 1892 to collect the above in 3 equal instalments in January, February and March 1893.

154. *Wet remissions.*—For the same fasli extraordinary wet remissions were also granted, more especially in Nellore and Gúdúr taluks, where the Pennair may be said to have totally failed. The following statement shows the amounts remitted for waste and withered crop, distinguishing the ordinary from the special, due to unfavorable season. The special remissions, including tiruvakammi or wet assessment, reduced to

dry assessment amounted to 579,596 or $8\frac{1}{2}$ times the ordinary remissions calculated by taking the average of five years:—

Taluk.	Wet remissions.				
	Ordinary waste, five years' average.	Special due to season.		Tiruvakasa.	
		Waste.	Shavi.	Ordinary or five years' average.	Special due to season.
1	2	3	4	5	6
Nellore	Rs. 12,385	Rs. 74,050	Rs. 1,90,848	Rs. 7,385	Rs. 20,927
Gudur	17,007	23,901	62,966	1,739	19,041
Rāpūr	4,490	5,604	4,923	668	5,396
Atmakūr	5,344	6,978	5,062	4,799	16,125
Kāvali	4,092	18,118	47,522	1,517	7,633
Udayagiri	610	866	205	950	2,318
Kandukūr	4,002	24,911	32,466	2,168	5,468
Kanigiri	192	668	212	99	761
Ongole	1,323	4,549	1,111	50	1,439
Total	60,186	1,64,655	3,45,373	19,266	79,568

155. *Expenditure due to famine.*—The statement shown as appendix IX exhibits the particulars of expenditure, both direct and indirect, incurred on account of the past adverse season in 1891 and 1892. Almost the whole relates to 1892. The total expenditure was Rs. 12,67,399 as shown below:—

	Rs.
Professional agency works	57,705
Civil agency works	2,84,952
Gratuitous relief	2,168
Remissions in excess of five-year average	49,762
Extra establishments	9,848
State loans	1,62,004
Total	12,67,399

156. *CONCLUSION—Season.*—It will be seen from the above chronicle and summaries (a) that the south of this district passed through a three-year period of great drought and scarcity, but was fortunately saved by a satisfactory north-east monsoon at the end of 1891 from advancing further on the path of distress, and and thereafter completely recovered itself; (b) that the north of the district had only nine months of drought and scarcity, but that this coming coincidentally with prices forced up to famine rates by the scarcity prevailing in so many parts of the Province caused acute distress, in at any rate, the north-west corner of the district, until the situation was put an end to by a copious south-west monsoon.

157. The subsequent north-east monsoon has been throughout the district copious, if irregular, and there is no reason to suppose that the district will not do well until the date of the next south-west monsoon.

158. *Measures.*—The following points appear noticeable [as arising out of the history of the year: (a) Roads form no doubt excellent relief works, but I have not observed that the drawbacks arising from their itinerating character (above) have been generally taken into account. When there are large on a road work, the work must shift its locality more or less rapidly, for itself, and when thus shifted it has a tendency to show great fluctuation in numbers according as it is near to or far from any populous centre. Except at the height of the late drought and hot season, it is scarcely too much to say that the executive officer in charge of even a major tasked work had it in his power to about double his numbers or about empty the work by moving the work 10 miles this way or

that way. For this reason I kept the detailed allocation of the road works very rigidly in my own hands and endeavoured so to maintain some continuity of action; but for all that it was impossible to avoid a certain capriciousness from this cause. In reading the statistics of laborers on works, this factor has to be considered as much as that of the abstract demand for work due to season. On account of the above drawback, I on the whole prefer for relief a large irrigation work which never shifts and which more fairly gauges the abstract demand. (b) If road repair works show capriciousness in numbers attending owing to their movable character, this is within my experience very greatly more so in respect of "kitchens." Taking a kitchen attached to a work, it makes within my experience all the difference between its being much frequented or quite empty, whether it is say in the middle of the work-spot, or a mile from it, or two miles from it. I know of no principle to regulate this matter, and therefore prefer myself the method of "weakly gangs" where the labour is graduated down to meet all capacities, and where consequently there is some sort of principle, to the purely gratuitous "kitchens." (c) Writing on a very different subject in this office letter No. 1665-D.B., dated 1st December 1891, to the address of the Chief Secretary, I drew attention to the three large methods which the Government adopt for attaining executive action—the district system wherein all subjects are entrusted to the Collector and his subordinates, the departmental system controlled from Madras which is independent of the district system and meets it at certain casual points only, and the Local Board system which leans at present on the district system. I quote that letter only as showing that the distinction was once before formulated from this office. The question here is which of these three systems is to be actually responsible for famine relief. The Local Boards of a district no doubt find funds for relief works, but practically they are so affiliated to the district system, especially on the engineering side, that they are identical with it in the present connection; at any rate I have nothing to say on this score. The code throws in Local Fund works with civil agency (Code section 21). The case, however, is very different with the Public Works organization of a district. This is perfectly independent of what I have called the district system, and the code makes a distinct class of its works, naming them Professional agency (Code section 18). This is done evidently in deference to the existing organization of the Public Works Department, not on account of any necessarily inherent difference in the works themselves. There is as much professional work, for instance, in a large road work executed by a Local Fund Engineer, as in a large canal work executed by a Public Works Department Engineer. Now Government have long since affirmed the general principle that relief works call for concentrated local authority, and indeed under what I have called the District system (Code section 10); but this conflicts with the Professional agency principle (Code section 18). The compromise made is by giving the Collector personally certain powers of taking the initiative and of making rulings—vide several sections of the Code and G.O., dated 16th February 1892, No. 152, Revenue. Also by the provisions for appointing a civil officer to the large works. What I have to submit is that this is not enough. Professional agency works require throughout just as much non-professional supervision in the interests of the cooly and of relief control proper as do civil agency works. The civil-officer plan, even if enforced everywhere (which would be very cumbrous and costly), is no substitute for the power of giving direct orders to persons distinctly subordinate. I consider that, when famine is acute enough to necessitate the introduction of the Famine Code in its entirety, that part of the Public Works Department which deals with relief works should be placed wholly under the District Collector, and that the check of Superintending Engineers, Public Works Accounts Department, &c., should come from without; in lieu of the present system whereby the Public Works Department continues its organization without change, and the check of the Collector comes from without. This opinion must be taken for what it is worth, but it is the result of very close observation of the actual conditions of relief works during the last two years. I wish it also to be noted that this view does not arise from the presence of any want of co-operation between the departments as I have found them, for, in my humble opinion, the maximum of harmony in that matter has prevailed in this district; but it arises from what I consider the inherent and very great weakness involved in the process of

exercising executive control by the round-about method of inter-departmental correspondence. (d) I do not think that the policy of handing over minor irrigation works to the Public Works Department and Professional agency was a success. I have said enough under head "(c)" to indicate generally my reasons. It will be seen (paragraph 86 above) how averse the Engineers of that department were to undertaking these works, and I had to insist upon its being done. (e) For the administration of relief on the lesser forms of relief works, I think that the contract forms shown in appendices III and V to this report and in this office letter No. 871 Tour, dated 15th August 1892, have proved their utility. I have not seen the subject treated elsewhere. (f) The question of section 131 of the code calls in my opinion for further consideration at the hands of the highest authority, if there is any intention of temporarily or permanently deviating from it. Its provisions being clear do not need to be here quoted; they have been treated as absolute in this district for tasked works (paragraph 94 above). To a graduated scale of increments lying above what has been selected as the ordinary task to be enforced, I can see no objection in principle. But a similar graduated scale of decrements below such task becomes at once a graduated scale of fines when section 131 comes in. If this graduated scale of fines is carried out by subordinate officers as a matter of course, the system becomes one of pure results as against the task system of the code; and, if carried down to zero or anywhere near it, it of course abolishes the minimum-wage principle altogether. As I have said, this subject deserves the attention of the highest authority. I will only risk two decided opinions myself, that when distress is at its really acute stage, the provisions of section 131 do not provide too many safeguards for the protection of the distressed cooly, and that the section can be worked just as it now stands so as to secure the appointed task with rare exceptions (paragraph 94 above).

159. *Officers.*—As to the merits of superior officers who have taken part in district operations under the above situations, I find it difficult to make any invidious distinctions, but I should specially express my own obligations to Mr. Mounsey, the Sub-Collector, whose energy was unflagging until he was struck down by illness. The two Special Deputy Collectors, C. Seshadri Row and Syed Mustafa, acquitted themselves with credit, the former as Personal Assistant to the Sub-Collector and the latter in the field. Among officers below the Deputy Collector grade, I have recognized the claims of all those who have done particularly good work by giving them district promotions; as operations in this district were not protracted, I do not think it is necessary to say more than that.

RESOLUTION—dated 18th February 1893, No. 65.

Recorded, pending preparation of the general famine report.

(A true Copy and Extract.)

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

To the Collector of Nellore.

Exd. A. Grubert

1893.
Board of Revenue
 (Revenue Settlement, Land Records
 and Agriculture),
MADRAS.

Printed March 2nd.

Proceedings, 18th February 1893, No. 65.

Recording report on the relief operations in
 Nellore district during the recent distress, pending
 preparation of the general famine report.

11/4
 BOARD OF REVENUE (REV. SETT., L. RDS. AND AGRI.), 9TH DEC. 1892, No. 781.

PROCEEDINGS OF THE BOARD OF REVENUE
 (REVENUE SETTLEMENT, LAND RECORDS AND AGRICULTURE).

READ—the following letter from F. D'A. O. WOLFE-MURRAY, Esq., Acting Collector
 of Cuddapah, to the Secretary to the Commissioner of Revenue Settlement
 and Director of the Department of Land Records and Agriculture, dated
 Cuddapah, 23rd November 1892, Disposal No. 2114-Eng. :—

With reference to paragraph 2 of Board's Proceedings, Mis. No. 7430, dated
 12th September 1892, I have the honour

1. Sub-Collector.
2. Sidhout Deputy Collector.
3. Cuddapah Deputy Collector.

to enclose herein, in original, the reports of
 the marginally-noted Divisional officers of
 my district who were in charge of famine
 relief operations. These reports fully

detail the conduct of such operations. I shall therefore confine myself to the
 following few observations in general on the conduct of famine operations in the
 affected part of the district, viz., the sub-division and the Sidhout and Badvel taluks
 and a portion of Cuddapah taluk.

2. The tracts in question receive their rainfall during both the south-west and
 north-east monsoons. The rainfall of 1889 was fair throughout the district, but that
 of 1890 was scanty, especially in the sub-division and particularly during the latter
 portion of the year, while both the monsoons of 1891 were almost total failures. By
 the end of 1891 most of the tracts under report were arid deserts with little grass and
 only withering and stunted crops, nearly all tanks were so dry that wet cultivation
 had never been even attempted.

3. Enclosure A * is a comparative statement showing the extent of cultivation for
 the five years ending 1889-90, 1890-91 and 1891-92. It will be seen therefrom that
 the dry cultivation in Badvel, Sidhout, Kadiri, Madanapalle, Vayalpad, Rayachoti and
 Cuddapah was less in 1891-92 than in the previous years, whilst the wet cultivation
 in these taluks for 1891-92 was far less than that of the previous years markedly in
 Badvel, Rayachoti, Vayalpad and Madanapalle. Drinking-water was obtained with
 much difficulty, many of the wells going down to a great depth, especially in the sub-
 division taluks, which are elevated and hilly, and in Badvel. In fact, no such
 scarcity of water has been known within the memory of the present generation, while

green grass sold in Madanapalle at 12 annas
 per bundle. The prices of the principal
 food-grains began to exceed the normal
 rates about the end of July 1891 as noted
 in the margin, and many of the working
 classes soon felt the pinch. As the
 Divisional officers' reports contain the
 detailed information as to the prices of
 grains, no separate statement has been
 enclosed. With the failure of the south-
 west monsoon of 1891, distress became
 prominent in Rayachoti taluk, and in

		Normal rates.	Scarcity rates.	Rates about July 1891.	Rates about middle of December 1891.
Rice	..	16-29	9-7	10-35	7-80
Cholum	..	27-61	13-7	22-15	13-39
Ragi	..	29-51	14-7	25-35	14-35
Cumbu	..	26-44	13-1	18-47	12-95

* Not printed.

August 1891 relief operations were opened by commencing the repair of the Ráyachóti-Guvvalcheruvu road under the supervision of the Local Fund Engineer. A kitchen at Ráyachóti for the distribution of cooked food to the really deserving poor was also opened by order of the Commissioner. The former work which cost about Rs. 12,260 was not, however, carried out under the Famine Code. Fixed wages were

	Rs.	A.	P.
Man	0	2	6
Woman	0	2	0
Child	0	1	6

paid to the labourers as noted in the margin as per orders of His Excellency the Governor, who inspected the Ráyachóti taluk in August 1891; the task exacted was the breaking of so many cubic feet of road metal per day, and I may mention it was found that the women were soon found equal to the men at this work. The kitchen, however, was worked under the Famine Code, and Stock Inspector Visvanatha Aiyar managed it efficiently, the recipients being chiefly the town beggars of Ráyachóti, together with an occasional straggling wanderer, who numbered on an average 16 per diem. In Cuddapah town nothing but an accident saved the opening of a Government relief kitchen. There was some excitement in the town in consequence of the grain loot at Kurnool and the sudden rise of prices which took place in November 1891. Two hundred beggars used to besiege my gates daily. Fortunately the management of a fairly endowed public charity at this moment fell into my hands, and by this means I was enabled in some measure to relieve the crowd of mendicants. By the middle of December 1891 prices reached scarcity rates and even went beyond them in the case of rice. The paucity of demand for field labour in consequence of failed crops necessitated the opening of relief works at the expense of the State in the marginally-noted taluks of the district, on or about the dates specified opposite each taluk.

Madanapalle—during the week ending 16th January 1892.
Ráyachóti—about the middle of August 1891.
Kadiri—during the week ending 20th February 1892.
Váyalpád—during the week ending 13th February 1892.
Badvél—during the week ending 16th January 1892.
Sidhout—during the week ending 16th January 1892.
Cuddapah—during the week ending 12th May 1892.

latter date the famine ceased entirely in the district. Special reports on the state of these taluks and the necessary measures of relief under section 35 of the Famine Code were submitted to the Board on the dates noted in the margin, and the under-mentioned works, to last for a period of six months, were proposed for execution as a means of relief to the labouring classes:—

	Badvél.	Sub-division.	Sidhout.	Cuddapah.
Minor irrigation works	Rs. 12,000	Rs. 35,000	Rs. 8,700	Rs. 10,000
Roads	1,12,500	1,10,000	82,000	27,000
Prickly-pear clearance	12,000	..	2,000	18,000
Repair of choultries	500	..	500	..
Wells	20,000	..	1,700	2,000
Other minor works—fence-fencing	10,000	35,000	12,000	..
Gratuitous relief	15,000	7,800	5,000	..
Total ..	1,83,500	1,87,800	92,900	60,000

In addition to this, a sum of Rs. 1,83,000 under Land Improvement Loans Act was also recommended for sanction as detailed in the margin.*

	Rs.
* Four sub-division taluks	1,50,000
Cuddapah taluk	10,000
Sidhout	8,000
Badvél	15,000
Total ..	1,83,000

† Executive Engineer.
One Special Deputy Collector.
Four Special Deputy Tahsildars.

5. The first fortnight of January 1892 saw the opening of road relief works in the sub-division, and the marginal establishment† was sanctioned for the sub-division. The Sub-Collector has written a most excellent account of famine operations in his division, the full particulars given in which it is unnecessary for me to repeat here.

6. I will now pass to Badvél taluk at this period, viz., the early months of 1892. The December rains, which had much improved the northern half of Sidhout, failed here, and by June 1892 minor irrigation works were extensively opened under the supervision of the village officers. These proved fairly successful, but such works have the inherent defect in them that they last but a short time and cannot be always found at the place where they are wanted. The labourers of Badvél had no employment; they assembled by hundreds and clamoured that they had no grain nor money to buy it with, and there was a narrow escape of a grain riot averted only by the tact of the Tahsildar M.R.Ry. G. Naraniah, B.A. M.R.Ry. T. Rama Rau, the Divisional officer, had strongly impressed on me the necessity of opening works at Badvél, but the Board refused sanction at first, and eventually work was opened on January 21st at Badvél, on which (the clearance of prickly-pear) six or seven hundred persons speedily found employment. After my inspection of the taluk and after the Chief Engineer himself had been besieged by a clamorous crowd and forced to "sport his oak," the great project of the Sagilér channel was approved for early commencement. I was satisfied an immediate extension of road works was necessary, and in February some 2,000 persons found relief near Badvél. These works were under Mr. Harley, the District Board's Engineer, who did excellent service in that trying climate, while on Mr. T. Rama Rau above mentioned fell much of the burden of organising the same. March saw further road-works opened at Porumamilla in the north of the taluk, owing to the unavoidable delay which occurred in starting the Sagilér project. By this time a Special Executive Engineer had been sanctioned for this division, and also a Special Deputy Tahsildar for Badvél, while the Divisional officer was relieved of his magisterial work and a Head Assistant Collector was sent to me at head-quarters. Forest work, i.e., grass-cutting, was also opened, and a Government relief kitchen was started in a remote poorly-soiled and ill-populated valley in the south-west of Badvél taluk, where a thorough inspection had satisfied me it was necessary. This kitchen was supervised by the village magistrate, a small extra-monthly payment being made to him; it effected its object, and was run very cheaply; the average attendance was 16 persons, about what I expected. April saw the opening of the great Sagilér project and the consequent closing of the road-works in Badvél. The Executive Engineer was Mr. Chatterjee from Bengal. At first, possibly owing to his being a stranger to the country and the people, there was some confusion on the works; this has already been fully reported on, but after a visit by Mr. Todd, the Executive Engineer of the district, matters went smoothly. The work employed over 4,000 persons daily, and was only marred by an outbreak of cholera in May. At this time the opening of a kitchen for labourers on this work was proposed for the non-working children and others; but by ordering their more extensive employment on very light tasks it was found unnecessary to open the kitchen for some weeks when it was sanctioned, but not opened owing to the sudden favourable aspect of the season. For the relief of poor gosha women in Badvél a committee of Muhammadan gentlemen selected applicants, and doled out annas 1-6 per day for women and 1 anna for each child from funds supplied by His Highness the Maharajah Holkar. Rupees 200 were thus spent. Much labour was also employed in this taluk in deepening and repairing drinking-water wells, and nearly half a lakh was advanced under the Land Improvement Act for improving agricultural

wells. The Commissioner saw the condition of the people on the Badvel works and, I believe, was satisfied with the same.

7. A feature of the famine here was the extensive experiments made on the feeding of cattle by means of prickly-pear. Ryots bought the necessary utensils largely. On the whole I do not think much is to be expected from this mode of feeding when drought prevails over a long period. It becomes more and more difficult to find the plant with sufficient moisture in it to give any nourishment, as the longer the drought the more shrivelled and parched the pear becomes, and it has an evident tendency to scour the cattle eating it. More care, therefore, must be taken in its preparation than the ordinary ryot is likely to give, when one considers that the same ryot sees every ordinary year growing around him enough fodder to feed his cattle for months together, if it were gathered, sun-dried and stored, a process that he is unfortunately likely to neglect until the end of time.

8. Sidhout taluk requires little notice. The north of the taluk had fared tolerably, while in the south only was work demanded. This country is rich in wells, and a single forest work—the walling of a reserve—was found sufficient to fill the demand for labour. Some hundreds were employed here under the Forest Ranger, a Local Fund Overseer, and finally a Stock Inspector. The management of the first official was a conspicuous failure. The usual test was applied by opening works at Famine Code rates in one or two other parts of this taluk, but there were no candidates at the price. The favorable season rendered possible the closing of works in this taluk; and on September 1st those in Badvel were also closed.

9. In the Cuddapah taluk the cultivation under the Kurnool-Cuddapah canal and the subsequent harvest, coupled with the sinking of wells under Land Improvement Loans, have enabled the taluk to cope fairly with the difficulty of the season. About the beginning of April the season became worse, and water could be had only with the greatest difficulty in some of the villages. A small area in the south-east of this taluk, where the crops had totally failed, rendered some relief necessary, and this was effected by the opening of irrigation works under the Public Works Department and of digging wells under Civil agency. But few persons were employed, from two to three hundred only.

10. Out of the sum of Rs. 650 sanctioned by the Board out of Maharajah Holkar's fund, the amounts as per statement noted in the margin were spent for the relief of gosha women; these were paid under the supervision of a committee of respectable Muhammadan gentlemen in the different centres. Each woman was allowed annas 1-6 and each child 1 anna per day. The relief began about the middle of March 1892 and was closed about the end of September when it was considered no longer necessary.

11. The most important source of relief afforded to the agricultural classes during the recent period of distress was the advances made to the owners of lands under the Land Improvement Acts, both under the special and the ordinary well rules. The marginally-noted statement shows the disbursements made for the above purpose in the different taluks of the district. The sinking of these wells has turned out a permanent source of relief to landed proprietors, as well as to those who are employed in tilling the soil and reaping the harvests on the land thus irrigated. Most of the wells now sunk have been dug to a great depth on account of the water stratum having gone

Taluk.	Number of wells constructed.	Number of wells under construction.	Amount.
From 1st January 1891.			
Badvel ..	64	329	Rs. A. P. 47,234 0 0
Sidhout ..	2	133	20,290 0 0
Cuddapah ..	25	91	22,221 0 0
Sub-division taluks ..	694	3,994	4,49,301 8 0
Total ..	795	4,647	5,49,046 8 0

down so low, and, owing to the nature of the soil and sub-soil in the affected tracts, these wells are calculated to last well over the next famine, be it 10 or be it 20 years hence. They have also afforded a permanent source of irrigation to about 15,500 acres of land at the least, calculated at 3 acres per well. The money expended on these wells has saved Government much, in that it kept numbers of persons, how many I consider it so difficult to calculate that I will not attempt it, away from Government works, who must themselves have otherwise received wages direct from Government, and Government must also otherwise have paid in addition for the supervision of their work. Cattle also derive no small benefit from such wells, for it is only in their neighbourhood in such a season that fodder is to be procured. All tank-beds, which in an ordinary hot season contain dry grass, this year had not one blade of any growth whatever.

1 Special Assistant Collector.
1 Special Deputy Collector.
2 Executive Engineers.
5 Deputy Tahsildars.
7 Paymasters.
7 Maistries.
24 Sub-Maistries.
3 Stock Inspectors.
2 Supervisors on Rs. 150.
2 Overseers on Rs. 100.
2 Minor Irrigation Overseers.
6 Sub-Overseers and 4 Clerks.
1 Messenger.
7 Lascars.

1 Superintendent of Poor Houses.
1 English Writer.
2 Cooks.
1 Tools Storekeeper.
2 Audit Clerks.
2 Watchmen.
2 Clerks for Special Deputy Collector.
3 Peons for do. do.
3 Peons for Special Assistant Collector.
14 Special Revenue Inspectors for Land Improvement Loans.
5 Special Gunastahs.
2 Hospital Assistants.

12. The marginally-noted statement shows the special establishments that were entertained in the district on account of the recent relief operations.

13. Statement B* enclosed shows the expenditure that

was incurred on the various works carried out during the time the distress lasted.

14. On the night of the 2nd June heavily descended the first burst of the south-west monsoon, as telegraphed by me to Government at the time, and it spread over the whole district. This was followed by heavy and continuous falls of rain which

	June.	July.	August.	September.	October.
1. Badvel ..	4.05	2.29	8.34	4.25	11.82
2. Proddatur ..	10.00	4.86	8.15	4.01	13.22
3. Sidhout ..	7.55	4.78	14.70	7.63	9.78
4. Pullampet ..	2.86	3.14	12.06	5.49	6.49
5. Cuddapah ..	8.74	3.29	11.90	9.36	9.46
6. Jammalamadugu ..	3.91	6.03	12.92	5.78	7.82
7. Pulivendla ..	4.38	2.46	4.10	4.25	8.88
8. Rayachoti ..	15.05	2.19	8.52	8.51	7.17
9. Kadiri ..	4.76	4.30	7.06	4.78	6.81
10. Vayalpad ..	1.55	2.54	7.37	5.49	5.68
11. Madanapalle ..	5.94	5.07	6.63	5.21	8.87

were very heavy freshes in rivers and hill streams. Dry cultivation commenced throughout the district at the proper season, i.e., in the early part of June, and the crops are doing well except in certain places where they have been injured by the excessive rains.

With the improvement in the season consequent on this timely outbreak of the monsoon, the relief works in the district were brought to a close on the dates noted in the margin.

Cuddapah, about 20th July 1892.

Sidhout, 20th July 1892.

Badvel, 1st September 1892.

Kadiri, June 1892.

Madanapalle, 13th August 1892.

Vayalpad, 15th September.

15. All the officials I have mentioned above worked specially well, and all those mentioned in Mr. Atkinson's report are also to be noticed. With many of their efforts I am personally acquainted. The anxiety of such a time can only be known to him who experiences it; but for inestimable in value. From Mr. Todd also, the District Executive Engineer, I received valuable assistance. The experience passed through showed the Famine Code to be a good skeleton on which to organise, and the district relief rules, which I remodelled

on those of the Bellary district, were fairly successful, but the great thing to avoid in drawing up such is the undue multiplication of rules, which only bamboozle the not very intelligent subordinate usually available in these parts. It is impossible for human hand to draft a code of rules which can control every circumstance that arises in a famine, and much must always be left to the tact and common sense, which, along with physical activity, are the chief qualities desirable in a famine officer.

16. I agree with the Sub-Collector about the difficulty of knowing when to commence famine works; no doubt the regulated wage is an admirable test, but it is as easy, though less dangerous, to begin too early as too late, and the eye of the Collector and Divisional officer, as I have often said, is far better than all the famine analyses and firka books on the world to decide this point in this district at least, where rain in a bad year is often most partial and certainly does not fall equally upon the just and the unjust.

17. The district is now fairly protected against all future famines by its wells and its railways, and there can never be a difficulty of finding suitable labour for so many of those classes as are required to be provided for at least for many years to come. I do not share the Sub-Collector's opinion on the uselessness of forest works; there are many other forest works besides the mere building of walls which are suitable for employing labour. There are forest roads and the trenching and pitting of bare hills with good soil for instance.

18. A few remarks as to the non-necessity for opening relief kitchens. This I think to be owing more or less to the following causes:—

The charitable nature of the Hindus, the dislike of the people to leave their own houses; I had certain paupers brought to Ráyachóti in carts to the kitchen, but they ran away. The bracing nature of the climate of the sub-division, which produces strong constitutions and enables its inhabitants to stand privation well; the sparse population and the fact that the very poor are not numerous, there being very few Pariahs in comparison with many other districts and the fact that they are well off. The local scarcity and uncertainty of rainfall, which teaches many persons to lay by for the equivalent in this country of a "rainy day." I found by the institution of grain-search registers that the people in the sub-division were occasionally fairly provided. In Badvel, the opening of a large relief kitchen was only prevented by the improvement of the season, and by the fact that many on the Sagiler work received first class wages. I also would refer to Mr. Foord's plan of giving very light and easy work, or even no work, to persons on each work who would ordinarily come on a relief kitchen. In my opinion this mode of relief saves an immense amount of money, the establishment of a single kitchen costs a good deal, while the few paupers that assemble round every large work can thus be easily dealt with, and it is here that the discretion and tact of a good famine officer come in and save Government much expense.

19. In conclusion I may say that no deaths occurred from starvation owing mainly to matters being dealt with in good time. Far different was my experience during the tail of last famine in Vizagapatam in 1878, when I had several small famine camps under my charge for a few months, and where the vorandahs used to be speckled with the dead regularly every morning.

ENCLOSURE No. 1.

From J. N. ATKINSON, Esq., C.S., Sub-Collector of Cuddapah, to the Collector of Cuddapah, dated 13th October 1892.

Adverting to your Reference on Current No. 1767-Eng., dated 14th September 1892, I have the honour to submit my report on the conduct of famine operations in the sub-division during the years 1891-92.

2. The sub-division comprises the taluks of Madanapalle, Váyalpád, Ráyachóti and Kadiri. These taluks are surrounded on all sides by ranges of hills and are intersected in all directions by other smaller ranges and groups of hills. They are situ-

ated on a comparatively high level, and, generally speaking, enjoy a cool climate. The rainfall, which is normally about equally divided between the south-west and north-east monsoons, is notoriously uncertain and partial in distribution. The population of

Taluks.	Area.	Population.
Madanapalle	838	136,826
Váyalpád	833	125,009
Ráyachóti	998	113,147
Kadiri	1,159	134,720

the taluks according to the census of 1891 and area are given in the margin. The year 1889 was a moderately good year, the rainfall being up to the average in all taluks except Váyalpád. Agricultural operations were, however, slightly affected

by the progress of the works on the Villupuram-Guntakal State Railway, as both ryots and coolies were attracted by the high wages to be earned thereon.

3. The south-west monsoon of 1890 was scanty, and this was followed by the failure of the north-east monsoon of 1890 and the south-west monsoon of 1891. Distress was felt first in Ráyachóti, in which the failure of the rains had been more complete and which is naturally poorer than the other three taluks.

4. During the hot weather months of 1891, the demand for labour in this taluk increased very rapidly, and to meet it repairs of tanks from Minor Irrigation Funds were extensively undertaken. Thirty-two tanks were repaired at a cost of Rs. 7,785. With the failure of the rains in June and July 1891 distress became more accentuated, and in August relief operations were opened in the repair of the road from Guvvalcheruvu to Ráyachóti. These operations were, however, not carried out under the Famine Code, and I have no information as to the numbers employed or cost. No task was enforced, but a fixed wage was paid. In the same month of August a kitchen was opened at Ráyachóti for distribution of cooked food. This was managed in accordance with the Famine Code. The kitchen was open from 15th August 1891 to 14th October 1891, and during this period 963 people were fed, the average daily attendance being 16. The total cost incurred was Rs. 129. The kitchen afforded relief to the usual town beggars, and it may be doubted in the light of subsequent experience if it was ever really required. Prices at this time—August 1891—were 50 to 75 per cent. above the scarcity rates.

5. There was good rain in most parts of the sub-division at the end of September 1891 and during part of October 1891. In the eastern parts of Váyalpád and Ráyachóti taluks the rain was especially copious and all tanks received supplies. The effect of this was to keep these tracts entirely out of the badly-affected area during the remainder of the distress. In Kadiri also there was fair rainfall at this period, and to this, no doubt, may in part be attributed the escape of that taluk from severe distress in the following nine months. In the rest of the sub-division the first burst of the north-east monsoon was less favorable, and after the middle of October there was practically a total cessation of all rain, the few scattered showers that occurred being insufficient even to support the dry crops.

6. The harvest of the early dry crops (by far the most important in the sub-division) in 1891 was very poor, on the average probably 4 annas and under. Putting aside the eastern portion of Váyalpád and Ráyachóti taluks, such extent of wet crop as was raised was no better, while the extent of wet land left

waste was very large. The wet remissions granted at the ensuing jamabandi are noted in the margin.

7. When the month of November 1891 had passed without any rain at all, it became evident that very severe distress must supervene, and I considered it necessary to recommend the opening of relief works from the beginning of January 1892.

8. The question naturally arises, when any given period of scarcity is the right moment to enforce the Famine Code and open relief works. It seems to me that any hesitation in enforcing the code is a mistake. It is the only certain means that I know of to test the extent of distress. The most experienced observers are apt to be mistaken in their estimates of the condition of the people. The Famine Code, on

the other hand, affords a test of almost mathematical accuracy. I need not do more than just note how immensely such a test lightens the anxieties of district officials. At the same time the enforcing of the Famine Code, if properly carried out, so far from being expensive, is a guarantee against waste of money. Thus it may be doubted whether one-half of those who resorted to the relief works opened in Ráyachóti taluk in August 1891 would have remained there, had tasks been enforced and payments been made in accordance with the code. On 20th, 21st and 22nd December 1891 there was a little drizzling rain in most parts of the sub-division. This was the last of the north-east monsoon. It was insufficient to affect crops, but revived the already withering herbage.

Tasks were enforced and wages paid in accordance with a plan sanctioned by His Excellency the Governor.
(Intld.) O. W. M.

16th Nov. 1892.

9. On 24th December His Excellency the Governor, accompanied by the Commissioner of Revenue Settlement, Land Records and Agriculture, arrived at Cuddapah, and measures were concerted for meeting the distress. It was arranged that road-works should be opened on the road from Gurramkonda to Galivedu at the village of Kalicherla in Madanapalle taluk; and on the road from Galivedu to Konampet at the village of Nulivedu in Ráyachóti taluk, and the Commissioner intimated his intention of visiting the sub-division very early in January in order to open the relief works. At the same time His Excellency the Governor expressed a strong wish that every effort should be made to encourage operations under the Land Improvement Loans Act.

10. On 5th January the Commissioner arrived at Váyalpád, at which place I met him the next morning, and from there we rode to Gurramkonda. On 7th we rode on to Kalicherla and found that relief works had commenced that day with 375 coolies. The numbers rose to 638 the following day, on which day the works at Nulivedu were opened with 472 coolies. On 9th January the Commissioner went to Nulivedu and from there proceeded on a rapid tour through the eastern parts of Kadiri and centre of Madanapalle taluk. Evidences of the bad season were everywhere apparent in withered grain crops, parched tank-beds and water-courses, and hills and plains innocent of verdure. However it was not considered necessary to open any further relief works at that time. On 16th the Commissioner left the sub-division.

11. The opening of the works in the Madanapalle and Ráyachóti taluks was the turning point in the distress. From that time forward anxiety was at an end, not only because it was now certain that all who really needed relief could obtain it, but because I was now provided with a gauge by which to estimate the extent of distress in other parts.

12. During his visit the Commissioner had directed that a road-work, which the Madanapalle Taluk Board had just taken up at Maddayagaripalle near Peddatippasamudram at an estimated cost of about Rs. 2,000, should be treated as a famine relief work, and executed under the provisions of the Famine Code. On 17th January I proceeded thither, and as the coolies refused to accept famine wages, the work was closed on the 19th.

13. In its order No. 4, dated 4th January 1892, Revenue Department, Government had sanctioned the entertainment of a special famine establishment as noted in the margin. Mr. Foord, the Executive Engineer, appointed to be in charge of works arrived at Kalicherla on 24th January, and from that date till his relief on 28th July 1892 was in sole executive charge of all relief works in the sub-division.

14. The condition of affairs in the neighbourhood of Ráyachóti town had for many weeks been critical, and it was found necessary to open works at that place at the beginning of February.

15. During all this time strenuous efforts were made to push on operations under the Land Improvement Loans Act. The energy of the Váyalpád Tahsildar was being attended by a large measure of success. In the hope of keeping down the numbers on the State relief works I directed the Madanapalle and Ráyachóti Tahsildars to push the Act to the utmost in the immediate neighbourhood of those works. It was, as I have no doubt, largely in consequence of their efforts that during February the numbers employed on the Gurramkonda-Galivedu road in the Madanapalle taluk and on the works in the neighbourhood of Ráyachóti town, actually exhibited a steady decrease, and on March 1st were as noted in the margin. Whether owing to unfavorable local conditions, or to the existence of more acute and wide spread distress, I was unable to attain a like result on the Galivedu-Konampet road, the numbers on which on March 1st stood at 945.

Gurramkonda-Galivedu road 461
Ráyachóti 380

16. The Commissioner had several times expressed a strong preference for irrigation works as a means of affording relief, and it was directed that where possible they should be undertaken on the task work system under departmental supervision, and where the insignificance of the works or their position precluded such an arrangement, that they might be given on contract as usual to the village officers at reduced rates, a condition being imposed that all applicants for work should be admitted. The latter system is, I believe, of practically no use for affording relief. In accordance, however, with the Commissioner's wishes steps had been taken during February to open certain tank works on the contract system in Madanapalle and Váyalpád taluks, and during March a large number of similar works were opened in Kadiri taluk, where distress was increasing though fortunately it never became very acute.

17. In the latter part of February I proceeded to the Kadiri taluk and was occupied with jamabandi there till the last week of March. During this time I visited about two-thirds of the taluk, the result of my observation being that all except the extreme east of the taluk would, thanks to its magnificent wells, probably escape severe distress. It was in the eastern parts of the taluk that most of the tank works alluded to in paragraph 16 were initiated.

18. During March Mr. Foord and myself had been concerting measures to take up minor irrigation works under departmental supervision. Our first attempt at Kokkunti in Kadiri taluk failed to attract any coolies, partly because the large extent of well cultivation and of well-digging was then giving much employment, and partly because the would-be applicants for relief were afraid of the rigid enforcement of tasks. This failure was satisfactory, in that it showed that the cry of distress in the Kadiri taluk was exaggerated; and I was able to leave this taluk to itself devoting attention more exclusively to the other three.

19. Meanwhile the numbers on relief on the other works had been steadily increasing, and at the end of March stood as noted in the margin. The large numbers employed on minor irrigation works in Kadiri taluk were, as pointed out in my fortnightly narrative, dated 2nd April, No. 63, no true measure of the distress, pressure having been exercised by the village officers under the mistaken notion that the works must be completed before 31st March 1892. The Madhavaram reserve was a new work opened partly to relieve congestion on the Galivedu-Konampet road, and partly to afford relief to villages at a distance from other works. It was, however, only sparsely resorted to for another month to come.

20. On 3rd April, work was commenced under departmental supervision on the task-work system on a group of tanks near Gurramkonda. These tanks continued to employ large numbers of laborers until the receipt of water in June put a compulsory

stoppage to the works. It is significant that though several tanks in the same neighbourhood had been and continued to be repaired under the contract system they never attracted more than a score or two of labourers, and those all adults and in good working condition. Yet I never received any complaints that applicants for employment had been rejected.

21. During April the progress of relief operations was uneventful, the numbers on relief showing a steady and, if it may be so called, healthy increase. At the close of the month the numbers were as noted in the margin.

Roads.			
Gurramkonda-Galivedu	...	...	1,193
Galivedu-Konampet	...	...	1,656
Ráyachóti	...	...	1,876
Minor Irrigation.			
Madanapalle	...	...	447
Váyalpád	...	...	598
Kadiri	...	...	235
Forest Fencing.			
Madhavaram reserve	...	...	124
Drinking-water Wells.			
Váyalpád	...	...	92
Total	...	...	6,219

chóti early in February, but it was found necessary in April to set energetically to work to deepen the large reservoir or so-called koneru, which supplies half the town with water. For about a fortnight an average of about 250 coolies per diem was employed, and it may be hoped that now the town, or so much of it as is served by this koneru, is for ever relieved from all fear of water famine. At about the same time another koneru at the opposite side of the town was cleared out. Similar operations were undertaken at Váyalpád at the end of the month, confined, however, to mere removal of silt.

23. The above are the only works undertaken by the State for improvement of drinking-water supply; and considering that the late famine (if it may be permitted so to speak of it) was as a water famine, it is said, far worse than that of 1876-77; it says something for the independence of the people that they should in this matter have reconciled themselves to doing without State assistance. No doubt it was a case of "where the devil drives," and doubtless the thousands of irrigation wells that were sunk or deepened with State loans also served for drinking-water wells. But at least it is matter for congratulation that money was not frittered away in the sinking of wells, which, as was the case in 1876-77, as soon as they had served their immediate purpose, were allowed to silt up even to the ground level.

24. On 27th April His Excellency the Governor accompanied by the Commissioner of Revenue Settlement, Land Records and Agriculture, arrived at Madanapalle, his advent having been heralded in parts of Kadiri and Madanapalle taluks by a fine fall of rain on the night of 26th, estimated at from 1 to 2 inches. This fall was most opportune, enabling ploughing to commence at once. This was followed by nearly another inch on 2nd May, and so at this time prospects for the ensuing early sowings looked bright.

25. On 3rd May the Commissioner visited Váyalpád and sanctioned the opening of a relief kitchen at that place. The inmates were, generally speaking, the usual town mendicants, all "sturdy beggars" being of course rejected. These people had for many months been gratuitously supported by a few public spirited men of the place, among whom I may specially mention the Village Magistrate, Chintala Narayana keddē. I do not go so far as to say that if State relief had been refused these wails would have been allowed to perish. But undoubtedly in the then state of prices it was a severe tax on any private purse to have to feed some 50 odd mouths every day. The largest number fed at the kitchen on any one day was 52 on 13th July 1892, the average attendance being about 50. Efforts were made to exact some trifling labour from such of the

inmates as were capable, and when in June I introduced a very light stone-breaking task, the inmates of the kitchen thought better of it, and ceased to attend. The kitchen was finally closed on 25th July 1892.

26. Early in May the Commissioner visited the tank works at Gurramkonda and the road works on the Gurramkonda-Galivedu road, as well as a small relief work which had been opened near Madanapalle. This inspection was followed by a visit from His Excellency the Governor, when the coolies employed on the above named works as well as those on the Ráyachóti road, to the number in all of considerably over 3,000, were mustered and inspected one by one. His Excellency expressed himself satisfied with their appearance.

27. At the end of the month another irrigation work was taken up under departmental supervision. This was the Doricheruvu, a large tank some 12 miles from Ráyachóti in the north-west corner of the taluk. The tank had been breached about 20 years previously. The work to be done was to construct a new low-level sluice and fill in the breach. This work outlasted the famine, and at the time I write is being completed as an ordinary work. It is calculated that this tank will irrigate 150 to 200 acres and it may almost therefore be called a remunerative work.

Roads.			
Gurramkonda-Galivedu	...	...	1,449
Galivedu-Konampet	...	...	1,834
Ráyachóti	...	...	1,851
Minor Irrigation.			
Madanapalle	...	...	100
Váyalpád	...	...	707
Ráyachóti	...	...	348
Kadiri	...	...	100
Forest Fencing.			
Madhavaram reserve	...	...	707
Drinking-water Wells.			
NIL.			
Total	...	...	7,096

28. At the end of May the numbers on relief were as noted in the margin. It had been hoped that the promise of May, in the fine showers that ushered in the month, would have been fulfilled by the thunder storms that usually presage the monsoon. This expectation was disappointed and the deficient rainfall during the month, amounting to from 50 to 200 per cent. less than the average, no doubt prevented the numbers on relief from decreasing.

29. The actual highest on record for numbers on relief was attained on June 2nd when the total stood at 7,356. On that night the famine received its death-blow, in what proved to be the first violent burst of an exceptionally heavy south-west monsoon. The rain, as registered on the morning of the 3rd, was as follows:—

	INCHES.
Madanapalle	3.44
Váyalpád	1.18
Piler	0.50
Ráyachóti	3.70
Kadiri	1.12

This fall was followed by constant heavy showers all over the sub-division. Indeed from that time forward there has been defect of sunshine much more than of rain.

30. This change in the season produced an immediate effect on the relief works. The decrease month by month has been as follows:—

30th June	...	...	...	...	...	...	3,188
31st July	...	...	...	...	...	...	1,616
31st August	...	...	...	...	...	...	476
15th September	...	...	...	...	...	...	358

On the last named date relief works were closed.

31. The above is a sketch of the progress of relief works proper. Of other measures of relief there is little to be said.

32. Most strenuous efforts had been made by all Tahsildars during the period of distress to encourage operations under the Land Improvement Loans Act. The following statement shows what measure of success had attended their efforts up to the close of September:—

January 1891 to September 1892.

Taluk.	Ordinary or Special.	Applications received up to 30th September 1892.		Disbursements up to 30th September 1892.		Wells constructed.	Under construction.
		Number.	Amount.	Number.	Amount.		
Madanapalle ..	Ordinary ..	104	12,900 0 0	93	11,815 0 0	4	89
	Special ..	1,080	1,58,806 8 0	888	88,563 0 0	21	887
Vayalpad ..	Ordinary ..	79	9,850 0 0	70	8,480 0 0	68	2
	Special ..	1,509	1,79,682 0 0	1,394	1,21,495 0 0	432	992
Rayachoti ..	Special and ordinary ..	1,149	1,27,117 0 0	1,149	1,07,904 0 0	152	957
	Ordinary ..	195	25,611 0 0	68	8,909 0 0	10	46
Kadiri ..	Special ..	1,049	1,02,105 8 0	1,049	1,02,105 8 0	7	1,041
Total ..						694	3,994

It would be difficult to estimate the exact effect of these operations viewed merely as relief measures. But calculating that each well would give employment and subsistence to eight persons for a period of two months, then it follows that between 1st January 1891 and the end of September 1892 37,504 persons had been supported for two months or 3,572 persons for the whole period of 21 months.

33. Gratuitous relief was very sparingly given, only in the Rayachoti kitchen during part of August, September and October 1891 and in the Vayalpad kitchen during part of May, June and July 1892. A few gosha females and children were also relieved in Rayachoti and Gurramkonda from funds provided by His Highness the Maharajah Holkar. No kitchens were opened on the works. Mr. Foord made an experiment and found that there was no demand for such an institution. On each of the larger works there was a small number of individuals incapacitated either by old age, lameness, deformity, blindness or the like from turning out a fair task. Such persons were entered in the gangs, were given some light or suitable work, and in calculating the task of the gang were not taken into account. This system appeared to give satisfaction to the individuals themselves, and certainly saved the expense and the worry of a kitchen. The children never seemed to be in want of gratuitous relief and were supported by their relatives. Their condition never gave cause for anxiety.

34. The health of the famine labourers was invariably good. Two medical subordinates were during the months from February to July attached to the works; but, as it fortunately turned out, their posts were mere sinecures. Beyond a few simple cases of fever, dysentery and bowel-complaints, sore eyes and accidents, there were never any patients. During the whole course of the famine operations only 3 deaths were reported among the coolies—one, that of a woman who was accidentally knocked down by a stone roller, receiving such injuries as resulted in death; another of a little child who fell into a well and was drowned; and the third of a man who was certified to have died of indigestion.

35. This immunity from sickness and mortality is the more remarkable because the season was in other parts of the sub-division decidedly unhealthy. There has been a good deal of sporadic cholera, which in Piler became severely epidemic at the end of May. In the Vayalpad taluk and parts of Rayachoti there has been unusually severe fever, upon which I have reported in my letter, Dis. No. 2902, dated 8th July 1892.

36. There were the usual complaints that the famine wage was insufficient. But provided the wage actually reaches the hands for which it is intended and that facilities for purchasing grain at a fair market rate are provided, experience has shown that the ordinary third-class wage was sufficient to keep the labourers in sound health and strength. It was, however, brought to notice that the local rates for ragi (the staple grain for purposes of calculating the wage) at the works on Gurramkonda-Galivedu and Galivedu-Konampet roads were very considerably higher than those in the head-quarters of the Madanapalle and Rayachoti taluks. It was therefore ordered that the rates prevailing in the nearest weekly market should be adopted for purposes of calculating the famine wage. A further difficulty was experienced on the Galivedu-Konampet road in that there were no local stocks of grain at all. Arrangements were,

however, made to get the village magistrates to import grain and subsequently some of the Rayachoti merchants undertook this business. For many months all the grain exposed for sale at the works was imported from Cuddapah via Rayachoti—a circumstance which shows that my estimate of stocks in December last was not very far wrong.

16th Nov. 1892. (Intld.) O.W.M.

37. The different classes of works upon which labour was employed were—

(1) Repairs of roads, including breaking metal, stacking gravel, spreading and consolidation of the same; digging catch-water drains, &c., and digging and fencing avenue pits.

(2) Repairs of tanks under either—

(i) Contract system, or

(ii) Departmental supervision on task work.

(3) Fencing forest reserves with a dry stone wall.

In all cases, except, of course, where tanks were repaired on contract, tasks were very carefully calculated and strictly enforced. I was very greatly indebted to Mr. Foord for the care with which he adjusted tasks to the manifold different conditions that presented themselves from day to day.

38. Of all the different forms of work undoubtedly road works admit of the most effective supervision and execution. Departmental repair of tanks is almost equally satisfactory, but here it generally happens that some quota of skilled labour is required, and unless either the work is a large one capable of employing large numbers for long periods, or is distributed over a number of tanks in close proximity to one another, as at Gurramkonda, obvious difficulties arise. I have not a single good word to say for repair of tanks on contract. Such works afford no relief at all.

39. Forest fencing is not a very satisfactory method of giving relief. An excess of women and children is much more difficult of proper accommodation than on roads. The severity of the work varies immensely. At times when the forest boundary passes over large expanses of rock, far from villages, from water and even shade, the task in the hot weather is almost insupportable. The coolies are spread over very large distances, rendering supervision specially difficult, and, in the end, the fencing is only of doubtful utility. A three feet wall is insufficient to keep men or cattle out of the reserve, while, as Mr. Popert has pointed out, the wall affords an admirable coigne of vantage for the shepherd or goatherd to watch for the forest guard.

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40. With the exception of the koneru (drinking-water reservoir) works at Rayachoti and Vayalpad, no petty works were opened near villages. I am altogether sceptical of either the advisability or necessity for such works. Supervision is of course an immense difficulty and on the other hand those who are really in need of relief and capable of work are quite willing to come to the large central works.

41. The net result of the famine operations may be stated as follows:—

41 miles of road made or repaired including an entirely new ghât trace, $\frac{1}{4}$ mile long.

59 tanks, irrigating approximately 2,502 acres, repaired.

16 miles of forest boundary fenced with a wall 3 feet high.

3 large drinking-water reservoirs cleared out and deepened.

42. In paragraph 6 above I have mentioned the extent of remissions which were given in jamabandi of fasli 1301. No remission was granted for waste, or loss of crop on dry lands, nor was any postponement of kists allowed. Nevertheless the land revenue demand of fasli 1301 was practically all collected by the end of June and that without any hardship. The statistics of coercive processes issued will compare favorably with those of previous years.

43. The past two years have demonstrated how far different localities and different classes in the sub-division are liable to distress, and a few remarks on this subject may be of future use.

44. Most parts of the sub-division are entirely dependent on local rainfall, and, as nothing is more certain than the uncertainty and capriciousness of the rainfall, it follows that most parts of the sub-division will always be liable to distress in years of short rainfall. The exceptions to this generalisation that is to say, the localities where fair water-supply may generally be looked for, are as follows:—

(i) The villages lying along the foot of the Palkonda and Seshachellam hills, extending to a distance of not more than 5 miles from the foot of those hills; this embraces a narrow tract along the northern edge of Kadiri taluk, the northern and eastern edge of Rayachoti, and eastern side of Vayalpad taluks.

(ii) A few villages situated among the high hills to the south and south-west of Madanapalle.

(iii) Another small group of villages among the hills to the west of Kadiri.

(iv) Those villages which are situated actually on the banks of the larger rivers, viz., the Piler river, Bahuda Madduleru and in its lower course the Mandavir.

The above localities can, it is now manifest, stand two years of continuously deficient rainfall without suffering seriously. They are almost safe from famine.

45. There is another tract comprising the central and western parts of the Madanapalle taluk, including the villages watered by the large tanks of Rangasamudram, Peddutipasamudram and Kandukur and others of rather less size, which even, though the water-supply be deficient, can, owing to the natural fertility of the soil and other advantages, support its population through two bad years.

46. The whole of the rest of the sub-division may be regarded as certain to suffer severe distress in case of the failure of three monsoons consecutively. Alleviation will, however, be afforded in those parts where well irrigation is most developed and where there are most fruit-bearing trees, especially tamarind. I am not aware that it has anywhere been pointed out how large a part is played by sugarcane gardens and tamarind topes in staving off distress. The agent of a well planted with sugarcane will afford much more continuous employment than if planted with paddy, and tamarind trees will continue to bear crops in years when the raising of cereals is impossible. The former during the autumn months afford constant employment in tying the canes, while the cutting, pressing of the canes, and boiling of the juice continue from the end of January till half-way through March. In March and April again the gathering and packing of tamarinds employ large numbers of laborers. It was the possession of large extents of sugarcane gardens and tamarind topes that preserved the tract referred to in paragraph 45 above and many other isolated villages from famine, and conversely the most treeless tracts in the sub-division are precisely those where relief works had to be opened, viz., the Tamballapalle firkas of Madanapalle taluk, the Nulivedu and Rayachoti firkas of Rayachoti taluk and part of the Vayalpad and Gundlur firkas of Vayalpad taluks.

47. The castes and classes that suffered longest and most severely were the ordinary laborers and poorer cultivators, Muhammadans, Boyas, Balijas, Kapus and Brinjaris or Lambadies. Very few of the tank-digger castes resorted to the works at first, finding, as they did, ample employment in well-digging. At a later period, however, their employers learnt to dig the wells themselves and the number of Voddars on the works increased. Malas and Madigas did not come on relief in any numbers till about the month of May. These castes are generally attached by a sort of predial servitude to the land of the wealthier cultivators and as long as there were any garden crops on the ground they found occupation in watering, weeding and harvesting. The Malas and Madigas were, generally speaking, the sturdiest figure on the works. There are not many weavers in the sub-division; such as there are resorted freely to the works, no special treatment being called for in their case.

48. Among many suggestions that might be made for staving off distress in the future I will only mention three, which appear to me of prime importance and general applicability—

(1) The steady expansion and improvement of well cultivation.

(2) A thorough overhauling of the various tank systems by a scientific staff, in connection with which I may say that I believe many most valuable irrigation sources are at present either wholly neglected or not made the most of.

(3) The planting of tamarind and other fruit-bearing topes in those tracts which are now treeless.

49. Finally I desire to bring to your notice the names of a few individuals to whom I am most particularly indebted for assistance during the period of distress. It would be difficult to exaggerate the amount of my indebtedness to Mr. Foord, the Executive Engineer. He was indefatigable. I consider that it was almost solely due to him that the history of the relief operations is unmarred by any untoward incident. His services were invaluable. Of his subordinates Overseers A. K. Subramanya Iyer and A. Masilamany Mudaliar deserve special recognition for the tact and withal the strictness with which they managed their works. The latter is unprovided with any employment and I think he well deserves to be taken into Government service as a reward for his labours.

I have made him road overseer on Rs. 70 a month.

16th Nov. 1892. (Intld.) O.W.M.

Mr. Scott, the Sub-Overseer on the Galivedu-Konampett road, had a hard billet and did his work well. He, too, has no permanent employment, and like Masilamany Mudaliar deserves to be permanently provided for.

All my four Tahsildars distinguished themselves by their success in pushing on operations under the Land Improvement Loans Act, but I may specially mention S. Pompathi Sastri, Acting Tahsildar of Vayalpad, and M. M. Varadachariu, Tahsildar of Rayachoti, for their untiring zeal in this matter. The latter was most active, constantly touring about his taluk, and always to be relied on to meet any emergency that might occur among the 4,000 and odd famine laborers employed in his taluk.

ENCLOSURE No. 2.

From M.R.Ry. T. RAMA RAU, Garu, General Charge Deputy Collector, Sidhout division, to the Collector of Cuddapah, dated 30th September 1892, Ref. on C. No. 3071.

Adverting to your foot-note (Reference 1757-Eng., dated the 14th instant) to Board's Proceedings, Mis. No. 7430, dated the 12th idem, I have the honour to submit the following report on the conduct of famine operations in the Badvel and Sidhout taluks during the past season.

2. Both these taluks suffered a good deal last year, Badvel being far worse off than Sidhout, as there was a failure of both the monsoons there. The two previous years also were unfavorable. I brought the condition of the two taluks to the notice of the Collector in November last and thinking that if there was some rain in December, as was the case in former years, the situation would be improved, recommended the opening of relief works in January in case the north-east monsoon should prove a failure (*vide* my letter No. 1012, dated 26th November 1891, printed in Board's Proceedings, No. 788, dated 11th December 1891). I was thereupon directed to open minor irrigation works as relief works.

3. Accordingly a number of irrigation works were started in December on contract system in anticipation of sanction of funds as approved by the Collector, the contractors being bound to employ all classes of coolies without distinction for unskilled labour (*vide* Collector's letters, Disposal No. 2106-Eng., dated 8th and Reference on C. No. 2856-Eng., dated the 14th December 1891). Soon afterwards an additional Minor Irrigation Overseer was sanctioned for each taluk, the Tahsildar's special advance was increased from Rs. 400 to Rs. 1,000, and these officers were allowed to carry with them the amount in their tours in order to secure prompt payment of wages (Collector's foot-note to his letter No. 2856-Eng., dated the 21st December 1891, and 6th January 1892). A few days after these works were put in hand, orders were received that no relief works should be given out on contract, but that they should be done departmentally as task work and at the rates prescribed in the Famine

Code (*vide* Collector's Reference No. 2856-Eng., dated 16th December 1891, Disposal Nos. 2460-Eng. and 2461-Eng., dated the 18th December 1891). As there were no task-work tables or special famine rules to go by for the execution of minor irrigation works, I addressed the Collector on the subject in my letter No. 1082, dated 22nd December 1891, and made certain proposals for carrying it out. These orders were again modified in the Collector's Circular No. 2478, dated the 26th idem, and Disposal No. 76-Eng., dated the 15th January 1892. Divisional officers were informed that minor irrigation works opened for relief be given out under the supervision of the village officers on the express condition the latter undertook to allow all classes to work on them. Effect was at once to the revised instructions.

4. There being no minor irrigation works in the Badvel town or in the neighbouring villages, where there was a large number of laboring classes, and in view of the fact that the bad season was severely affecting them, as they had not been given employment, and that crime was rapidly on the increase there, I put in my letter No. 1066, dated the 16th December last, the opening of some Local Fund works, such as prickly-pear clearance and the construction of some new and the repair of certain old wells as water scarcity was being very badly felt in the somewhat town of Badvel. I was thereupon asked to report whether these works could be postponed for a few weeks (Collector's Reference No. 2922, dated 20th December 1891). I replied in the negative and was soon afterwards authorised to open the prickly-pear clearance, which I did on the 21st January immediately after the works were placed at the disposal of the Tahsildar.

5. During the latter part of December good rain fell in the northern part of the Sidhout taluk and saved the standing crops over a large area; but it was the case with Badvel. The matters there began to grow worse. It was then necessary to undertake measures of relief on a somewhat extensive scale and directed to select Local Fund works (drinking wells, roads and prickly-pear clearance) which should be sufficient along with minor irrigation works to give labour to the people who might want it during the following six months. In regard to minor irrigation the estimated amount far exceeded the average revenue in the majority of the taluks and the repairs consisted more or less of revetment and masonry, earthwork, the kind of work suited for unskilled labour, forming but a small fraction of the estimates. The Local Fund works which could be selected were not sufficient to find employment for the whole taluk for six months. I therefore reported in my letter, Reference No. 112, dated 13th January 1892, that the contingency fund met only if the Sagilér project were undertaken. The Chief Engineer for the project having arrived at Badvel a couple of days afterwards, I spoke to that officer on the subject. He said that the quantity of earthwork to be executed would be comparatively small and that for the present it was contemplated to undertake it up to the Porumamilla tank only (a distance of about 10 miles) and not up to the Sagilér tank (for 30 miles). I brought the matter to the Collector's notice and suggested the desirability of undertaking road works (repairing existing ones rather than starting new ones—*vide* my Reference on C. No. 112, dated 16th January 1892).

6. During the latter part of January the Collector arrived at Badvel and was visiting a great portion of the taluk and issued the opening of road works and gave necessary instructions to the Local Fund Engineer. Meanwhile prickly-pear clearance was going on there. On the first day a large number up to 400 came for admission, and when I informed them that the work would be conducted on a task-work system and wages paid at Famine Code rates, all but a dozen coolies were kept aloof for 3 days though the wages were being paid at second-class rates, the sanction of the Collector; but the numbers began to swell considerably and in the course of a week we had over 400. As no task had been laid out for this kind of work, I adopted 75 per cent. task with the approval of the Collector. Coolies were formed into gangs of 50 each with a head cooly for each gang and a maistry over all the head coolies. The work continued under this system and was started on the 12th February; from which date the wages were paid at third-class rates and the number of coolies rapidly began to fall off. It

down to 42 in 3 days afterwards. The work (prickly-pear clearance) was closed in March last. The chairman of the Badvel union was in charge of the work and was entrusted with the duty of payment of wages. The Tahsildar and myself too were personally supervising the work while we were at Badvel. We all three were present on the day on which it was started.

7. As stated above, the road works (breaking and stacking metal) close to Badvel were opened under the management of the Local Fund Engineer. He happened to be absent from the taluk both on the day on which the work was started and for a few days afterwards. He had, however, left necessary instructions with his overseer who remained in immediate charge of the work till it was closed. As printed rules for the conduct of relief works had just been furnished to all the officers concerned, we had not much difficulty in organizing gangs or establishment or marking tasks or regulating wages. Some inconvenience was felt for a few days in the beginning on account of want of certain forms of returns, such as work sheets, &c. The numbers went on rapidly increasing from 400 to over 1,000 in 4 days. After they received wages on the first payment day in my presence, they struck work the following day (16th) complaining that the wages were rather too low (although none received less than third-class rates). I did not, of course, yield to them. They soon afterwards returned. All this occurred during the absence of the Local Fund Engineer; during which period I exercised personal supervision. The work did not attract many laborers from the north of the taluk. The total number did not go much beyond 2,000. Most of them belonged to Badvel and its neighbouring villages.

8. On the 17th March last, road works were opened near Porumamilla too under the Famine Commissioner's personal orders. There was a more rapid rise here in the number of coolies than on the works near Badvel, but, as in the case of the latter, most of the laborers belonged to villages close to the line of works. Here too, as in Badvel, the coolies struck work in the commencement. The work was in the immediate charge of a Stock Inspector under the supervision of the Local Fund Engineer, myself and the Tahsildar just like the other work. The formation of gangs and the appointment of head coolies and sub-maistries and maistries according to the rules and subject to my approval devolved upon the Tahsildars in both places.

The coolies were formed into gangs of 100 each with a head cooly for each and a sub-maistry for every four head cooly gangs. A head maistry was appointed over 1,600 persons; 50 per cent. of the full task (648 cubic feet) was the quantity of work (breaking and stacking metal) prescribed for each gang per day. A few coolies of each gang were employed in supplying drinking-water for the rest. There were two paymasters, one on Rs. 40 per mensem at Badvel and the other on Rs. 25 at Porumamilla. Payments were made twice a week. Now and then I personally checked measurements of work done and the nominal rolls of coolies. The Local Fund Engineer and the Tahsildar too did the same. I also checked the paymaster's accounts. There was pretty good shade under the avenue trees on the line of works near Badvel, but there was none such near Porumamilla. A few sheds were therefore put up there, but they were not much availed of by the laborers except during their recess between 12 noon and 2 p.m. For the night they returned home in most cases. The Porumamilla road works were closed as per orders of the Commissioner on the 21st April soon after the Sagilér project was put in hand on the 18th idem. The Badvel works continued till the 10th May when they were stopped under the orders of the Collector contained in his telegram of the 5th idem.

9. After the closure of road works the Revenue Department had not much to do with the direct supervision of relief works except a few minor irrigation works which had been already undertaken and which had not yet been completed and a few drinking-water wells; but our time was taken up in watching the condition of the people, in administering gratuitous relief, and in looking after the laborers on the Sagilér works. The Tahsildar was appointed civil officer on these works under section 116 of the Famine Code. As stated in the foregoing paragraph, the project was opened on the 18th April. There was some confusion and want of system there in the beginning. No sufficient previous intimation was given to the Revenue Department. The Tahsildar was then with me in the other end of the taluk. In two or three days

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10. The condition of the people was, on the whole, good. The timely opening of relief works near Badvel town in January saved numbers who would otherwise have suffered a good deal. There were no deaths from starvation. Cholera, however, carried off a large number of people. It first broke out on the Sagiler works in the last week of May. Necessary arrangements were made to arrest the progress of the disease; the gangs were scattered and the patients removed to a cholera shed where they received medical aid. There were not several cases on the line of works. The disease spread itself throughout the taluk and has not even yet completely disappeared.

Fever, of a virulent type, was also prevalent during the hot season and proved fatal in some cases. It was something like influenza.

11. No relief kitchens were found necessary on the road works either near Badvel or Porumamilla. Most of the coolies on the Badvel works belonged to that town or neighbouring villages. They used to leave their non-working children at home when they went out to work and return home in the evening. The works commenced with comparatively a small number (between 400 and 500) and there was no rapid rise, the total number not going far beyond 1,000. The Porumamilla road works were not intended to be kept on for more than a month, as by the time they were opened in the latter part of March the Sagiler project had been sanctioned and the Commissioner had ordered them to be closed immediately after the project was put in hand. This project was opened on 18th April.

On the 10th March, a relief kitchen was opened at Jangamrajpulli, a village situated in a somewhat isolated valley about 15 miles to the south-west of Badvel, after the Collector's personal inspection in the latter part of January. There are two cusba villages and about a dozen hamlets in this valley. The village magistrate was appointed superintendent with an allowance of Rs. 5 in addition to his pay. There were six inmates in the beginning. The number after remaining at 9 and 10 for some days suddenly rose to 19. It gradually fell down to 10. The kitchen was closed on the 9th August last.

In the month of May the Public Works Department officer in charge of the Sagiler works reported that there was a large number (about 1,000) of non-working children belonging to laborers and that they required gratuitous relief. Some of them, I thought, after personal inspection, required to be fed gratuitously. I then recommended the opening of a kitchen on the works. The Collector was of opinion that it was possible to employ a larger number of children on the works and that their employment would obviate the necessity of opening a kitchen. This course was then adopted. Sanction for starting a kitchen was, however, accorded in the beginning of July, but by that time the season had so far improved that it was not found necessary to open one.

12. Under the orders of the Collector, a committee, consisting of three Muhammadan gentlemen of Badvel town, was formed to relieve the gosha Muhammadan women of that place requiring assistance out of the Maharaja Holkar's donation. A sum of Rs. 200 was altogether spent on this purpose at the rate of Rs. 50 per month, the dolo being As. 1-6 per adult and one anna per child per diem.

13. Scarcity of water was more keenly felt than the abnormally high prices of food-grains. The supply in the existing wells in the Badvel town having almost failed, three new drinking-water wells were sunk (two in the bed of the tank and one below it) at a cost of Rs. 1,000. The Commissioner saw them when he inspected the place in March. They proved no small boon to the people of this town. Under the orders of the Commissioner some of the old wells on the line of works, both in Badvel and Porumamilla, were cleaned out by famine labour. Drinking-water wells in other parts of the taluk were also repaired. The want was relieved in several places by the repair of old and construction of new agricultural wells under the Land Improvement Act, which also afforded employment to a large number of laborers. The amount of loans sanctioned up to date has come to Rs. 45,409-8-0 and the number of wells to which the amount relates to 278. This water famine continued till the general prospects improved in June when there was good rain throughout the taluk.

14. Cattle suffered very much for want of fodder and water. They were driven to the jungles in large numbers. Hill grass too became scarce in the course of a few months as the hot season advanced. In a few villages where there was some crop under wells and in places where paddy withered the ploughing cattle had some fodder; but that too was insufficient. In spite of all this, cattle owners did not buy hill grass which was stored in one or two localities by the Forest Department. Several experiments were made successfully to feed cattle on prickly-pear. The success was made widely known in the taluk. Several ryots seemed to take advantage of this new mode of rescuing cattle from starvation and largely purchased the requisite instruments for preparing the leaf for fodder.

15. The account contained in the foregoing paragraphs (4 to 13) relates to the Badvel taluk. Only a few villages in the south of the Sidhout taluk suffered much during the late famine, the remaining portion having improved after the rains that fell in the latter part of December. A few minor irrigation works were started and some drinking-water wells repaired in the affected tract. Near Ventinaitta, an important village in the centre of the tract in which the distress was severely felt, a forest work (formation of dry stone walls for fencing the Konarajupalli reserve) was undertaken by the Forest Department as a relief work. It was first put in charge of the Sidhout taluk ranger, but, as he did not manage it properly, it was transferred to a Local Fund overseer and then to a stock inspector. It remained in charge of the Tahsildar for a week or ten days till it was closed after the stock inspector left the district in the first week of July. There were at one time over 500 coolies on this work. Prickly-pear clearance was also undertaken in two or three of the affected villages, but, as the coolies would not work at Famine Code rates, the work was not proceeded with.

16. Both in the Badvel and Sidhout taluks, the coolies on the relief works belonged for the most part to the villages in the vicinity of the line. Although the people in the remote parts were badly off, they would not, except in a very few cases, leave their homes. When the road works were commenced at Badvel, I personally told the people of the distant villages in the north (Porumamilla and other places) to go there; but they would not do so. Crowds gathered round the Commissioner at Porumamilla and clamoured for work; but they would not go to Badvel even though the Commissioner promised them travelling allowance (batta), and, when 4 days after works were opened near Porumamilla, they all flocked to them. So too all the laboring classes of the south of the taluk would not go to the Sagiler works. If they had done so, the numbers there would have risen much higher than 5,000. They would have, I think, gone there if the south-west monsoon had failed.

17. All the officers engaged on famine duty had, as you are aware, a very hard time of it. How heavy the work in this division even in ordinary times is and how inadequate my office establishment the Collector Mr. Wolfe-Murray has on more

Code (*vide* Collector's Reference No. 2856-Eng., dated 16th December 1891, and Disposal Nos. 2460-Eng. and 2461-Eng., dated the 18th December 1891). As there were no task work tables or special famine rules to go by for the execution of these minor irrigation works, I addressed the Collector on the subject in my letter, No. 1082, dated 22nd December 1891, and made certain proposals for carrying them out. These orders were again modified in the Collector's Circular No. 2478-Eng., dated the 26th idem, and Disposal No. 76-Eng., dated the 15th January 1892, and Divisional officers were informed that minor irrigation works opened for relief might be given out under the supervision of the village officers on the express condition that the latter undertook to allow all classes to work on them. Effect was at once given to the revised instructions.

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7. As stated above, the road works (breaking and stacking metal) close to Badvel were opened under the management of the Local Fund Engineer. He happened to be absent from the taluk both on the day on which the work was started and for a few days afterwards. He had, however, left necessary instructions with his overseer who remained in immediate charge of the work till it was closed. As printed rules for the conduct of relief works had just been furnished to all the officers concerned, we had not much difficulty in organizing gangs or establishment or marking tasks or regulating wages. Some inconvenience was felt for a few days in the beginning on account of want of certain forms of returns, such as work sheets, &c. The numbers went on rapidly increasing from 400 to over 1,000 in 4 days. After they received wages on the first payment day in my presence, they struck work the following day (16th) complaining that the wages were rather too low (although none received less than third-class rates). I did not, of course, yield to them. They soon afterwards returned. All this occurred during the absence of the Local Fund Engineer; during which period I exercised personal supervision. The work did not attract many laborers from the north of the taluk. The total number did not go much beyond 2,000. Most of them belonged to Badvel and its neighbouring villages.

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13. Scarcity of water was more keenly felt than the abnormally high prices of food-grains. The supply in the existing wells in the Badvel town having almost failed, three new drinking-water wells were sunk (two in the bed of the tank and one below it) at a cost of Rs. 1,000. The Commissioner saw them when he inspected the place in March. They proved no small boon to the people of this town. Under the orders of the Commissioner some of the old wells on the line of works, both in Badvel and Porumamilla, were cleaned out by famine labour. Drinking-water wells in other parts of the taluk were also repaired. The want was relieved in several places by the repair of old and construction of new agricultural wells under the Land Improvement Act, which also afforded employment to a large number of laborers. The amount of loans sanctioned up to date has come to Rs. 45,409-8-0 and the number of wells to which the amount relates to 278. This water famine continued till the general prospects improved in June when there was good rain throughout the taluk.

14. Cattle suffered very much for want of fodder and water. They were driven to the jungles in large numbers. Hill grass too became scarce in the course of a few months as the hot season advanced. In a few villages where there was some crop under wells and in places where paddy withered the ploughing cattle had some fodder; but that too was insufficient. In spite of all this, cattle owners did not buy hill grass which was stored in one or two localities by the Forest Department. Several experiments were made successfully to feed cattle on prickly-pear. The success was made widely known in the taluk. Several ryots seemed to take advantage of this new mode of rescuing cattle from starvation and largely purchased the requisite instruments for preparing the leaf for fodder.

15. The account contained in the foregoing paragraphs (4 to 13) relates to the Badvel taluk. Only a few villages in the south of the Sidhout taluk suffered much during the late famine, the remaining portion having improved after the rains that fell in the latter part of December. A few minor irrigation works were started and some drinking-water wells repaired in the affected tract. Near Ventimaitta, an important village in the centre of the tract in which the distress was severely felt, a forest work (formation of dry stone walls for fencing the Konarajupalli reserve) was undertaken by the Forest Department as a relief work. It was first put in charge of the Sidhout taluk ranger, but, as he did not manage it properly, it was transferred to a Local Fund overseer and then to a stock inspector. It remained in charge of the Tahsildar for a week or ten days till it was closed after the stock inspector left the district in the first week of July. There were at one time over 500 coolies on this work. Prickly-pear clearance was also undertaken in two or three of the affected villages, but, as the coolies would not work at Famine Code rates, the work was not proceeded with.

16. Both in the Badvel and Sidhout taluks, the coolies on the relief works belonged for the most part to the villages in the vicinity of the line. Although the people in the remote parts were badly off, they would not, except in a very few cases, leave their homes. When the road works were commenced at Badvel, I personally told the people of the distant villages in the north (Porumamilla and other places) to go there; but they would not do so. Crowds gathered round the Commissioner at Porumamilla and clamoured for work; but they would not go to Badvel even though the Commissioner promised them travelling allowance (batta), and, when 4 days after works were opened near Porumamilla, they all flocked to them. So too all the laboring classes of the south of the taluk would not go to the Sagiler works. If they had done so, the numbers there would have risen much higher than 5,000. They would have, I think, gone there if the south-west monsoon had failed.

17. All the officers engaged on famine duty had, as you are aware, a very hard time of it. How heavy the work in this division even in ordinary times is and how inadequate my office establishment the Collector Mr. Wolfe-Murray has on more

than one occasion brought to the notice of the Board (Board's Proceedings, No. 32, dated 15th January 1892, Revenue Settlement, Land Records and Agriculture, and Mis. No. 233, dated 9th January 1892, Land Revenue). I had charge of three taluks, in two of which relief works were in progress. In view of this fact the Collector was pleased to recommend that I should be relieved of my magisterial work during the famine and after a Special Assistant Collector was appointed for the district the appellate work of the three taluks and the original work of two were transferred to that officer. A Special Deputy Tahsildar and Sub-Magistrate was appointed for the Badvel taluk to relieve the Tahsildar of his magisterial and other routine work. Here I beg to bring to your notice the conduct of M.R.Ry. G. Naraniah, Acting Tahsildar of Badvel, who has done his work particularly well during the famine.

ENCLOSURE No. 3.

From M.R.Ry. T. RAMA RAO, Garu, General Charge Deputy Collector, Sidhout division, to the Acting Collector of Cuddapah, dated 26th October 1892, Ref. on C. No. 3071.

As directed in your Reference on Current No. 1757-Eng., dated the 11th and 14th instant, I have the honour to report on the points therein referred to.

2. *The extent of failure of rains.*—In the Badvel taluk both the monsoons were almost a failure last year. In no month was there even so much as 3 inches of rain and the greatest fall did not exceed 1.75 inches on any day. The two previous years also were unfavorable. The Sidhout taluk, though better off, does not compare favorably with the previous years as may be seen from the following rainfall statement:—

Month.	1887.	1888.	1889.	1890.	1891.
<i>Badvel Taluk.</i>	INS.	INS.	INS.	INS.	INS.
June	1.20	1.35	0.85	2.05	0.80
July	1.05	4.60	7.40	1.70	1.45
August	4.25	3.60	8.65	3.60	2.60
September	10.80	1.60	4.10	2.70	2.05
October	6.07	1.85	4.85	4.30	1.75
November	8.97	7.25	1.00	3.25	0.64
December	1.15	0.6	1.55	1.25	0.63
Total ..	35.09	23.85	28.90	18.85	10.81
<i>Sidhout Taluk.</i>					
June	5.2	1.92	1.45	4.55	0.91
July	1.95	4.36	9.70	3.27	2.85
August	7.85	6.62	8.97	3.08	6.05
September	5.6	4.95	6.5	6.15	4.14
October	8.57	4.97	7.6	7.44	2.24
November	9.42	1.84	0.95	5.3	0.75
December	2.1	1.9	2.5	1.84	0.72
Total ..	40.69	29.46	37.67	32.53	17.69

3. *Extent of loss of crops.*—The Badvel taluk has a number of tanks of which the Badvel large tank is the largest in the district. It received little or no supplies last year and there was almost no wet cultivation under it. So, too, was the case with the next important tank in the taluk, viz., Porumamilla tank. As regards the minor tanks some received no supply whatever, while others received only partial supplies; but no tank was full. Out of the total occupied area of acres 17,000 (in round numbers) under wet, no doubt over 15,000 acres were cultivated up to the end of March last; but the crops were mostly dry and they either totally failed or yielded a very poor outturn. We had therefore to give large remissions, viz., nearly Rs. 40,000 against Rs. 20,000 in the previous year. Out of this sum of Rs. 40,000, Rs. 18,000 represent the difference between wet and dry assessment, Rs. 13,000 were on account of shavi and the rest (over Rs. 8,000) on account of waste, the correspond-

ing items for the preceding year being Rs. 12,000, 2,000 and 5,000. A large extent of dry land too was cultivated, viz., nearly 72,000 acres, out of an occupied area of 90,000 acres, but the yield was very poor in the majority of cases.

Sidhout taluk.—The condition of this taluk improved a good deal on account of the rain that fell in the latter part of December. Several tanks received supplies though not in full, and the crops, which had been on the point of withering, revived, except in a portion of the taluk in the south. The following statement shows particulars of the total occupied extent and of cultivation in this taluk from April 1891 to the end of March 1892:—

	Dry.	Wet.	Total.
Occupied extent	37,570	10,329	47,899
Cultivation	28,808	8,481	37,289

Remissions to the extent of Rs. 20,000 had to be given against Rs. 2,000 in the preceding year. Rs. 3,400 related to shavi, 5,100 to waste, and the rest, viz., Rs. 11,500 to difference between wet and dry assessment. The last item of remission was allowed as a special concession in cases where dry crops were raised in wet land when there was not sufficient water for wet crops.

4. *Prices.*—Owing to the exceedingly short rainfall and to the failure of crops in consequence, the prices of food-grains rose abnormally high. Those of rice and cumbu were higher in each month in 1891 than in the corresponding months in the two preceding years in both the taluks. So also were those of ragi in Sidhout taluk. The price of the last-mentioned grain in the Badvel taluk was so except in March, April and May. In March it was a little lower than in 1889 and in April and May same as in 1890. Ragi is the staple article of food in these taluks; cumbu comes next. Rice is chiefly consumed by the higher classes. In Badvel it sold at 6.25 local measures of 152 tolas per rupee in January 1891 and at 6.5 in the succeeding four months. From June it rose each month till January last. In Sidhout it was sold at 6.25 measures per rupee in the first four months, at 6 measures the next three months, and at 5.75 measures in the following two months in 1891. It rose to 5.5 measures in November and still higher to 4.25 in December and remained stationary in January and February last. It has been above the scarcity rate in both the taluks ever since September 1891, i.e., for one full year.

In Badvel ragi, which sold at 15.5 measures in January 1891, became cheaper in the succeeding few months as some fresh grain, which was produced under wells, was brought into the market. In May it was sold at 18 measures. From that month it began to rise gradually till November and rapidly in December. In the latter month and in January last it was even above the scarcity rates. It became a little cheaper in February, but rose again in March and April last. The price of the article has been fluctuating from May last ranging between 9½ and 12 measures. In Sidhout, it did not reach the scarcity rate owing chiefly to the fall of rain in December last and to a pretty good harvest in the previous season, and had it not been for the large exportations to the neighbouring taluk of Badvel the price of this grain would have been more easy. As it was, it was rather high. It was 15.75 measures per rupee in January 1891 and became cheaper in the following three months. It was sold at 16 measures in June, July and August, and from August it rose gradually up to November. In December there was sharp rise from 12 to 9½ measures. It rose still higher to 9 measures which price continued up to April last.

In Badvel the price of cumbu started from 13½ measures in January 1891 and became a little easier till May when it was at 15 measures. From June it began to rise gradually till November when it was 11.12 measures. In December there was a sudden rise, viz., 7.87 measures. Both in this and in the succeeding months it exceeded the scarcity rate. From February to August last it was ranging between 8.5 and 8.6 measures per rupee. It became cheaper last month, viz., 11.25 on account of the harvest which commenced in August last.

In the Sidhout taluk the price of this grain remained stationary at 14 measures per rupee during the first five months in 1891. From that time it began to rise gradually till September when it was at 12 measures. There was a slight fall in

October, but a sudden rise (9.75) in November and a still greater rise in the next four months. Although it did not reach the scarcity rate it touched it in the months of March, April, May and June last, in which it sold at 8 measures. The following statement gives particulars of prices during the last four years. Cholum does not form the chief article of food in these taluks. Ragi comes first, then cumbu and then to a small extent cholum :—

	1889.			1890.			1891.			1892.		
	Rice, 2nd sort.	Cumbu.	Ragi.	Rice, 2nd sort.	Cumbu.	Ragi.	Rice, 2nd sort.	Cumbu.	Ragi.	Rice, 2nd sort.	Cumbu.	Ragi.
<i>Badvel Taluk.</i>												
January	24	15	17	5	14	17	6	13	15	4	7	8
February	8	15	15	2	15	17	6	14	16	6	8	9
March	8	15	15	2	15	18	6	14	17	4	8	9
April	8	15	15	2	15	18	6	14	18	4	8	9
May	8	15	15	2	15	18	6	14	17	4	8	9
June	8	15	15	2	15	18	6	14	16	4	8	10
July	8	14	15	2	15	18	5	13	15	6	8	12
August	8	14	15	2	15	18	5	12	14	6	11	11
September	7	15	15	2	15	16	6	11	14	..	..	..
October	4	15	15	2	15	17	5	11	12	..	..	..
November	8	16	15	2	15	17	4	7	8	..	..	..
December	4	15	17	2	15	17	4	7	8	..	..	..
<i>Sidhout Taluk.</i>												
January	1	15	17	8	15	19	6	14	15	4	8	9
February	1	15	17	8	15	19	6	14	16	4	8	9
March	1	15	17	8	15	19	6	14	16	4	8	9
April	1	15	19	8	15	19	6	14	17	4	8	10
May	9	15	19	8	15	19	6	13	16	4	8	10
June	9	15	19	8	15	19	6	12	16	5	8	11
July	9	15	19	8	15	19	6	13	16	5	9	13
August	9	15	19	8	15	19	5	12	14	5	10	12
September	9	15	19	8	15	19	5	12	13	..	..	..
October	9	15	19	8	15	18	5	9	12	..	..	..
November	9	15	19	7	15	17	4	9	9	..	..	..
December	9	15	19	7	15	17	4	9	9	..	..	..

5. I have described at length the conduct of the famine operations in these two taluks in my letter, Reference on Current No. 3071, dated 30th September 1892, which I beg may be read along with the present report.

6. *Extent of work done in the digging of wells, &c.*—In Badvel taluk a sum of Rs. 47,234 was advanced for sinking wells under both special and ordinary rules and Rs. 10,350 for other agricultural improvements up to 30th September 1892. The number of applications accepted came to 370 and the amount involved to Rs. 68,480. Sixty-four wells are reported to have been actually completed and 329 under construction. The bulk of the applications were received after the north-east monsoon proved a failure and more especially after the distress became severe. The work on all the wells did not commence simultaneously nor was it carried on uninterruptedly. I saw a large number of these wells in the course of construction. There were generally 12 to 16 laborers at work on each well. The majority of them were Wodders. I think this work afforded employment to between 1,500 to 2,000 laborers, of whom a large number would otherwise have gone to roads.

In the Sidhout taluk Rs. 20,290 were granted for the sinking of wells and Rs. 5,685 for other agricultural improvements, the total number of applications accepted coming to 176 and the amount involved to Rs. 29,630. No wells except two are reported to have been completed. One hundred and thirty-three are said to be under construction. The Tahsildar has been directed to inspect each of these wells forthwith. I will inspect them in the course of the next month and submit a special report. Altogether from 600 to 800 coolies were employed on this work during the period of distress.

7. *The advantage which the two taluks have already and will hereafter realise from wells.*—In the Badvel taluk there are already over 1,700 wells on dry land. They

irrigate about 7,000 acres. This is no doubt but a small fraction of the total occupied area (90,000 acres) under dry, but still the extent of cultivation under wells is comparatively large, amounting, as it does in a wet taluk, to between one-third and one-half of the occupied wet area which depends chiefly upon a number of tanks. The supply in these wells ran short in the late season so much so that a portion of the area commanded by them was not at all irrigated in some cases and in some others the crops raised under them suffered from want of water. Yet these wells proved no little boon in a season like the past. The stall-fed cattle belonging to the well-owners were saved from starvation inasmuch as they had fodder, if not good food, crops under them. The impetus that has been given to well-sinking by the generous loan rules will have a most beneficial effect. The ryots have become alive to the exceptionally favorable terms which the rules afford. A pretty large number (over 400) of wells have been either sunk or are in the course of construction under the State loan rules. They would irrigate an area of about 1,500 acres. An equally large, perhaps a larger, number of wells would hereafter be sunk if there should be such drought as we had recently and if full facilities were afforded to the applicants by the entertainment of a special establishment for the purpose.

The Sidhout taluk is better off than Badvel in regard to the number of wells it already has on dry land. They come to nearly 3,400 irrigating an extent of about 11,000 acres, which is as large as the total occupied area under wet and is nearly a third of a dry occupied ayacut of the taluk. It is the existence of these wells and the fall of rains in the latter part of December last that averted a serious calamity. In a small tract in the south of the taluk, where the rains failed, the wells became almost dry. State loans have been taken for the construction or repair of 135 wells, which would irrigate about 450 acres. A much larger number of wells would be sunk hereafter in a season of drought if additional facilities were afforded to work the rules.

8. *Absence of necessity for gratuitous relief.*—I have explained this point in my Reference on Current No. 3071, dated 30th September 1892. For easy reference I quote extracts below :—

"No relief kitchens were found necessary on the road works either near Badvel or Porumamilla. Most of the coolies on the Badvel works belonged to that town or neighbouring villages. They used to leave their non-working children at home when they went out to work and return home in the evening. The works commenced with comparatively a small number (between 400 and 500) and there was no rapid rise, the total number not going far beyond 1,000. The Porumamilla road works were not intended to be kept on for more than a month as by the time they were opened in the latter part of March the Sagiler project had been sanctioned and the Commissioner had ordered them to be closed immediately after the project was put in hand. The project was opened on the 18th April. In the month of May the Public Works Department officer in charge of the Sagiler works reported that there was a large number (about 1,000) of non-working children belonging to the laborers and that they required gratuitous relief. Some of them, I thought, after personal inspection, required to be fed gratuitously. I then recommended the opening of a kitchen on the works. The Collector was of opinion that it was possible to employ a larger number of children on the works and that their employment would obviate the necessity of opening a kitchen. This course was then adopted. Sanction for starting a kitchen was, however, accorded in the beginning of July, but by that time the season had so far improved that it was not found necessary to open one."

ENCLOSURE No. 4.

From M.R.Ry. R. GOVINDU RAO NAYUDU, Garu, Deputy Collector of Cuddapah division, to the Collector of Cuddapah, dated 20th October 1892, Dis. No. 1795.

With reference to your letter, dated 24th September 1892, Reference No. 1757-Eng., I have the honour to report on the distress and the relief operations carried on during the past season in Cuddapah taluk.

The average annual rainfall of Cuddapah taluk is 34.05 inches. During the calendar year 1890 the rainfall amounted to 31.65 inches which was a little less than the average. On account of this deficiency slight symptoms of the approaching distress appeared in that year. In the year 1891 there was only a rainfall of 16.20 inches in the taluk. The consequences were the tanks in Cuddapah firka received very scanty

supplies and the wet crops raised under them generally failed. The wet crops in Pendlimarri and Animela firkas also failed to some extent, but the existence of river channels and the large number of private wells saved crops in many cases. The worst affected part in the taluk was the tract comprising Chinnakarupalle, Ippapanta, Kolumulapally, Rudrayagaripalle and part of Chinthakomuradinne villages lying to the south of Cuddapah town. In this tract dry crops (even horse-gram) also failed. The Chenmur firka is protected against scarcity by the Kurnool-Cuddapah canal system.

Owing to the failure of dry crops the ground having been parched up by the severe sun in the absence of rainfall for a considerable period of time, a clamour for help arose in the tract of Ippapanta and other villages and the necessity for providing labour to the poor in the tract—but most of the people in those villages are poor—appeared. Owing to the deficient produce and also owing to large exports to the sub-division and other parts which were worse affected, the prices rose: cumbu from 20 seers to 9 seers a rupee, cholam from 17 to 9 and ragi from 21 to 10. The belief prevailing in the merchant class that Nandana in the Hindu cycle year would be a year of severe famine like the previous Nandana of sixty years ago acted also as an agent in the rise of prices as the greedy Komatis would not sell their stock in the expectation of gaining larger profits later on.

A good deal was done in the affected parts by way of digging wells. On account of wells newly dug during the season with the aid of State loans about 1,500 coolies were employed in the wells who would otherwise have gone to State relief works. The 126 wells which were shown in the loans statement submitted with this office Disposal No. 1741 of 10th October 1892 are expected to bring about 400 acres newly under wet cultivation and this extent may be said to have been permanently insured against famine unless springs fail.

The relief operations carried out in the taluk consisted of two minor irrigation works (repairs of Kothakunta and Patakunta of Chinnakarupalle), repairs of drinking wells, the former under the supervision of the Public Works Department and the latter under that of the Revenue Department. A statement showing the time taken, the number of coolies employed and the expenditure involved in the two works executed under the Public Works Department supervision and also another statement showing the number of drinking wells repaired under the sanction of District Board and the expenditure involved are enclosed. Besides these seven drinking wells were repaired with small expenditure amounting to Rs. 65-8-9 under my authority as President of the Taluk Board. All these drinking wells were repaired for providing water which became insufficient for the needs of the people.

No necessity for gratuitous relief appeared in the taluk as a great part of the taluk was already protected from failure of crops by the Kurnool-Cuddapah canal system, river channels and by a large number of private wells where there are no channels or canal distributaries.

As for the small tract of Ippapanta side which was the worst affected, many poor people could get labour in the Cuddapah municipality and those who were unfit for labour could get gratuitous relief on account of private charity in the town. About 30 helpless persons were daily fed in Mutyala Seshu's choultry which was under the joint management of the Government and private trustees.

I have nothing to say specially on behalf of any officers in the conduct of famine operations in the taluk.

RESOLUTION—dated 9th December 1892, No. 781.

Recorded, pending the preparation of the general famine report.

(True Copies and Extract.)

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

To the Collector of Cuddapah.

Exd. W. H. French.

1892.

Board of Revenue

(Revenue Settlement, Land Records
and Agriculture),

MADRAS.

Printed December 15th.

Proceedings, 9th December 1892, No. 781.

Recording famine administration report of the
Cuddapah district, pending preparation of the
general famine report.

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BOARD OF REVENUE (REV. SETT., L. RDS. AND AGRI.), 8TH DEC. 1892, No. 780.

PROCEEDINGS OF THE BOARD OF REVENUE

(REVENUE SETTLEMENT, LAND RECORDS AND AGRICULTURE).

READ—again the following Proceedings of the Board of Revenue, (Revenue Settlement, Land Records and Agriculture), dated 16th September 1892, Mis. No. 7529:—

Read—the following letter from W. G. UNDERWOOD, Esq., Collector of Anantapur, to the Secretary to the Commissioner of Revenue Settlement, Land Records and Agriculture, dated Anantapur, 31st August 1892, No. 393-F.B.:—

With reference to Board's Proceedings, No. 6186, dated 21st July, paragraph 2, I have the honour to submit a general report on the state of the Anantapur district with a brief notice of the famine. With reference to paragraph 3 of the Proceedings I beg to state that the accounts for expenditure are not all to hand yet.

2. The only taluks in which relief works were considered necessary were Dharmavaram, Anantapur and Tadpatri. A relief kitchen was, however, opened at Uravakonda in Gooty taluk. In Hindupur, Madakasira and Penukonda there were some showers. These and the well cultivation kept the people from want. But if the recent rains of June and July had been longer delayed, the pressure would have been felt there too. How the people in the north and west of Gooty taluk tided over the season is a mystery to me. In the neighbouring taluk of Alur extensive relief was necessary and the conditions of soil and rainfall are similar. I was besieged by persons at Wajra Karur and Uravakonda demanding relief, and on account of loud complaints opened a kitchen at Uravakonda. On providing work not a soul would stir. There was work with high wages at the Pamidi bridge, some 20 miles away. The contractor sent an agent who gave advances. Few coolies went to Pamidi and the few did not stay long. It is the more inexplicable, as in 1884, when the famine was much less sore in the land, a great deal of earth-work on the Dharmavaram-Guntakal Railway was done. In Tadpatri want was confined to the Yadiki division, where the failure of the rains was so great that no land was even ploughed. Relief was afforded early in the year and continued to the 30th June. On the rains falling it was found that idlers from the neighbouring villages alone attended the works. Dharmavaram was the first taluk to show symptoms of want in the Kalyándrug, the driest division of the district. The weavers were the first to feel the pressure. This is attributed to their unthriftiness. They worked at walling the forest reserve though they injured their hands badly, being unaccustomed to the work. Want spread to the centre of the taluk and necessitated works around Narasankota. They were deserted at the first fall of rain. In Anantapur the want was chiefly felt in the north and west. Three tank restoration works sufficed for relief and works were closed the middle of July.

3. *Rainfall.*—This was very scanty, but drinking water failed only in some 5 or 6 villages. As the famine practically closed with the fasli, I give, as Appendix I, the rainfall for all stations for the year ending on 30th June for 1301 and the five previous faslis. The average for the faslis 1296–1300 is 24.74 for the district, whilst in 1301 it was only 15.99. For July 1892 it was 4.68 inches, the greatest fall for 12 years. The average for the five previous years is 1.76 inches. This year the rain is continuing on into August. In April and May there were slight showers here and there, but these were confined to small tracts and had hardly any effect. In the three southern taluks and Kalyándrug division alone was there any appreciable quantity. In other places rain was more anxiously expected than ever. Some rain fell in the southern portion of the district towards the early part of June, but it was towards the end of that month that the monsoon burst forth with an almost unprecedented rainfall. The rainfall was equally distributed over the whole district and almost all the tanks received supplies, some receiving full. The rains were so heavy that some tanks were breached and apprehensions were entertained with regard to some others. Owing

to the same cause sowing of mungari crop on dry lands was retarded. The seed that was being sown was turned up by the rain and it was feared that this state of things would continue and prevent cultivation operations on dry lands. But happily there was a break in the rains and sowing became universal save for late cotton. After this the rain held off for some time. But there was a slight drizzle. Ryots in some places began to apprehend the same state of affairs as in the past year, but the end of July in some taluks and the beginning of August set matters right and now crops are very hopeful. A statement comparing the rainfall of June and July last with the average of the past five years for the corresponding months is enclosed. The rainfall is decidedly much heavier this year.

4. *Water-supply* is sufficient for drinking and agricultural operations. Almost all the irrigation sources have received a good supply. Water is abundant in all wells.

5. *Agricultural operations*.—After the cessation of the first heavy rains, sowing dry lands went on generally. Ragi, korra, sama, cumbu, cholam, castor, gingelly, cotton and pulses were sown throughout and they are still being sown in the northern taluks. Some ryots who had sown ragi in wet lands under some tanks supported by wells seeing the change in the season ploughed up the lands and re-sowed them with paddy. The agricultural value of the sudden burst of the monsoon may be gauged by a reference to the extent of land brought under cultivation. Up to the end of June the cultivation was as follows:—

	ACR.
Dry	16,102
Wet	4,603
In July alone there was cultivation of—	
Dry	263,541
Wet	18,972

The figures up to the end of July are compared in the margin with the figures of past five years up to the end of the same month. Although there has been a fall in the extent of dry cultivation, yet the wet cultivation is in excess of that in any of the previous years. The decrease in dry cultivation is probably due to inaccurate returns, the jamabandi being late and the karnams away from their legitimate duties. The second heavy showers began to fall towards the end of July and continued into this month. They have brought fresh supplies to tanks and the ryots' courage has risen. Weeding of cholam, cumbu, korra, ragi and paddy is being done and early-sowed cholam under wells and nalas is being harvested. Outturn 4 to 8 annas.

6. *STATE OF THE CROPS*.—Mungari dry crops and kartick wet crops are still green, especially paddy, but their condition is good. It is, however, too early to make any forecast on the outturn. If the season continues as favorably as it has commenced there should be bumper crops. All I fear is the arrival of locusts and other destructive insects or blight.

7. *CONDITION OF PEOPLE*.—The greatest number of persons that ever sought State relief on works was 1,442, and that in the month of May. On some works, notably in Dharmavaram taluk, coolies struck work but on the others, with the first showers of the monsoon in June, numbers began to fall perceptibly. The works were therefore closed in the following month and eventually the district was removed from the list of affected districts. Nowhere had people showed signs of emaciation or deterioration. They were healthy and strong. It was a great blessing that during the prevalence of distress no epidemic appeared. Cholera broke out in the district in the early part of July when the famine works were practically closed. It prevails now in 13 villages of four taluks, viz., Tadpatri, Gooty, Anantapur and Penukonda. The total number of attacks is 902 and total deaths 358. Into Penukonda taluk the disease is said to have been carried by a pilgrim who went to Pamdurti, an isolated

village in that taluk, where the epidemic has been severe. Every effort is being made to stamp out the disease. With this exception the health of people generally is good.

8. *Cattle*.—The famine, from which the district has just emerged, was one of sorer trial to beasts than to man. It is impossible to say the mortality, but it must have been very great amongst the jungle cattle. Even the agricultural animals were on diminished rations.

Fodder.—There is abundance of pasture available on the hills and plains although dry fodder is extremely scarce. The latter is obtained in small quantities from cholam under wells.

9. *Prices*.—Prices ruled highest in the month of December throughout the district. Until the end of November rain was anxiously expected but in vain. The failure of both the monsoons induced the local merchants to withhold grain in view to a rise in the market. There was a fairly large import and a great hoarding and now the holders find themselves bitten by the fall in prices and there are large exports from Hindupur *via* Dharmavaram. This is probably for Dhono Road for Kurnool and some grain goes by road to Bangalore. A comparative statement of the average prices of the district stationwar from December to August is enclosed. Prices are easier now not only in the unaffected tracts but also in taluks where distress was prevalent.

10. *Tuccavi*.—The total amount of money disbursed in the district up to the middle of this month is Rs. 95,879. This is mainly due to the adverse state of the season. A statement is enclosed showing the transactions under the Loans Acts and the number of wells constructed and under construction. Owing to heavy rains some have withdrawn applications for sinking wells. Applications for loans for purchase of cattle and seed-grain are, however, being received.

General Remarks.—The district, as a whole, has successfully tided over the famine. The loss of live-stock and the failure of crop last year has crippled the ryot to some extent, especially the poorer class. The present year has opened hopefully. There have been good rains and irrigation sources are now well supplied, and the water in all wells stands many feet higher than it has for three years. Crops are in good condition. There is sufficient stock of food-grains and prices are easier though not so low as in normal years. Grain is freely exposed for sale in the market.

The famine year "Nandana" may be considered to have passed without the terrors predicted of it.

Resolution—dated 16th September 1892, Mis. No. 7529.

Recorded, pending the preparation of the general report on the late distress.

(A true Copy and Extract.)

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

READ—the following letter from C. H. MOUNSEY, Esq., Acting Collector of Anantapur, to the Secretary to the Commissioner of Revenue Settlement, Land Records and Agriculture, dated 7th November 1892, No. 762-Dis. :—

I have the honour to submit the general report on the conduct of famine operations called for in Board's Proceedings, Mis. No. 7430, dated 12th September 1892.

2. In this office No. 393-F.B., dated 31st August 1892, sent in reply to Board's Proceedings, which was a general report of the condition and progress of the district, a brief notice of the famine, when and how it began and when it ended, has been given. Full reports having from time to time been made regarding the deficiency of rainfall in fasli 1301 and its effect on the different parts of the district, it is my intention in this report to confine myself to the conduct of famine operations, without discussing their necessity.

3. *Relief works.*—Relief works were opened in the taluks of Anantapur, Dharmavaram and Tadpatri; 13 in all were started, of which 2 only were carried on by civil agency. The rest (being repairs to major and minor irrigation works) were entrusted to the Special Executive Engineer of the Public Works Department.

Appendix I gives a complete list of the relief works with the dates of their opening and closing, the establishment employed on them and the class of wages earned by the coolies. The cost of the works at normal rates is also compared with the cost at famine rates in some cases.

Of these relief works, on Nos. 9, 10, 11, no work was done, and the expenditure was on cartage of tools, &c., not on wages.

Supervision.—The professional agency relief works were under the immediate supervision of Overseers, Paymasters being appointed for the disbursement of wages.

For the Rayalecheruvu-Bhogasamudrum road, a Sub-Overseer was appointed on Rs. 30, general supervision being the duty of the Revenue authorities.

One of the Stock Inspectors sent to the district for famine duty was in immediate charge of the stone-walling of the forest reserve at Kalyandrug under the orders of the Deputy Tahsildar of that Sub-division.

The two civil agency works were according to the Famine Code under the control of the Divisional officer and the professional agency works under the Executive Engineer sent specially to the district on famine duty.

4. *Gratis relief.*—Altogether 8 kitchens were opened in the district; appendix II gives the date of opening and closing the establishment on each kitchen, the highest and lowest numbers fed on any date and the expenditure. The kitchens at Nasanakota and Nittoor were only kept up for a very short time, the former attracting only two inmates, the latter being absorbed into Yadiki kitchen.

Cooked food was distributed in the kitchens, the rations being that proscribed in the Famine Code. Appendix III which gives the highest and lowest number fed at the kitchens on any one day in each month will show approximately the progress of the famine among the poorer classes.

In addition to State relief, Sir Savalai Ramaswami Mudaliar and His Highness the Maharaja of Holkar sent donations for distribution of dole to the respectable poor.

5. *Tasks and wages.*—On only one relief work (Balarazu kalva spring channel repairs) were first-class wages ever earned by the coolies, but second-class wages were earned on all the others. On Kalyandrug stone-fencing the task was enhanced after the work had been in progress for some months, with the result that subsequently third-class wages only were earned. It is probable that the laborers on this work had been previously undertasked, as it was difficult to get a fair task owing to the frequent variation in the distance the coolies had to come to the work and the distance they had to carry the stones. It may be remarked that the normal cost for this work makes no allowance for "lead" or distance of work from the village which were at one time considerable. The tasks on the tank works were regulated by a task-table introduced by the Executive Engineer.

A report on their sufficiency or otherwise from that officer would have been useful, but he has left the district now, and his famine records are in Bellary.

With regard to the wages paid, it need only be said that they were approved of by His Excellency the Governor to whom several complaints as to their inadequacy had been addressed.

6. *Audit of Famine expenditure.*—The audit of famine expenditure on works carried out by the Public Works Department was done by the Examiner of Accounts in that department. According to the Famine Code, the Divisional officers were responsible for auditing the expenditure on works and kitchens under their control, the Treasury Deputy Collector being responsible for the final adjustment in accounts.

7. *Medical.*—The District Surgeon inspected most of the kitchens in the district. No epidemic appeared among the coolies; so the establishment of a hospital in connection with any relief work or kitchen was not necessary, although a hospital assistant

was posted at Yadiki. The condition of coolies on works remained good throughout. Cholera only appeared after the close of the famine and then more in a sporadic than an epidemic form.

8. *Other Famine operations.*—The only other famine operation, if it can be so called, was the introduction of the prickly-pear as fodder for the cattle. Experiments were successful in only one or two cases and no cattle were saved, a fact partly accounted for by the scarcity of the plant in the greater part of the district.

9. *Additional Famine establishment.*—Appendix IV shows the officers specially entertained on account of the famine, which is exclusive of the subordinate establishment on the kitchens (shown in appendix II), the Executive Engineer, Public Works Department, and the Stock Inspectors whose services were lent to this district.

10. *Assistance rendered by Local Funds.*—Two works were carried on out of Local Funds, viz., the Rayalecheruvu-Bhogasamudrum road (Tadpatri taluk) and the deepening of a well for the Madigas at Kalyandrug (Dharmavaram taluk).

11. *Relief works completed or not completed.*—Of the irrigation works, the repairs to Kamarapalli tank and the bank of Raptad tank (Anantapur taluk) were completed. Work done on several of the other tanks was washed away by the first rains of the current fasli; work costing between Rs. 3,000 and Rs. 4,000 was done on the Rayalecheruvu-Bhogasamudrum road, Tadpatri taluk. As to the Kalyandrug forest reserves, one block was completely enclosed and the wall round one hill of another block was nearly completed, the Forest Department putting the finishing touch to it. It will be difficult, if not impossible, to enclose the latter block completely, as the boundary line runs through an open field where stones cannot be procured. But a trench might be dug which would answer almost as well as a stone wall.

12. *General remarks—Relief works.*—From appendix I, it will be seen that more than half of the total expenditure was on works other than those which would contribute to stave off famine, namely the works carried out under civil agency, the repairs to the road between Rayalecheruvu and Bhogasamudrum and the stone-fencing round the Kalyandrug forest reserves. But with regard to them, it may be said that they afforded a kind of work suitable for the famine coolies; they provided labour for a large number of coolies at a time; they were useful and necessary works; and they were carried on in localities where there were no irrigation works, the repairs to which would be equal to any extensive demand for labour. On only two of the tanks, repairs to which afforded relief, was any profitable work done, the earthwork on three others being washed away by the first rains of this year's south-west monsoon.

The stone-walling of the forest reserve at Kalyandrug was peculiarly one which could have been done cheaply and easily by gangs of able-bodied labourers, but which must be expensive when done by gangs of weak labourers, women and children.

Classification of laborers.—Owing to the preponderance of women and children on most of the works, and the inadvisability of separating families, the system generally followed was that in which all labourers were placed in the third class, with liberty to earn second class or even first-class wages by doing second class or first-class task. At Kalyandrug for a few days, laborers were divided according to the Famine Code into three classes; but on the Head Assistant Collector's first visit, all were grouped in third-class gangs and a task provided. That this is the proper system was proved especially on the irrigation works, where third-class wages only were earned at first before the men came on to famine relief, and families could work together; while at the end of the famine on Raptad tank, first-class wages were earned. It is to be remarked that "able-bodied and skilful" men were almost entirely wanting at any rate on the works in Dharmavaram taluk and probably also other works, because the railway in progress supplied a great deal of work for skilled labour at favorable rates.

Wages.—Wages were paid according to section 185 of the Famine Code. The only remark I have to make about them is that the amount was fixed according to the price of the staple grain ruling in the cusba for the week, whereas in some cases, notably on the irrigation works in Dharmavaram taluk, the price ruling in the villages where relief works were, that being the price at which the coolies had to buy their grain, was 2 seers per rupee dearer on one or two occasions.

It would be impracticable to fix the wages according to the price of grain ruling in every village in which there is a relief work, but the price at, say, the nearest Revenue Inspector's head-quarter village, might be adopted (where it is not coincident with the taluk cusba).

Tasks.—On the works carried out by the Public Works Department comprehensive tables of tasks were framed by Mr. Watson, the Executive Engineer in charge. Gangs were formed of a uniform working strength of 20 men (1 man=2 women=4 children), and the task given in the table was the third-class task of such a gang, that is, the task to be performed to earn third-class wages. A second-class task = third-class task + 50 per cent.; a first-class task = double third-class task.

When a gang had to travel more than a mile from each village, the task was reduced 10 per cent. for every 3 miles travelled over and above the first mile. Considerable reduction on this score had to be made on the Kalyandrúg work which for the latter half of the period in progress was from 4 to 6 miles off the villages from which the coolies came.

The task on this work was set at first by the Divisional officer and revised subsequently by the Executive Engineer.

That on the Local Fund road work Tadpatri was, I believe, set by the Tahsildar, an officer of some Public Works Department experience. Fines were imposed for short work to keep the coolies up to the mark.

Kitchens.—Cooked food according to the rations prescribed in Famine Code was distributed at the kitchens. Ordinary people generally eat a mixture of ragi and cholum as ragi alone seemed to irritate the stomach after a time. It might be advisable always to mix some jowari or other grain with it.

At Kalyandrúg and (judging from the number that resorted thereto) in other kitchens caste prejudice did not prevent any destitutes from coming to the relief, though some prejudice, whether of caste or otherwise, did keep the Nasanakota kitchen empty in Dharmavaram taluk. The great difficulty was to prevent the kitchens being abused. Local officers could not in some cases be trusted to shroff all comers properly, and to refuse to admit persons without the sanction of the Divisional officer would for a time deprive the needy of the relief, to which they were entitled. Periodic inspections, however, were sufficient ordinarily to check admissions.

13. The report from the Head Assistant Collector is enclosed. Of the other Divisional officers, the Deputy Collector who was in charge of Gooty and Tadpatri taluks during the distress is dead and his successor reports that he has nothing to say. The Anantapur Divisional officer has nothing to add to his report sent in connection with Board's Proceedings, No. 6186, dated 21st July 1892, which was, however, a report on the condition and progress of the division not on the conduct of famine operations. This officer, however, was not in special charge of any relief work.

14. The draft of this report has been written by the Head Assistant Collector Mr. Pitt at my request from the materials gathered before the time of my arrival.

15. The permanent Collector has not left any note nor told me anything as to any officer who should be specially recommended for good work.

ENCLOSURE No. 1.

From A. T. PITT, Esq., M.C.S., Acting Head Assistant Collector, Pennukonda, to the Collector of Anantapur, dated 9th October 1892, No. 700.

With reference to your foot-note to Board's Proceedings, No. 7430, dated 12th September 1892, calling for a report on the conduct of famine operations under my charge, I have the honour to submit the following.

2. The relief work under my charge was the stone-walling of the Kalyandrúg Forest to which was attached a kitchen to provide for (1) the old and destitute, (2) the children of those on the works too young to work for themselves.

3. The stone-walling was commenced in December 1891, on an urgent order from the Collector, under the immediate supervision of the then Deputy Tahsildar Mr. Vasudeva Row. On the 1st January, if I remember rightly, a task-table was drawn up prescribing the work to be turned out daily by a gang of certain numerical strength (1 man=2 women=4 children) to entitle it to 2nd or 3rd class wages. If a gang turned out 3rd-class wages, each member

obtained 3rd-class wages and so on. It was a difficult matter to fix this task, from the variation in the lead of stones; the fact that nearly all the laborers were unsuited to the work and to the preponderance of women and children who crippled those who might have done better. Further, at the beginning, there was no kitchen and the presence of several families which were numerous and small made it necessary to fix the task somewhat lower than it should perhaps have been to enable the working members of such families to earn enough for all. Subsequently, the Executive Engineer fixed a task. He had at first made no allowance for the distance the people had to walk to the works, which was at that time four or five miles. On a reference from me some allowance was given. The imposition of Mr. Watson's task had the effect of reducing the number of coolies from an aggregate of 1,775 in March to 799 in April and 110 in May, by which time the distress had intensified. This shows either that the majority of the coolies who attended the works at first were not really "starvation coolies," or that Mr. Watson's task was excessively hard. As Mr. Watson never visited this work which the coolies were working, he had no idea of the conditions under which the labour had to be performed. The work was four or five miles from the coolies' homes, a distance they had to walk morning and evening. Supply of drinking-water was, as may be imagined, deficient, the heat was intense, and many of the coolies were unused to that particular sort of manual labour. I think the task was excessive. One or two gangs containing the pick of the coolies did the task entitling them to 3rd-class wages, but expressed their difficulty in doing so, which I myself thought real, and, while the season prospects were still as gloomy as at the beginning, the works were practically deserted.

4. The staff employed was as follows:—

On work.		Rs.
(1) One Stock Inspector, who superintended kitchen also	...	75
(2) Supervisor	...	10
(3) Writer	...	10
	Total	95

On kitchen.		Rs.
(1) Gumastah	...	15
(2) Two cooks	...	10
(3) One warder	...	6
(4) One scavenger	...	4
	Total	35

5. Appendix B shows the aggregate number attending the work and kitchens monthly adding in the case of the work the number for the last day of each week and for the kitchen the number attending daily. The sudden fall in number in April is explained in the case of the work by the imposition of Mr. Watson's task, and in the case of the kitchen by "shroffing" and by the exclusion from the kitchen of the children of those who no longer attended the relief works.

6. Appendix C gives details as to the change in tasks, and the two different tasks with the effect on the outturn.

7. Appendix D shows the monthly expenditure and includes outlay on the deepening of a madiga well done by one or two gangs of those who attended the major relief works.

8. The amount of wages earned on the introduction of the 1st task, i.e., from January was generally 3rd class—

	Daily.
	AS. P.
Man	1 10
Woman	1 5
Child	0 11

Third class.—On the introduction of Mr. Watson's task, wages were: 1 anna 4 pies man, 1 anna 1 pie woman, and 9 pies child, the price of grain having by that risen from 16 seers per rupee to 13 or 14 seers per rupee.

9. The amount paid to the coolies as wages comes to Rs. 4,951 in round figures; according to the rate given as the normal one by the District Forest-officer, the cost of building the same length of wall under normal conditions would come to Rs. 1,690 approximately (at the rate of 2 annas per cubic yard).

10. **General remarks.**—The chief difficulty met with in connection with the stone-walling was the fixing of an appropriate task: not only was the distance of the work from the coolies' homes constantly increasing, but the "lead" from the stones was varying almost every day. The Executive Engineer whose tasks were adopted in the latter part of the season wrote "The task

given in my No. 485, dated 25th March 1892, would of course only apply to building the wall with stones at site, say within 10 yards. When stones have to be brought any distance, I would have the work done by separate gangs and should fix task from time to time for each gang according to local circumstances. I should have to compile a wonderfully comprehensive task-table to be fair to a gang rolling stones down a steep slope and a gang bringing stones up a similar slope for a gang with open ground, and a gang with jungle, &c., &c."

It will be thus seen that considerable modification had to be made in Mr. Watson's task before it was applied to the actual work. I made no attempt at solving the difficulty which he represents above, but waited how much work the coolies turned out under certain conditions and whether the coolies were then doing their utmost or were at times idling; on this outturn I based my task. I have dwelt somewhat at length on the matter of the task-table, because it is important that that should be as fair as possible; and the experience gained in this respect will make it easier to draw up a task-table for a similar work in the future.

Audit.—Accounts were audited in my office, whence consolidated returns were submitted to the treasury branch of the Collector's office. Care was taken that the officer disbursing wages, &c., should not be the officer actually responsible for the supervision of the work and punctual submission of returns showing daily outturn of work, and daily attendance was insisted on.

Supervision.—The officer primarily responsible to me for the supervision of both work and kitchen was the Stock Inspector but for famine duty. He was assisted by a gumastah in the kitchen and a supervisor on the works. All orders, however, went through the Deputy Tahsildar, who, as officer in local charge of the works, exercised a general supervision, but was relieved from actual responsibility in this matter, because he was disbursing officer. The services of the Tahsildar of the taluk could not be utilised on this work, as it was at one corner of a taluk, about 70 miles long, nearly the whole of which was affected. I of course made frequent visits to Kályandrúg.

With reference to the concluding paragraph of the Board's Proceedings under reference desiring that the names of those officers doing specially good work should be brought to notice, I may remark that it did not require extraordinarily great efforts to cope with a famine neither prolonged nor of the severest, and brilliant work was unnecessary. I must however add that, of the officers connected with the relief at Kályandrúg, the heaviest work fell on Mr. Vasudeva Row who was Deputy Tahsildar at the beginning of the distress. Everybody was at the first inexperienced, and great credit is due to that officer for his energetic superintendence of everything connected with the relief and the able way in which he carried out the orders given to him from time to time.

In conclusion, and with reference to your reminder for this report, I have to represent that your foot-note calling for it by the 3rd instant did not reach me until the 3rd and since that day travelling has prevented me from submitting this report earlier.

RESOLUTION—dated 8th December 1892, No. 780.

Recorded in continuation of the proceedings first read above.

(True Copies and Extract.)

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

To the Collector of Anantapur.

1892.
Board of Revenue
(Revenue Settlement, Land Records
and Agriculture),
MADRAS.

PROCEEDINGS OF THE BOARD OF REVENUE
(REVENUE SETTLEMENT, LAND RECORDS AND AGRICULTURE).

READ—the following letter from R. SEWELL, Esq., Collector of Bellary, to the Secretary to the Commissioner of Revenue Settlement and Director of the Department of Land Records and Agriculture, dated Bellary, 14th November 1892, Index No. 1545:—

Referring to the Proceedings of the Board of Revenue, Mis. No. 7430, dated 12th September 1892, I have the honour to submit my report on the conduct of the relief operations in the Bellary district for 1891-92.

2. Anxiety began to be felt about the middle of last year (1891) when it became clear that the south-west monsoon had failed and that the rainfall was insufficient for the crops then sown, and at the time of His Excellency the Governor's visit in August, I was busy maturing plans for the future in case the scarcity of rainfall should continue through the north-east monsoon and thus lead to widespread distress.

3. The quantity of rainfall recorded during the period in the district was as given below. It was very scanty, being only 7.25 inches from April to September 1891, both inclusive, as compared with 16.21 inches which was the twenty years' average for the same period. This resulted in widespread failure of the Mungari crops. The rainfall in October and November was only 2.05 and 0.59 against an average of 4.85 and 1.21 respectively. It was on the rainfall of these two months that the cultivation of a large area of black-cotton soil depended, and in consequence of the drought the ryots and agricultural labourers began to lose hope. The drought was almost as threatening as in the worst years known, viz., 1876-77 and 1884-85; and the failure of dry crops was general, being especially bad in the Bellary and Alur taluks, in a large portion of Rayadrug, Kudligi and Hadagalli, and in the black-cotton soil tracts of the Adoni taluk. In Hospet and Harpanahalli also the crops on about a third of each taluk suffered seriously.

Stations.	April to September.		October.		November.	
	Average.	1891.	Average.	1891.	Average.	1891.
Yemmiganur	17.46	5.05	4.28	1.27	1.59	..
Adoni	21.30	11.02	4.80	2.18	0.81	0.20
Alur	16.14	7.42	5.26	1.15	0.86	0.50
Siruguppa	15.13	4.80	4.76	1.45	0.92	1.20
Kampli	14.04	6.25	5.10	4.30	2.42	..
Bellary	12.23	6.81	4.39	1.00	1.52	0.65
Rayadrug	12.03	4.67	5.06	0.55	1.59	1.05
Hospet	19.14	16.43	5.28	3.80	1.40	0.20
Harpanahalli	16.23	6.92	4.59	2.55	1.58	0.75
Kudligi	17.44	6.15	5.03	2.85	1.24	0.60
Huvinahadgalli	15.24	4.22	4.52	1.48	1.00	1.35
District average ..	16.21	7.25	4.85	2.05	1.21	0.59

4. The statement noted below shows how serious was the actual falling off in the outturn, but these figures of course were not then known. This failure crippled the resources of the country and the outlook appeared the more serious because the surplus stocks had been everywhere reduced previous to the failure of the south-west monsoon by export to other distressed districts. Prices of staple food-grains therefore

Printed December 15th.

Proceedings, 8th December 1892, No. 780.

Recording report on the conduct of famine operations in Anantapur, pending preparation of the general famine report.

began to rise alarmingly and the merchants felt considerable anxiety and dread of loots. Anxiety was increased by the news of the looting in Kurnool.

Average area cultivated during the 3 previous years.	Area cultivated in 1890-91.	Extent of decrease in the cultivated	Extent on which the actual outturn amounted to						Total.
			20 annas.	16 annas.	12 annas.	8 annas.	4 annas.	0 annas.	
ACS. 2,025,868	ACS. 1,503,763	ACS. 522,095	897	40,994	12,096	369,707	512,717	567,352	1,503,673

5. The subjoined statement shows the extent of the rise in value of cholam, the staple dry grain of the district. A special report was submitted to the Board at the end of October 1891 showing in detail the state of the district (Index No. 1322, dated 3rd November 1891, embodied in Board's Proceedings, No. 712, dated 6th November 1891).

Standard of grain.	Years.	Price in seers of 80 telas per rupee during the months of						Scarcity rate.
		July.	August.	September.	October.	November.	December.	
Cholam	1876	22.0	20.9	16.2	10.2	7.1	7.4	13.5
	1877	5.8	5.6	6.1	8.7	10.0	11.4	
	1891	26.4	26.1	22.7	21.9	17.1	14.2	

6. On November 8th, Mr. Clogstoun, Commissioner of Revenue Settlement, arrived at Bellary and we made a rapid tour of inspection together through Ráyadrag and the western taluks. Immediately afterwards I rode through the worst part of Alúr, and on December 11th Mr. Clogstoun again met me, this time at Alúr, and himself traversed part of the Alúr and Adóni taluks passing on to Kurnool. During our journey in the southern and western taluks, at Mr. Clogstoun's request I drew up a code of rules for the conduct of work set on foot for famine relief, based on Mr. G. Stokes' rules for the Salem district, and we adhered to this code on all works in the district while the scarcity lasted. I append * to this report a copy of those general rules and the series of orders subsequently published, which I called "Famine slips," bound up together. I understand that the Collectors of Kurnool, Anantapur, Nellore and Cuddapah adopted my rules and slips and also worked on them as a basis. The first famine slip was issued on 16th November 1891.

* Will follow.

7. My inspection of villages, especially in Alúr, satisfied me that unless Government stepped in to their aid the condition of many of the working classes would become serious, since the ryots could employ little or no labour in their fields, and were too anxious for the future to venture on spending money in charitable relief. There was another matter that helped to swell the rapidly-growing anxiety, and this was the fact that the ensuing cyclic year bore the ominous name of "Nandana," the Nandana famine of 1832 being everywhere a household word amongst the inhabitants of the Ceded Districts. The opening of relief works was accordingly fixed for December 15th.

8. Previous to this, on November 26th, a selection of works suitable for famine relief had been made by the Commissioner and myself in consultation with the Superintending Engineer, the Executive Engineer and the Local Fund Engineer. Works to be started were selected (Famine slip No. 8 of November 30th) and application made for the allotment of funds and for the entertainment of special establishments.

9. His Excellency the Governor visited the district on 19th and 20th December, and the list of works originally selected for execution was revised under his orders.

10. By Government Order, No. 37, dated 12th January 1892, the district was declared a distressed district for the purposes of the Famine Code. I may mention here that I am convinced that the opening of works on December 15th was none too

soon, for on the very first morning upwards of 2,000 persons came to the Chippagiri work in the Alúr taluk, and in the case of some there were visible signs of emaciation and want. At the same time I do not think that we waited too long.

11. I append a statement (A) showing the number of coolies on the works month by month from beginning to end. The greatest number, 19,765, was reached in June. The numbers were much less than I had originally expected, but a great many people got work in the villages on digging "nath grass," wells, &c., while the hoarded resources of the ryots surpassed all anticipation and enabled in most cases to maintain themselves and their families through this year of drought.

12. Relief operations.—Relief was given in this district in the following ways:—

- (1) By the opening of relief works.
- (2) By gratuitous relief.
- (3) By advances.
- (4) By the grant of remissions and postponement of collections.

13. Item No. 1 consisted of two classes of works, viz., "Professional agency" and "Civil agency" works. The marginally-

(a) Gadiganur tank works.

(b) Clearance of prickly-pear on the Daroji tank.

(c) The supply channel of the Alúr tank.

noted Professional agency works were taken up by the Public Works Department, (b) was fully carried out, the remaining works being left incomplete when the famine operations ceased. Items (a)

and (c) begun for famine relief are now in progress and will be finished as ordinary Civil works. The enlargement of the Alipore tank for supply of water to the garrison and town of Bellary would have been taken up if necessary. It was, as a matter of fact, opened, but experience of three days showed that the work was not needed in that neighbourhood, and it was closed. The improvement of the Kanekal tank in Ráyadrag was begun as a famine relief work, but it became evident after a time that relief works were not wanted in that neighbourhood by any large number of persons, and this too was closed after 36 days' trial work on the Arcihalli tank was begun, but closed the same day as coolies did not come to it.

14. Under the head of Civil agency works the principal works were on the following roads:—

- (1) Road from Alúr to Guntakul.
- (2) Do. Adóni to Nagaldinne.
- (3) Do. Bellary to Bommanahal.
- (4) Do. Bellary to Siruguppa.
- (5) Do. Alúr to Adóni.
- (6) Do. Gauripore to Duggavati.
- (7) Do. Chippagiri to Nancherla.
- (8) Do. do to Bantanahal.
- (9) Do. Alúr to Aspari.
- (10) Do. Molagaveli station to the village.

They were executed by the Local Fund Engineer under my orders as Collector. The work consisted chiefly in the collection and stacking of metal and gravel on the roadside and spreading where necessary. Numbers 8 and 10 were left incomplete when the relief was closed in September last, but the Local Fund Engineer has arranged to get them completed out of the ordinary Local Fund budget grant.

15. The wages and tasks on both classes of works were regulated according to the provisions of the Famine Code. The Superintending Engineer generally regulated his work by the "first-class task," reducing for unfulfilled work. I found it more convenient to take the third class as my basis and increase to second or first class rate for good work because as a rule the gangs only performed the third-class tasks.

16. Shortly stated, the principle on which we worked was that coolies were drafted into gangs of about 100 in number with a head cooly who kept a nominal roll, marking at the close of the day everything necessary to enable the paying officer to assess the payment due. Absentees were noted, the task prescribed was entered up daily and the actual work done, the prescribed task being fixed daily by a pro-

fessional officer for each gang according to hardness of soil and length of lead and lift, while the task actually done was checked by the professional overseer in charge of the work. The mode of calculation by the paying officer is given in Famine slip No. 22. The set of rules and slips appended will show these principles clearly. Slip 33 especially shows the rules, based purely on the Famine Code, but arranged for the convenience of paying officers. Slip 43 will materially assist calculations in future famine works, but it was issued too late to be of much use on the present occasion.

17. Wages were paid according to the Famine Code scale. The standard of grain adopted for fixing the wages was the cheaper variety of cholam. This was declared by Tahsildars weekly and information sent to the works. Generally the prices ruling at the Taluk head-quarters were taken to regulate the wages of the coolies, but where there was a perceptible difference between the prices at the Taluk head-quarters and at the principal villages close to famine relief works, the following rules were issued under the Commissioner's instructions for the guidance of Tahsildars:—

1. "Where the village price differs from the cusbah price by not less than one seer, the village price may be taken.

2. "Where the village price differs by less than one seer from the cusbah price, the latter must be taken.

3. "If prices are cheaper than 14 seers per rupee at the cusbah, the declaration must give the cusbah price unless the difference between that and the principal neighbouring village price is equal to or more than 2 seers per rupee."

18. It was found that our system worked perfectly smoothly, as smoothly on the first day of opening a work as on the last, and that it is so simple that it is applicable to any number, few or large. Except for the sole difficulty of finding competent and trustworthy overseers and paying officers in sufficient numbers, we could have taken on any number of persons on the works at a day's notice. As a fact from beginning to end there was never a hitch, save when some paying officer was found to be stupid or lazy, or when an overseer did not do his duty properly. The system appears to me perfect in its simplicity and adaptability. So much so that I think it should be uniformly adopted for famine relief works in India.

19. The strength of the typical gang as given in the Famine Code is 50, but it was considered advisable by the Commissioner that a gang should consist of 100 persons and my experience leads me entirely to concur in his view.

20. The formation of gangs was little difficult because of the varying claims of members of the same families and of the same village, but there was very little complaining. Officers in charge of works changed the nominal rolls every fortnight and on those occasions were directed to alter each gang when necessary by removals and additions so as to bring it to proper strength. No "weakly gangs" were formed in the district. They were found unnecessary because, as a rule, the coolies came on in a fair condition of strength, and the daily wages were sufficient to keep them in good health till the relief operations ceased. To each work an auxiliary gang was attached consisting of head coolies, sub-maistries and head maistries sweepers employed on works, coolies employed to carry tappal from and to the Taluk office, and coolies appointed to guard the treasure of the paying officer where there was no police station or sub-treasury. The pay of the men in the auxiliary gang was regulated with reference to the nature of the work they had to do, whether 1st, 2nd or 3rd class, and they were paid on nominal rolls just like the regular labourers.

21. There were a few alterations of system and rules adopted as necessity for them and it is incumbent on me to notice these for the information of the Board and Government.

22. At the commencement of the works, the tasks given at page 61 of the Famine Code were adopted, but it was found in practice that they were too high. The gangs could not, and did not, work up to that scale, and the wages earned were very small in consequence which resulted in a number of people leaving the works in despair and dudgeon. They returned afterwards. The Superintending and Local Fund Engineers were consulted, and after they had experimented by keeping an ordinary gang up to the full ordinary work for a day or two they arrived at very similar results.

The tasks were accordingly revised and received finally the sanction of the Board. The scale is given in famine slip No. 39.

23. On this scale the coolies worked up to the 3rd-class standard, but would seldom take the trouble to go beyond it.

24. I have often doubted whether on principle the system adopted by me is best, viz., of fixing the 3rd-class scale as the normal and rewarding the gangs for increased work, or that adopted by the Public Works Department of fixing the first class as the normal scale and fining for short work. My principle was enunciated very early in the campaign, viz., in famine slip No. 22, dated 25th December 1891, and is as follows:—"The principle is that a famine cooly gang's task is calculated at half a regular labourer's task, and if the gang performs this half task, it will draw enough wages to provide the coolies, whatever be the price of the staple food-grain (cholam in this district); with enough to buy food sufficient for two meals a day. If it chooses to work harder and turn out 75 per cent. of ordinary labourer's task, the gang will get 2nd-class wages; if it turn out full labourer's task, 1st-class wages. But if it does less than 50 per cent. task, it will be fined proportionately on the 3rd class or standard famine wage" (see page 18 of the rules). "Note that the 1st-class wage is not double the 3rd class, so that it would be hard on the gang to make the full task the standard and then deduct half 1st-class pay for delinquency of 50 per cent. in work." Of course the deduction for work less than 1st-class standard, if that is fixed as the normal, may be so graded by tables similar to that in famine slip No. 33 as to be perfectly fair, and the only question is, which system would be most likely to induce the gangs to work harder and earn more. I still adhere to the opinion which I expressed to the Superintending Engineer that it is more encouraging to gangs to receive normal wages for the fair work and be rewarded for extra work, than to be consistently perpetually under punishment as it were. But it is a fact that the coolies hardly ever cared to work above the normal. They would fulfil the allotted 3rd-class task and then give over for the day no matter how early it was. It is clear that this affords a strong argument for fixing as normal a task that requires hard work, and then cutting their pay proportionate to the work actually turned out. The labourers seemed to have no normal energy leading them to desire to get higher wages and this again is a strong argument that they found the 3rd-class wages sufficient.

25. Another alteration introduced was the following. The task being fixed for gangs of typical strength, it is the duty of some responsible person to fix the actual task for the actual gang each day with reference to absences, numbers of men, women and children, respectively, and so on. This duty was first placed on the paying officer, but afterwards the Commissioner thought it best to make the Professional overseer responsible for it, and this alteration was carried into effect.

26. To show the way we worked at first, I request a reference to the first part of famine slip No. 22 headed "Rules for Paying officers." Mr. Clogstoun's system relieved the paying officers and threw the whole burden on the overseers. I do not mean to argue that he was not correct; one officer can do it as well as another, and the question is which has most time at his disposal.

27. We had some difficulty in some places of fixing tasks for metal collection owing to the distance at which the stones lay from the work, and the Commissioner found it necessary to lay down that at the Nandavaram road works no gang should receive pay lower than the subsistence wage, at the same time ordering that inordinately lazy gangs should be taken off money wages altogether and receive kitchen rations where kitchens existed. We had no occasion, however, to enforce this last order.

28. The case of nursing mothers were specially dealt with. They were paid under the orders of Government not less than the subsistence wage, however short the outturn of work turned out by them. Under the term of "nursing mothers" were included only such women as were actually nursing at their breast children aged two years and under, whether their own or of any one else, for of course it was impossible to decide on the parentage of each child.

29. Proper arrangements were made for distributing wages to the coolies on the work-spot and our rules worked very well. A paying officer was appointed for every

32 gangs. When the number of gangs employed on any work was less than 10, payments were made daily, the orders being to pay once in every two days when the gangs numbered from 10 to 20, and once every three days when they numbered from 20 to 32. Payments made were generally punctual and regular and there were very few complaints of delay.

30. The tools required for the works were supplied by the Public Works Department on the indent of myself or the Local Fund Engineer. Subsidiary articles such as baskets, pegs, twine, yard measures, &c., were obtained by the Tahsildars themselves, though at times the deficiency was made good by the Local Fund Engineer.

31. For each famine work under the Local Fund Engineer, a sub-overseer was appointed on a salary of Rs. 35 per mensem since the permanent staff under his control could not be spared without detriment to the regular Local Fund works. The sub-overseers were placed under the direct orders of the Local Fund Engineer. Each sub-overseer was allowed a writer on 8 annas a day and a storekeeper on 6 annas. A sufficient number of maistries and head coolies were also appointed—a head cooly to each gang, a sub-maistry to every four gangs and a head maistry to every 16 gangs. There was no difficulty experienced in securing the services of the required number of men. The names of the sub-overseers thus appointed (eleven in number) are given in the accompanying statement (marked B).

32. The Commissioner ordered originally that no shelter should be provided for the coolies, but it was found on the very exposed Nandavaram road this entailed great hardship during the exceedingly hot weather, to babies and little children and we were empowered to put up a rough shelter, which was done. The expenditure, however, under this head was very slight, being only Rs. 22-5-0.

33. The supply of water to the coolies for drinking purposes was carefully attended to; casks were supplied by the Local Fund Engineer and carts were hired to carry them to the work-spot. The number of carts thus employed was ample, and there was not much complaint of want of water. The carts were dispensed with as soon as rain water collected in sufficient quantities in the pits on the road side.

34. No necessity was found for keeping separate bazaars on the work-spots. The supplies were amply available in villages adjacent to the works and the coolies hardly ever slept at the works. They preferred walking many miles to and from their villages rather than sleep out of their own houses. The extra labour they thus entailed on themselves is incalculable, but it takes a very severe famine to uproot the prejudices of the people. Petty dealers were allowed to bring sundry articles during the working hours to be sold to the coolies and their children.

35. Only a few cases of fraudulent practices were discovered, and these are hardly worth noticing; now and then large stones and lumps of earth were introduced into the centre of metal heaps. Sometimes there was short measurement which looked suspicious, but when discovered, sharp punishment was inflicted, the head cooly being summarily dismissed and the coolies punished by gangs being broken up and the coolies compelled for a few days to stay away from the works. One only case was brought to notice, viz., of bribery by a sub-overseer who was charged with having demanded illegal gratification for appointing men to posts of maistries and head coolies, but the charge was not substantiated.

36. The paying officers, four of whom were stock inspectors detailed for famine duty, mostly did their duty very well and proved honest and straightforward. Special care was, of course, taken in the selection of these officers. They were mostly permanent officials on whom we had a hold and whose places were supplied by others temporarily entertained. The cash balance in charge of only one of the paying officers was found incorrect on examination, and this was ascertained to be due more to irregularity than to any desire for criminal misappropriation on his part. The deficit was made good and his services were dispensed with.

37. The works were inspected by the officers of the Revenue Department, viz., the Collector and his Assistants, the Divisional officers, Tahsildars and Deputy Tahsildars. On civil works the power of inspecting officers was absolute, and their interference was not restricted, as it was in the case of professional agency works with which Revenue officers had little to do.

38. To secure certain information regarding the health of the coolies and to ascertain whether they were falling off in strength under the famine wage, I instituted a system of selected families. In every gang on every work two or three typical families were chosen and their condition reported on periodically by the inspecting officers.

39. Medical officers were also attached to large works and in the case of others, arrangements were made for their occasional inspection. The District Medical officer himself took a lively interest in the matter, frequently inspected the works and communicated to me his remarks and suggestions. There was no epidemic or outbreak of disease of any kind, though at one time the numbers on works were close on twenty thousand.

40. *Gratuitous relief.*—This consisted chiefly of kitchens opened for the relief of children under seven years of age and of infirm persons who could not work on the relief works. There was no necessity for any village relief kitchens nor did the necessity for kitchens arise at all till the last week in January, when the Commissioner on his visit to the Nandavaram relief works considered it desirable to order their establishment. I was not myself satisfied that kitchens were necessary, but of course the Commissioner's instructions were obeyed and they were opened accordingly.

41. The first kitchen was started on the Alur-Guntakul road on the 1st March, and the next on the Adoni-Nagaldinne road on the 7th March, and a third was opened on the Bommanahal road work on 23rd May. The marginally noted figures represent the weekly average attendance on each kitchen in the district. The fact

that these kitchens were not more extensively resorted to by the children of the coolies is a proof that the coolies themselves were able to support them on their wages. The kitchens were worked strictly according to rules laid down in the Famine Code, supplemented by my famine slips Nos. 5, 29 and 31 and 34. The food given was sufficient and wholesome and was distributed to the recipients within the premises of the kitchen. Its removal from the kitchen was strictly forbidden and any surplus left after the evening meal was ordered to be destroyed.

42. *Advances.*—I now come to advances. They consist of two classes, viz.—

(1) Advances to weavers and (2) advances to landed proprietors. The former system was not resorted to at all in this district. As regards the latter, the amounts disbursed up to the end of September 1892 under the Land Improvement and Agriculturists' Loans Acts are as noted below:—

Taluks.	Loans disbursed under						
	Land Improvement Loans Act.			Agriculturists' Loans Act.			Grand Total.
	For well-sinking.	For other purposes.	Total.	Purchase of fodder.	Cattle and seed-grain.	Total.	
Bellary	Rs. 41,565	Rs. 34,725	Rs. 76,290	Rs. 21,288	Rs. ..	Rs. 21,288	Rs. 97,578
Rajadurg	25,122½	4,200	29,322½	..	..	..	29,322½
Hospet	1,550	..	1,550	..	..	..	1,550
Kadlgi	5,962½	340	6,302½	483	..	483	6,785½
Radagally	8,313	12,171	20,484	899	..	899	21,383
Harpanahalli	4,710	6,430	11,140	..	..	..	11,140
Alur	23,968½	32,015	55,983½	21,250½	282	21,532½	77,516
Adoni	21,425	3,050	24,475	..	92	92	24,567
Total	1,32,650½	93,213	2,25,863½	43,920½	374	44,294½	2,70,158

These advances enable the ryots to carry out works which provided labour for a large number of people nearer to their homes than our works. They were mostly utilized for digging wells and clearing of nuth or deep-rooted grass. Several of the richer landed proprietors seized on the opportunity afforded them by the famine and

the consequent cheapness of labour to clear their lands of this nuth grass, and this kept a number of persons employed in their villages.

43. *Remissions, &c.*—The general loss of crops caused by the failure of both the monsoons warranted the grant of liberal remissions. The Board was pleased to sanction (Board's Proceedings, No. 275, dated 7th April 1892) full remission of Government dues in the affected villages or tracts and all Government lands, including unauthorized cultivation and imams fully assessed, or whose jodi or quit-rent was equal to the full assessment which were left either uncultivated or yielded less than a 2-anna crop, and suspension of collection on all lands which yielded a 2-anna but less than 6-anna crop until the result of the ensuing south-west monsoon was known. A statement (marked C) showing the amount of remissions granted, and the amount of revenue whose collection was suspended, is enclosed.

44. *Cattle.*—The failure of the two successive monsoons resulted in great mortality amongst cattle owing to want of fodder. The enclosed statement (marked D) shows the mortality from starvation and other causes from January 1890 to August 1892. The total number of deaths from September 1891 to August 1892 was 20,623. Besides these, though there is no regular record of them, there must have been a number of deaths amongst the cattle driven to the hills for pasture. The mortality culminated in May and then rapidly declined owing to rainfall.

45. Fodder was exceedingly dear and all sorts of experiments were resorted to to eke out the supply. A large quantity of grass was cut on the Sandūr hills and removed to different parts in the district. Efforts were also made to bring in fodder by rail from the Forest reserves on the Nallamalai hills in the Kurnool district and rice straw from the Kistna district, but the cost was prohibitive. It was not till September 1891 that the Sandūr hills were much resorted to for grass, because the hill grass was considered unpalatable to cattle at the commencement of the distress and the cost of removing the same was excessive. It was extensively used, however, in the four western taluks and in parts of Riyadrug. The cost of carriage prevented its being conveyed in any large quantity to the Adoni and Adoni taluks which lie at a distance. The serious mortality amongst the cattle has led to ploughing and other agricultural operations being carried on after the famine by manual labour, coolies pulling the plough instead of cattle.

46. The subjoined statement shows the income derived by the Forest Department and the Raja of Sandūr from the grass removed on the Sandūr hills and leased forests. The income began to fall after February owing to the extreme dryness of the grass and the deterioration of its quality and quantity. No cost was incurred in cutting the grass either by the Raja of Sandūr or the Forest Department as it was cut and removed by the persons who took out licenses for doing so:—

Month.		By the Forest Department on the Sandūr leased Forests.	By the Raja of Sandūr on the Forests under his control.	Total.
		RS. A. P.	RS. A. P.	RS. A. P.
April 1891	.. .. .	1 14 6	.. .. .	1 14 6
May "	.. .. .	1 9 0	.. .. .	1 9 0
June "	.. .. .	12 3 0	72 12 3	84 15 3
July "	.. .. .	37 13 0	.. .. .	37 13 0
August "	.. .. .	194 1 0	4 10 6	198 11 6
September "	.. .. .	385 15 0	58 7 3	444 6 3
October "	.. .. .	431 3 3	79 9 0	510 3 3
November "	.. .. .	1,276 14 0	279 4 0	1,555 8 0
December "	.. .. .	2,998 2 0	649 9 0	3,647 11 0
January 1892	.. .. .	1,829 13 1	818 2 6	2,647 15 7
February "	.. .. .	550 5 0	636 10 5	1,186 15 5
March "	.. .. .	.. .. .	.. .. .	.. .. .
Total for the official year		7,719 12 4	2,618 7 9	10,337 4 1
April 1892	.. .. .	491 10 0	250 5 9	741 15 9
May "	.. .. .	534 5 0	228 1 9	762 6 9
June "	.. .. .	444 1 3	281 1 6	725 2 9
July "	.. .. .	191 7 0	.. .. .	191 7 0
Total		1,660 10 3	760 9 0	2,421 3 3
Grand Total		9,380 6 7	3,378 6 9	12,759 7 4

47. No efforts were spared to induce the ryots to feed their cattle on prickly-pear though the prickly-pear itself grew hard and dry in many places for want of moisture. I distributed, through the charity of His Highness the Maharaja Holkar, a number of sets of instruments for extracting thorns and cutting the leaves of prickly-pear, while cattle were purchased in taluks where prickly-pear abounds in order that itinerating experiments might be carried on, and the ryots learn that they can keep their animals alive on that fodder. The amount allowed to me for this was Rs. 200. The cost of making these experiments, &c., was Rs. 114-8-6, and the balance of Rs. 95-7-6 will be transferred to the Board of Revenue. There can be no doubt that many ryots took to that kind of fodder owing to our exertions, and that some considerable good was done thereby.

48. I now come to expenditure incurred by Government on works and gratuitous relief.

49. The accompanying statement shows the expenditure incurred on relief works "Professional" and "Civil Agency" works, as well as the cost of establishment entertained in the Local Fund, Revenue and Public Works Departments and the cost of tools and plant incurred by the departments concerned.

50. The total advanced amount on account of gratuitous relief was Rs. 1,165-0-8, of which a sum of Rs. 626-13-2 was expended. The amount adjusted up to the end of September was as follows:—

	RS.	A.	P.
For purchase of food in bazaars	250	7	8
For petty establishment	168	1	6
For sundries (erection of sheds, &c.)	71	7	8
Total	490	0	10

The balance of Rs. 136-12-1 remain still unadjusted.

51. By the first week September 1892, the state of affairs considerably improved by the breaking out in June of the south-west monsoon and the necessity for State relief entirely ceased throughout the district. All relief was finally closed on 7th of that month.

52. I should not omit to mention here the charity of Sir Savalay Ramaswamy Mudaliar of Madras, who sent 600 cloths for distribution amongst the poor. These were all distributed among the deserving poor employed on relief works and other places in the name of the donor.

53. I forward, in original, the reports of those senior officers * who had control over the famine operations in this district.

* The Divisional officer, Adoni.
Do. do. Bellary.
Do. do. Hospet.
Local Fund Engineer.
Executive Engineer.

54. A sum of Rs. 500 was placed at my disposal from funds contributed by His Highness the Maharaja Holkar for purposes of relief other than those provided for in the Famine Code. No opportunity was, however, offered of making use of this bounty. A sum of Rs. 2-1-0 only was spent in relieving an indigent lunatic woman. The balance of Rs. 497-15-0 will be transferred to the Board as directed.

55. *Conclusion.*—I think that on the whole our conduct of affairs in this district during the distress has been very successful. The works were opened just at the right time; the system which had been elaborated beforehand, worked extremely smoothly; there was no loss to Government or fraud; no confusion or hardship to labourers; excellent work was turned out, the Local Fund Engineer being full of praise of the material collected; we have good returns for our outlay though, of course, that outlay was heavy (heavier as must always be the case than work done by contract); and finally the audit of accounts has proved most satisfactory.

56. These results could not have been effectual without the cordial co-operation of a number of officers, and it gives me pleasure to bring the most prominent of these to the notice of the Board.

The Local Fund Engineer, Mr. J. M. McInerney, was indefatigable, never sparing himself in the hottest months, or on the most exposed works, and working extremely hard to secure the success of the operations conducted.

Mr. A. T. Forbes, C.S., was the centre of the work at the head-quarters having been specially appointed to this district as Assistant Collector, for purposes of famine. He relieved me of a vast amount of work, and from beginning to end gave me his most loyal help.

I have also acknowledge the constant help given to me by Surgeon-Major W. O. Hara, District Medical Officer. His advice and reports of inspection proved of the greatest assistance.

The Divisional officer of Adóni, Mr. K. Subbarayadu, did very good work and was constantly engaged in inspections, without which there must have been a great deal of fraud and failure.

The Tahsildars also worked very heartily and energetically, and amongst them I must specially notice M. V. Chelapathy Naidu, Tahsildar of Bellary, and P. Subbaraya Mudaliar, who was Tahsildar of Adóni for 3½ months and of Alúr for 10 months. I would especially commend Mr. Chelapathy Naidu for the energy and zeal he displayed throughout, though I must say that Subbaraya Mudaliar runs him close.

Of the four stock inspectors I may note K. Sethu Row and B. K. Santayya as specially to be praised for their work as paying officers. All the superior Revenue officers of the district had hard work, touring and inspecting villages, to ascertain the condition of the people and assessing crops and lands for remission. In this respect I desire to express my thanks to Mr. Jardine, Acting Head Assistant Collector, who showed the greatest interest in the condition of the people of his taluks. His estimate of the condition of the Hadagalli taluk and that of the Taluk Tahsildar S. Chitamber Row turned out to be peculiarly exact and could only have been the result of constant and unwearied supervision.

Of the paying officers K. Runga Row, who worked on the very exposed Nandavaram road, and worked from the beginning most zealously and intelligently, deserves the greatest credit.

I must also tender my thanks to Mr. Plunkett, Treasury Deputy Collector, for his trouble over the accounts and audit which has resulted in everything running smoothly from beginning to end. Famine slip No. 24 is his handwork.

My Huzur Sheristadar, K. Venkata Row, the English Head Clerk, V. Subbaraya Mudaliar, and the Special Famine Clerk in my own office, K. Nagesa Sastri, are especially deserving of commendation. The latter was Mr. Forbes' righthand man throughout for all the burdensome office routine work.

ENCLOSURE No. 1.

From the Local Fund Engineer, Bellary, to the Collector of Bellary, dated Bellary, 10th October 1892, No. 2085.

With reference to your endorsement on Proceedings, dated 12th September 1892, I have the honour to submit my report on the conduct of famine relief works.

2. *Estimates.*—Estimates for famine relief works had been prepared and many had received the sanction of Government, so that when orders were received to start famine relief works we were fully prepared. These estimates fall under two heads, viz., (a) for constructing new roads, (b) for repairing existing roads. With the experience of the last famine before us it was wisely determined to confine the work to putting in order existing lines of communication. The limited funds at the disposal of our Board will allow of only small allotments for the upkeep of roads, and since in 1876-77 many miles of road were constructed, which we have never been able to maintain, it was obviously wiser to improve present roads than to add to the list of roads once constructed and then abandoned. This rule to confine work to "repairs" was departed from in three cases only for the most cogent reasons—

(1) The Adóni-Nagaldinne line should end not at Nandavaram but at Nagaldinne on the Tungabhadra. The completion of 5½ miles of road north of Nandavaram has been given up in 1876-77 in despair of finding materials.

(2) After putting in order existing road within 10 miles of the most populous and affected villages, the *Molagavally* and *Buntankal* Feeder-roads, both long felt wants, were put in hand as employment for the thousands needing work.

3. *Estimates for Repairs—Communications.*—The estimates for repairing roads included as principal items of work—

- (a) Collecting and breaking stone into road metal.
- (b) Collection of gravel.
- (c) Spreading of metal and gravel.
- (d) Consolidation of metal and gravel.
- (e) Earthwork, &c.

All these items of work are eminently suitable for unskilled labour, and, though a little intelligence is needed in the breaking of stone, I found, from experience, that the ordinary cooly became an adept in a week. If among the thousands employed there were a few coolies invincibly ignorant, it is not surprising, when we consider, that our works were open to allcomers above 7 years capable of doing any work.

4. *Tools.*—The tools required to carry on the work are—

- (a) The ordinary tools—Mamooties, pickaxes and hammers.
- (b) *Subsidiary tools*—Baskets, pegs, twine and yard measures.

At first orders were issued to Tahsildars to have all kinds of tools in readiness, but before the actual starting of work it was obvious that my department alone could rightly arrange the distribution of ordinary tools, while Tahsildars might very well prepare a stock of the subsidiary tools.

From the beginning then my department was responsible for a sufficiency of ordinary tools, and throughout the whole operations there was never a case of scarcity of tools on any of the works. The Tahsildars of taluks in which relief works were opened had prepared a number of subsidiary tools, but soon after the works were opened it was found that the sources whence Tahsildars drew their supplies of these articles were very limited and I took upon myself the responsibility of seeing that each and every work was kept supplied with everything in the way of tools.

5. *Tools—Ordinary—Mamooties, Pickaxes and Hammers.*—In addition to a limited stock of our own we borrowed from the Public Works Department, in Kurnool and Bellary.

14,000 mamooties,
14,000 pickaxes,
19,000 hammers,

which were distributed to the following centres:—

Alúr.	Harpanahalli.
Adóni.	Kúdlighi.
Bellary.	Hospet.
Hadagalli.	

For these we prepared a total of about 50,000 handles.

6. Of subsidiary tools my department purchased and supplied 50,000 baskets, 10 maunds twine, 1,500 pegs, 100 yard measures.

7. I think the best arrangement for the distribution and supply of tools to be this:

When it is decided that relief works are to be opened, the Tahsildar of the taluk concerned should be directed to have ready a number of yard measures and a small quantity of string so that he can instruct the head coolies, sub-maistries and maistries in the methods of stacking and measuring of materials. This was done during the late operations and answered admirably. The Tahsildars of affected taluks might also be asked to assist me in finding basket-makers, &c. Once the work is started the supply of tools of all kinds might be left to the Engineering Department. The reasons for this suggestion is that it is not desirable to have two purchasers in the one taluk and because I have greater command over sources of supply through overseers in contiguous taluks or in Bellary, my head-quarters.

8. *Executive Staff.*—For each famine work a sub-overseer was required, and in the selection of suitable men no small difficulty was at first experienced. There was no lack of applicants among them many who had served in the famine of 1876-77. As, however, our work was to be conducted on lines altogether different from those of last famine, I decided (and wisely, I think now) to have nothing to do with former famine men. More than once a man in Madras or elsewhere accepted my offer, and after a personal interview with me and explanation of the duties required of him he declined the post and returned whence he came. We were well rid of such adventurers. What we required in sub-overseers was not so much previous long experience but average intelligence, active habits, and, above all, to obey orders. In our work nothing or next to nothing was left to the discretion or judgment of sub-overseers. What they had to do was laid down in the clearest of rules issued by yourself interpreted again and again by me and supplemented by written instructions I gave on the spot. If they faithfully obeyed orders we were satisfied.

For not obeying orders I dismissed, summarily, a man who had had much previous experience and unexceptional testimonials, while the man who throughout gave most satisfaction—he carried out orders—is a young man with very little previous practical training.

At one time we had 9 sub-overseers employed. Several of them required constant watching to see that they adhered to rules, while some, I am glad to say, gave no cause for serious fault-finding with their work.

9. *Sub-overseer's writer—Sub-overseer's storekeeper.*—Each sub-overseer was allowed a writer on 8 annas a day to assist in the preparation of returns and a man on 6 annas a day to keep account of issues and receipts of tools—

Head cooly.

Sub-maistry.

Head maistry.

10. The working unit consisted of a gang of 100 persons in different proportions of men, women and children, according to nature of work. Each gang was in charge of a head cooly on 4 annas per day. To every 4 gangs a sub-maistry, and to every 16 gangs a head maistry, was appointed. The duties of head cooly, head and sub-maistry, are clearly defined in your famine slips. There was never a scarcity of head coolies or maistries; on the contrary there was generally more applicants than vacancies.

11. *Tasks.*—When we began in December, tasks based on experience of relief works in other districts were issued for adoption on our works. We soon found that in the case of metal tasks we were expecting far too much, and as soon as I could speak from positive personal knowledge, I addressed you and urged that the task should be reduced. The tasks were at once reduced and throughout our operations the tasks, as revised and issued in famine slip No. 43, were enforced. It is perhaps needless to go into the question of tasks again here, but I may be permitted to add one remark. In the original task fixtures we had no *definition* of metal. Given that stone is abundant and to hand and the size of metal increased to, say, 2½" and above, then 12 yards for 3rd-class task may conceivably be right. But in no furlong where we did work could stone be said to be abundantly at hand and I did *define* what road metal for us meant, and now, after experience of over eight months, I believe that the tasks as revised are fair.

12. *Shelter for labourers on works.*—For about six weeks or to the end of January in Alūr and Adōni taluks in the mornings up to 8 A.M. and the evenings after 5, a cold wind was often felt and it was difficult to get the coolies to make a start at work or to work the full 8 hours. Obviously no shelter on the works was needed, indeed such shelter would have induced to idleness.

When the hot weather set in it was thought by many that huts would be required on the works, but I have learnt from experience that natives generally do not mind heat. Putting the coolies to any great extent would have been a most costly work, but I never once thought we need trouble much about shelter from the sun and this opinion is justified by events. A very limited outlay was incurred on the Nandavaram works for supplying a few mats, and this was all that was done.

Except the road from Nandavaram to Nagaldinne, which is a howling wilderness, all other roads on which we worked had babool trees more or less plentifully lining the road side. Over these babool trees, small and big, I kept the most anxious watch and begged the Tahsildars of taluks to aid me in keeping them unloped by goat herds. It is wonderful how many families can huddle together in the shade of an ordinary sized babool, and at noon the coolies were very happy in the shelter the babools afforded.

13. *Supply of drinking water on works.*—Inasmuch as probably 30 per cent. of all coolies brought their own pot of water in the morning, our work of supplying drinking water was made easy. To keep the coolies on work supplied with drinking water we arranged two 50-gallon casks on a 2-bullock cart which made 3 or 4 trips daily according to lead. It is not easy to say what number of casks are required per 1,000 coolies, but in practice what I did was to send the casks to works ready for mounting on carts and, as necessity arose, carts were engaged while a small reserve stock of casks was held in readiness for any large sudden increases in numbers of coolies employed. The total number of casks purchased by my department was 77 casks. I think I am right in saying that throughout our operations the supply of drinking water to all works was abundant.

14. *List of works—Alūr taluk.*—(a) Chippigery relief work (Guntakal-Alūr road) collection of materials from limits of Anantapur district to Alūr, a distance of 16½ miles. Reached Alūr on the 10th June 1892.

(b) Began on the 26th May 1892 as Alūr-Adōni relief work and completed. Collection of metal up to a distance of 6 miles from Alūr. It was then found that collection of metal, since it entailed trampling on standing crops, must be stopped and this work was transferred to construction of—

(c) Molagavally Feeder-road. When collection for 14 miles out of 16½ miles (Guntakal-Alūr road) were completed we began spreading on the 24th May 1892 at two points, viz. :—

(d) Spreading 3rd mile to 8th mile.

(e) Spreading 8th mile to 17th mile.

The former spreading was finished on the 5th June 1892 and the coolies transferred to—

(f) Collection and spreading on Chippigery-Nancherla road.—Work here was discontinued on the 19th July 1892, and the coolies absorbed into (g) below. The latter spreading was completed on the 19th July 1892 and the coolies formed up for the—

(g) Construction of Chippigery-Buntanhal Feeder-road on the 3rd July 1892, when the collection up to Alūr was completed.

(h) Spreading from 17th to Alūr and subsequently collection of gravel and spreading Alūr-Adōni road was begun; this work was discontinued on the 7th July 1892, and the coolies absorbed into—

Molagavally Feeder-road work—

(i) Molagavally Feeder-road works were closed on the 7th September 1892.

(j) Chippigery-Buntanhal road works were closed on the 7th September 1892.

Work done—Alūr taluk.

15. The total work done on relief works in Alūr taluk is, in round numbers, as follows :—

(i) Alūr-Guntakal road—16½ miles collection of metal and gravel. Reforming road—Spreading and tamping all materials collected. Work finished.

(ii) Alūr-Adōni road. Collection of metal and gravel and spreading on 3 miles. Collection of metal for 3 miles more.

(iii) Chippigery-Nancherla road. Collection and spreading metal and gravel on 2 miles of road. Collection only of metal and gravel on 1 mile of road.

(iv) Chippigery-Buntanhal road. Completion of 4 miles of road. 1 mile incomplete.

(v) Molagavally road. Completion of 1½ miles of road. 1 mile incomplete.

16. (a) Adōni taluk—Nandavaram-Nagaldinne relief work begun 20th December 1891 and completed on the 1st August 1892. The coolies employed on the above were then moved to a point on.

(b) Nagaldinne-Adōni road, when a mile of spreading of old materials was done and then collection southwards to a point 6 miles from Adōni.

The first portion of this work, occupying nearly four months, was a most difficult and trying one. Between Nandavaram and Nagaldinne (5½ miles) only some 2½ miles were partly made in the last famine and 3 miles were given up and left unmade because materials could not be found. The trial pits made in 1876-77 confronted us, and the people who knew all about it were sure materials could not be found. Year after year the Local Board had the subject of completing this portion of road before it, but as often the inception of the work was not undertaken because the funds required were not available.

In spite of the failure of last famine gangs to obtain road materials it did not need any special intuition to say that materials were there if we went deep enough to get them. We resolved to find the materials and we did find them of most excellent quality. Through 6 to 8 feet of cotton soil, as hard and stiff as the hardest clay down through 12 feet of compact clay, the hardest I have ever seen, day after day for a whole month together did the gangs keep digging in their huge pits till at last gravel was found that required to be cut like rock.

The tract of country for 6 miles along the road is waterless and treeless and the blinding glare and hot winds severely tested the strength of our coolies. But the work was carried through and finished and every bit of materials were spread without a single mishap.

Work done.—Summarising the work done in this taluk we have—

(a) Nandavaram to Nagaldinne 5½ miles new road made.

(b) 1 mile materials (18 to 19 M) spread.

(c) 11 miles of metal (17½ to 6½ M) collected.

(d) 9 miles of gravel (17½ to 8½ M) collected.

17. Bellary taluk—Tekkukota relief work began at 27½ M of the Bellary-Sirugupphah road on the 26th December 1891 and moved steadily southwards, collecting materials and reforming road, till on the 3rd September 1892 we had reached 18th mile. On the 17th May 1892 a sub-overseer with a body of coolies began spreading from 23rd mile northwards, and after completing up to 27½ (the original starting point of work) collected materials up to 30th mile.

(b) Bommanhal road works started on the 19th December 1891 was discontinued on the 26th December 1891 and coolies told off to Kunnakal relief work.

Re-opened on the 15th February 1892 and continued to 1st August 1892.

Work done.—(a) Materials collected, spread and tamped (22 to 27½ M) = 5½ miles. Materials collected in 6½ miles (27½ to 30 M) and (22 to 18 M).

(b) Materials collected from (11 to 6 M) = 5 miles.

18. Hadagalli taluk.—A work was opened at Ittighi on the 7th March last and closed after three days when it was found that the people did not need it.

19. *Method of working.*—The experience gained during the progress of works has been embodied in circulars and slips issued by you from time to time and it may therefore suffice if I now merely briefly indicate a few prominent points we observed in the method of working.

Repairs—Communications.—The relative cost of metal and gravel is as 8 to 1. Our Board is too poor to afford purchase of metal for roads in cotton soil which costs from Rs. 4 to Rs. 6 per 100 cubic feet, and if the Board were to benefit materially from the works undertaken, it was by securing for the roads metal of sufficient quantity and the proper quality. That the acquisition of metal was kept in view may be seen from the fact that out of 55 miles of road worked on we secured metal in 49 miles. In only 6 miles was metal absolutely not procurable, and to make up for this we collected the best possible gravel and in ample quantity. It needs stone to be very sparsely strewn over fields two furlongs distance on either hand to furnish a yard of metal per foot run of road and again and again visitors to our works on seeing the lines of metal stacks have wondered whence the metal came, the land on both sides being black cotton with not a stone visible on it. Of course such metal cost a great deal, but there is no question that where procurable at all metal is in the end relatively and absolutely cheaper than gravel.

20. *Repairs Communications—Collection of materials—Metal.*—The quantity of metal collected per furlong varied from 100 to 140 yards per furlong according to the state of the road to be repaired. To collect this quantity of metal two gangs would take from 8 to 12 days according to task imposed. To collect 140 to 160 cubic yards gravel the quantity required per furlong was two gangs occupied only 3 or 4 days. Thus the number of metal gangs should be far greater than that of gravel gangs to avoid the daily shift of gangs and to prevent the progress of gravel workers far in advance of metal gangs. In practice what we did was this. On starting a work all our gangs were formed into metal gangs two in each furlong. Both gangs began to stack at the furlong stones and approached each other till they met in the centre of furlong and the required quantity was collected. Stacking of metal was done on one side of the road only. By observing this arrangement check could be made of the work and not infrequently. I have, for the satisfaction of discontented coolies, gone over the work done during the five previous days.

21. *Gravel.*—When metal collection was finished in a mile, gravel gangs were started one gang in a furlong, and the number of gravel gangs engaged was proportioned to the number of metal gangs, so that the pace along road of the respective workers might be fairly even. Gravel was stacked on the opposite side of road to metal stacks.

The manner of stacking metal and gravel need not be described here as it is shown fully in Proceedings, dated 8th February 1892, No. 902.

22. *Repairs—Communications—Spreading materials.*—Out of a total of about 55 miles of materials collected materials were spread and consolidated in 32 miles materials were all picked up and spread and consolidated.

23. *Communications—New roads.*—The new roads are—

- (a) Nandavaram to Nagaldinne completed.
- (b) Molagavally Railway station to village 2 miles finished out of 3.
- (c) Chippigery to Buntanhal 4 miles finished out of 5½ completed.

These works were carried out roughly as follows: Two gangs were placed in each furlong to raise and consolidate earth embankment and to collect and spread (after consolidation of embankment) a layer of gravel 6" thick over the width (14") of road. When this was done one of the gangs was moved on and one left to collect and stack 180 cubic yards of gravel for spreading on road later.

24. *Fraud how prevented or treated.*—Fraud, meaning loss to Government through embezzlement of money, there was none because, I believe, that it was impossible through constant check by the responsible officers of the district. During the whole course of the work one solitary case of a sub-overseer exacting a fee for giving the appointments of head cooly and maistries was reported. I tried to get at the truth of the matter, but of course failed. I watched the sub-overseer and discovered nothing, but on the other hand took the earliest opportunity of getting rid of him.

In the beginning of our work there were a two or three cases of coolies placing large stones or earth in the centre of metal heaps, but the punishment summarily meted out to the offenders, viz., dismissal altogether of head cooly and temporary dismissal of the gang effectually guarded us against a repetition of such practices. Again there were a few cases of over-measurement of stacks for which a sub-overseer was fined and another warned and maistries in every case fined. These and these only were the cases that occurred and as they were very few, they cannot be viewed as serious.

25. *Distribution of tools to coolies.*—On the very first day of opening work at Chippigery, it was clear that to collect tools from the coolies after the day's work and distribute them again on the work next morning was wholly out of the question. To collect and distribute tools would have occupied several hours daily which must mean curtailment of the actual working day and therefore a great loss to Government or the shortening of the stay of coolies at their homes.

The coolies then were given the tools and allowed to take them home, while every care was taken to keep accounts of the issues and receipts. This, the only workable plan, was, of course, risky, and I fear that some tools have been stolen. How many have been stolen I cannot ascertain until my tools accounts have all been made up, but I have reason to believe that the losses are not great.

26. *General remarks.*—Before the works were many weeks old it became evident that, for the success of the operations, no hard and fast rule defining the work of each official could be laid down. Unless a system of give and take and mutual aid was observed among the various officials in charge of works, serious inconvenience would result. This may seem a detail, but, if it is one deserving of importance. I am glad to be able to say that no obstructive tactics were practised, and that on the whole the works proceeded with one assisting the other as far as he could.

27. *Revenue officers.*—If I may I would like to bring to your notice the great assistance rendered on all occasions by revenue officials, especially by the Deputy Collector of Adoni, M.B. Ry. Subbarayadu Pantulu Garu; by the Tahsildar of Adoni, M. B. Ry. Kothundarama Naidu Garu; by the Tahsildar of Alur, M. B. Ry. Subraya Modaliar Avergal; by the Tahsildar of Bellary M.B. Ry. M. Chellapathy Naidu Garu.

28. *Local Fund subordinates.*—Among sub-overseers who tried to do their duty, I beg to name—

S. Singaravulu Mudaliar in charge of Alur-Guntakal road spreading and the construction of Buntanhal road.

H. Runga Row in charge of spreading Alur-Guntakal and Alur-Adoni roads.
Govindasawmy Pillay in charge of Buntanhal road.

The Adoni permanent overseer had extra work thrown upon him in the supplying of subsidiary tools to works and he never failed me. The Alur permanent overseer had also to supply tools and he generally did his work well.

29. *Office establishment.*—Notwithstanding that an extra clerk was allowed, a great amount of extra work was entailed on my office, and I think that all hands worked very satisfactorily throughout the nine months. I would especially bring to your notice that my head clerk, S. Gopaul Row, worked exceedingly well amidst the heavy burden of work thrown on him as also my second clerk, Goochoosamy Naidu, who accompanied on my journeys of inspection of relief works.

30. My omission of essential points in the narrative will be ready to your hand from your own frequent inspections of the various works as from reports sent to you from time to time by responsible officers. What I tried to bear in mind and to carry out from the beginning to the end of the work was first that Government must have from the coolie a fair amount of work for the wage disbursed; secondly, that the coolie, while being watched that his strength be not overtaxed, should receive a wage proportionate to the work he turned out. It is not to be expected that I could under every circumstance and in all cases satisfy at once Government and the coolie. Whenever and on whatever side we may have erred, you, I am sure, will not ascribe our errors to laxity of supervision of the works. This regards the Government outlay.

The interests of the Local Board had also to be regarded. Was it to receive again a legacy of mountains of inferior gravel and oversized and practically useless metal piled up when least required along roads. It is not for me to land what has been done and how it has been done.

ENCLOSURE No. 2.

From W. E. JARDINE, Esq., Acting Head Assistant Collector of Bellary, to the Collector of Bellary, dated 15th September 1892, Ref. No. 1401.

In reply to your reference, dated 15th September 1892, No. 4547, I have the honour to state that the following relief works were in operation in this division:—

- (1) The Darogi tank work.
- (2) The road work at Ittigi.

No. (1) was started on the 15th December 1891 and was managed by the Public Works Department. It was placed under the control of a Superintendent, the Public Works Department overseer visiting the scene occasionally for payment to the coolies and exercising some check. The nature of the work was the removal of the prickly-pear. The Public Works Department had its own system of labour and the coolies were generally paid first class wages. The mode of working and the payment to coolies, &c., will be found described in detail in my letter No. 8, dated 15th January 1892.

The work was purely for providing relief to Bellary taluk, where distress was rife and to which the scene of work was nearer. It opened with about 106 people. The number rose to upwards of 600 in the second week and by the end of the third week it provided labour for about 1,008 people. But this did not last long. By the end of January the number had fallen to 183. The work, however, lingered on till the end of April and it was closed in the first week of May. The number on the last day was 41. No special relief was provided for the shelter of the coolies, who generally resorted to their homes in the evening, nor were any frauds reported. The condition of the people was throughout excellent.

2. *The Ittigi work.*—This work was opened on the 7th March 1892 under the orders of the Collector, but proved a failure, having been closed on 17th March 1892. Only 49 coolies were present. It had been opened with the belief that relief would be absolutely necessary in the Hadagalli taluk, but it was found that that was not the case. The people had private labour available by way of removal of nuth grass, whereby they got higher wages than those usually given on relief works. This in main is the reason for the non-attendance of coolies. The work during the short time it was in existence was supervised by the Local Fund Engineer. I was also present when it was opened. No special arrangements were made for the shelter of the people on works.

3. Besides the foregoing two works, several minor irrigation works were put in hand in Kudlighi and Harpanhalli taluks to provide labour. The village officers were also directed to give relief to stray cases deserving relief found in their villages.

ENCLOSURE No. 3.

From M.R.Ry. K. SUBBARAYUDU PANTULU GARU, Deputy Collector, Adoni Division, to the Collector of Bellary, dated 10th October 1892, No. 1057.

Referring to your endorsement, Reference No. 4547, dated 15th September 1892, on copy of Board's Proceedings, M.S. No. 7430, dated 12th September last, I have the honour to report as follows.

2. The necessity for affording relief to distressed people in need of labour by the opening of relief works having been established, the first relief work in the division was opened at Chippagiri of the Alur taluk on the 15th December 1891, on the Alur-Guntakal road, and the second work was opened five days after that or on the 20th December 1891 at Nandavaram of the Adoni taluk. In opening the above works, the parts of the taluks most seriously affected were taken into consideration, and considering the numbers of coolies then coming and the distance from which they were coming, one work for either taluk was first considered sufficient. As, however, the numbers of coolies increased and the distress appeared more widely spread, the number of relief works in the Alur taluk had to be increased from time to time as necessity arose; and including the repair of the supply channel of the Alur tank, the work on which was finished in less than a fortnight, seven works in all have been opened in the Alur taluk. In the Adoni taluk, on the other hand, there was always only one work throughout, and this was found quite enough. Work was first done on the section from Nandavaram to Nagaladinna, and after that was completed the same gangs were removed to near Yemmiganur from which work was done on the road southward towards Adoni. A statement marked A showing the different relief works opened in the division, the dates of their opening and closing, the amount spent on each work according to information available in the taluk offices, the nature and the approximate quantity of work done on each, and the number of coolies who attended, is enclosed, and it will be observed from this that, as was already reported from time to time both by sketches and otherwise, the distress was more severe and more widely spread in the Alur taluk than in the Adoni taluk. It will also be observed from the same statement that, with the exception of the comparatively slight work done to the supply channel of the Alur tank, all the other works opened were Local Fund road works; and it is the unimportance of this division in point of irrigation works that led us to fall back upon road works as the next best.

3. The supply channel work of the Alur tank was done under the professional supervision of a Public Works Department overseer, and all the other Local Fund road works were done under the immediate professional supervision of the Local Fund overseer and sub-overseers named in the last column of the statement referred to in the preceding paragraph. Mr. MacInerney, the Local Fund District Engineer, now and then visiting and inspecting the road works and issuing the requisite instructions to the overseers and sub-overseers in immediate charge on professional matters. On the revenue side, there was Deputy Tahsildar A. D. Krishna Row of Yemmiganur attached to the one relief work in the Adoni taluk, and Special Deputy Tahsildar K. Subba Row of Alur was similarly attached to the relief works in the Alur taluk, and of course the works were also being visited and inspected as often as possible by the respective Tahsildars of the taluks, by myself as the permanent Divisional officer and also by the Collector. The Special Famine Deputy Collector, Mr. Adekesavulu Naidu appointed to the charge of the Alur taluk in March last, also inspected the works of the Alur taluk from time to time since he took charge of that taluk.

4. All the relief works were, as far as possible, executed according to the rule framed and published by the Collector of the district, and the instructions contained in the *Supplies* slips issued by him from time to time, and the task system was enforced all throughout, and it is gratifying to have to observe that, although the tasks were on the whole strictly enforced, and though the coolies did not generally earn more than the third-class wage, that wage alone was found enough to keep the coolies on in good health till the end. It must, however, be mentioned at the same time that, in my humble opinion (a) the timely opening of the relief works, (b) regular and punctual payments of wages and (c) the fact, that although the rates

of wages were comparatively low taken individually, all the members of a family—men, women including nursing mothers, and all eligible children coming in search of labour were freely taken on the relief works and paid their wages, whereas ordinarily children and nursing mothers would not be engaged as coolies and would not get any cooly at all except perhaps in places where there are large mills and factories working, have also largely contributed to the maintenance of good health by the famine coolies till the last.

5. Payments of wages were made by paying officers who were appointed at the rate of one for every thirty gangs or fraction thereof and Nagadi clerk K. Runga Row, R. Nursinga Row and Stock Inspector K. Setu Row were the paying officers on the work in the Adoni taluk, and Stock Inspectors Chithambaradevu, Setu Row and Santhayya and Gopalaswamy Naidu, Mr. D. Silva, Srinivasa Row, Venkataramana Iyer, Venkata Subbayya, and K. V. Ramanajam were paying officers from time to time on the works in the Alur taluk. The overseer in charge of the work himself made payment of wages to coolies in the case of the supply channel work of the Alur tank. The paying officers felt a little difficulty in making payments regularly for a few days in the beginning till they acquired some practical knowledge of the rules, but they soon got into the groove and learnt to make payments regularly and with facility; and it must be said in justice to them as a body, that although the nature of their duty is somewhat trying, they have almost all of them acquitted themselves creditably, without giving room for any complaints of short payment or extraordinary delay in payment from the coolies. Stock Inspectors Setu Row and Santhayya and Nagadi clerk K. Runga Row, have shown themselves particularly able and energetic in their work.

6. Sufficient attention was paid all throughout to the supply of sufficient water for drinking purposes to the coolies on the works. Water was supplied in casks, carried two in a cart at a time, and special care was taken to raise or lower the number of water carts according to surrounding local circumstances and the numbers of coolies on the works; and I am glad to have to say that, notwithstanding that some of the relief road works in the division run through extensive treeless and waterless plain, everything went on very smoothly, even in this direction, without any kind of accident or inconvenience whatever.

7. As a general rule the coolies were all returning either to their own villages wherever possible or to villages surrounding the works and taking shelter there in nights in old temples, vacant houses or homes of acquaintances or relatives. It was, therefore, not found necessary to provide any shelter for them, but when work was going on in the midst of the barren open plain between Nandavaram and Nagaladinna in the Adoni taluk, and when severe hot winds began to blow, sanction was obtained to erect some temporary movable sheds there for the protection of tender infants and babies, and for this purpose a small amount of Rs. 22-5-0 was spent. It was not found necessary to incur a similar expenditure anywhere else because of the existence of palul trees here and there by the roadsides.

8. In a few and far between instances it was discovered that coolies working tried to defraud by putting in rather big stones in the midst of heaps of broken metal, but such tricks were detected then and there and nipped in the bud and checked both by fining the coolies and others concerned and by the issue of instructions to all executive and inspecting officers to watch against such frauds by taking daily a few heaps at random and examining their contents here and there. One or two Kolkars who were found to have marked as present a few coolies actually absent were also detected then and there at the usual checking of gangs by the inspecting officers and duly punished. There was thus little or no fraud on the whole, and this is no doubt due to the careful supervision and healthy check exercised by the different kinds of inspecting officers from time to time.

9. The other kinds of relief afforded in the division during the past season of distress were kitchens for children in connection with the relief works, and the grant of loans under the Land Improvement and Agriculturists' Loans Acts.

10. One children's kitchen was opened on the Adoni-Nagaladinna road work on the 7th March 1892 and it was closed on the 2nd August last with the work itself. The total amount spent in connection with it was Rs. 235-2-2 and the average attendance at it was about 15. Similarly a children's kitchen was opened on the 1st March last on the Alur-Guntakal road work and it was closed on the 31st August last. The amount spent in its connection was Rs. 436-3-9 and the average attendance at it was about 30. It was noticed that, as a general rule, the coolies here did not like to send in their children to the kitchens, even although the kitchens were quite close to the place where their gangs were working, and this disinclination seems to my mind to be due to a superstitious idea that they seemed to have had that it is a very mean thing even for the poorest and the lowest class person to say that his or her child has gone to the "kitchen" as they call it.

11. A statement marked B showing the work done in this division in the way of grant of loans for different objects under the Land Improvement and the Agriculturists' Loans Acts is also enclosed. There is no doubt that many people who would otherwise have had to go to our famine relief works found work nearer their homes in "nuth" grass clearance and well-sinking

more especially in the former, as, besides the expenditure of the amounts obtained as loans under that head, several big and well-to-do ryots have chosen to spend large amounts from their own pockets in getting large extents of their holdings cleared of "nuth" grass and well improved, taking advantage of the dry season and cheap labour. But it must be said that it was only strong-bodied youthful males that found labour in "nuth" clearance and strong men and women in well-sinking. Children and nursing mothers will not generally be admitted on such works, because the employers think they would be losers by employing such, and certainly women and children will never do for "nuth" grass clearance. For detailed information in connection with the subject of wells in this division, please see my report, No. 1027, dated 6th October, submitted the other day.

12. I feel particularly happy to have to add in conclusion that in consequence of the timely opening of the relief works and the care and interest taken by the different officers concerned, the famine administration in the division has been, in my humble opinion, a complete success on the whole; and what is still more gratifying is that there was not even a single case of death from starvation any where in the division, although Alur taluk is apparently the most affected taluk in the whole district. Cholera spread in here and there in the division towards the close of the famine operation, but thank God even this dire epidemic has practically been kept away from our works by His Gracious hand.

ENCLOSURE No. 4.

From M.R.Ry. C. RAMASESIA AIYAR, Avergal, Deputy Collector, Bellary Division, to the Collector of Bellary, dated 25th October 1892, No. 87.

[Reference on No. 4547, dated 15th September 1892.]

I have the honour to submit the report called for on the famine operations in the Bellary and Rayadurg taluks forming the head-quarter division.

2. There are two seasons of cultivation of lands dependent upon falling rain, viz., mungari and hingari. The former embraces the months of May to July and the latter August to November. The rainfall in fasli 1301 during the cultivation season was as below:—

The figures of Bellary town are quoted—

	INCHES.
April	2.29
May	2.13
June	0.14
July	1.30
August	0.30
September	0.81
October	0.65
November	
December	

3. The rainfall in the mungari period was much below the usual quantity. Advantage was taken of it small though it was, and the red soil lands on which generally mungari crops are raised were cultivated with sozza, jonna, korra, akkidi, &c., but the absence of rainfall subsequently affected their growth and development and resulted in a general failure. In some places an average crop of 2 to 4 annas was obtained. In one or two villages, as for instance, Tekkalakota, the average exceeded 4 annas.

4. The hingari was a total failure everywhere. Large extent of land, chiefly black soil, were left waste in every village.

5. The ryots looked upon the season with great anxiety, and when their last hope was blighted, began to waver. The cooly classes that depended entirely upon agricultural labour were the first affected and began to seek other means of livelihood. At this time the Government relief works were opened and they were timely. They checked migration to a great extent.

6. A few works, capable of employing a large number of laborers for a length of time, were opened as test works. In the beginning a few minor irrigation works were started in Rayadurg taluk, but these were stopped as soon as the test works were opened. The expenditure on the former was small and only local labour was provided for by them. In each taluk one irrigation and one road work were started as test works. In the Bellary taluk, the Gundiganur tank and in the Siruguppa road, and in the Rayadurg taluk, the Kanekal tank and Bommanahaul road were the works selected. The dates of opening were as follow:—

Gundiganur tank	15th December.
Siruguppa road	26th "
Bommanahaul road	19th "
Kanekal tank	27th "

7. Excepting the Kanekal tank work the others were started under the Revenue Department agency. The Kanekal tank was from the beginning under the Public Works Department. The Gundiganur tank remained under the Revenue Department up to 24th February, when it was made over to the Public Works Department. It was managed by an Assistant Engineer of that department. The Bommanahaul and Siruguppa road works were in charge of Local Fund Overseer under the supervision of the Local Fund Engineer. The financial part alone was retained in the hands of the Revenue officers.

8. *Gundiganur tank*.—This, as stated above, was opened on the 15th December by the Tahsildar who was the Inspecting officer; I was present at the opening. A good number came on it and the strength increased soon. The task system was in force and as the earnings of the coolies were reduced with reference to the actual task performed, they withdrew from the work in numbers shortly after they returned, but the original strength was not obtained. Ramaswami Naidu of the Collector's office was the first paying officer. He was soon relieved by Mr. Moore who was shortly after replaced by Santiah of the Agricultural Department. The Deputy Tahsildar of Siruguppa was in charge of the work until towards the end of January when Assistant Engineer Mr. Venkatramiah took charge. The work was finally transferred to the Public Works Department on the 24th February. It continued until 15th August when it was closed as a relief work.

9. *Siruguppa road*.—This was opened on the 26th December. The Tahsildar was the Inspecting officer throughout and the Deputy Tahsildar of Siruguppa was also latterly added as Inspecting officer. Obulu Row of the Collector's office was appointed as paying officer. He was however, within a few days relieved by Stock Inspector Rangayya Naidu (13th January 1892). The latter continued as paying officer till the work was closed. The Taluk Local Fund Overseer was in charge of the work for a few days until a separate Local Fund Overseer Masilamasi Pillai was appointed to the charge of it. The work was begun at Tekkalakota at the 27th mile and proceeded southwards. All the coolies worked in one block until 30th June 1892 when under your order, dated 29th June 1892, No. 3261, the coolies were separated into two sections—one working in the south towards Sanavasapur and the other northwards from Tekkalakota. The southern section continued in charge of Masilamasi Pillai and the northern section was placed in charge of Narayanaswami Naidu, who was latterly succeeded by Govinduswamy Naidu. Stock Inspector Rangayya Naidu continued as paying officer of the southern section and the northern section was entrusted to the Deputy Tahsildar of Siruguppa who undertook the paying business till the work was closed.

10. *Bommanahaul road*.—This work was opened on the 19th of December; the work was commenced at Bommanahaul and moved northwards. Bhimasena Row, 2nd clerk of my office, was appointed as paying officer. On the 26th, it was closed and the coolies were relegated to the Kanekal tank work. Very few of them however joined it. After this (Kanekal work) was closed, the Bommanahaul road work was re-opened and was in operation from 1st February to 31st July 1892. The Tahsildar of Rayadurg was the Inspecting officer so long as the scene of work was within the limits of that taluk. From the middle of April when the laborers began to work in the limits of the Bellary taluk, the Bellary Tahsildar was the Inspecting officer. Mr. D'Sylva was the Local Fund Overseer in charge up to the end of March when Govinduswamy Naidu succeeded him. There was a succession of paying officers as below:—

(1) Mr. Moor up to	27th April.
(2) B. K. Santhyya up to	27th June.
(3) Gopalachari, up to	11th July.
(4) Narasinga Row, up to	close.

The work was closed on the 31st July 1892.

11. *Kanekal tank*.—This was commenced under the Public Works Department. The coolies on the Bommanahaul road work were transferred to this. Very few of them however attended it, as it was too distant for their homes. The wages paid were considered too low and the numbers on the work never rose. It remained less than 100 and the work was closed soon after. There was no necessity for relief in this part as there was ample employment for the laborers. Kanekal is a large irrigated village, and to supplement the irrigation from the tank which was insufficient, numerous small wells over 250 were sunk in wet lands and worked. Wells were also sunk and repaired in the red-soil parts in the south. These provided for a large number of persons who were thus able to earn their usual wages. Hence famine labour was not in requisition.

12. The number of labourers on the works was limited for some time, but as distress deepened the numbers rose rapidly. The maximum numbers on the works were as below:—

Bommanahaul	669
Siruguppa	2,762
Gundiganur	477

The number began to fall from June, when rain fell to a sufficient extent to commence agricultural operations. The strength on each work was gradually reduced and was as below when they were closed:—

Bommanahaul	...	...	...	...	...	...	...	244
Siruguppa	...	...	...	...	...	...	...	1,191
Gundiganur	...	...	...	...	...	...	...	Not known.

13. The coolies were generally drawn from the villages adjacent to the scene of work. Very few attended from distant places. The whole of the laborers employed on the works were not entirely devoid of means of subsistence and some proportion of them possessed it, but they, notwithstanding, tried to earn what they could rather than keep quiet and exhaust the small means at their disposal which they intended to conserve to meet any future worse contingency. Less than 100 coolies attended the Siruguppa road work from the Alur taluk and all the others on the work belonged to the villages of the Bellary taluk.

14. It cannot be said that the ryots of other villages, who did not avail themselves of the Government relief, were in better circumstances or were wholly provided for in their villages on private works. These were limited and in a number of villages there were none; yet the cooly classes subsisted somehow without Government aid. This is remarkable in the Rayadrug taluk. On the whole it seems to me that the rural classes were not as bad as originally supposed and were able to tide over the famine without much suffering.

15. *Petty establishment.*—This consisted of the head cooly, sub-maistry and maistry. These were employed in numbers proportioned to the strength of the coolies on the works according to the scale fixed. Their pay was also regulated according to the scale.

16. *Payments.*—Payments were made daily or once in 2 or 3 days according to the number of gangs the paying officer had to deal with, and the distance he had to travel from his headquarters. Daily payment was, however, the rule and was insisted on, and only where this was impossible, payments were made once in 2 or 3 days according to circumstances.

17. Subsistence allowance was paid for one day in every week at the rates fixed without exacting labour from the coolies for that day. This day was generally the nearest weekly market day which allowed the coolies time to make purchases of their necessities in the markets. Only those that had attended the previous six days regularly were allowed the benefit of the subsistence allowance.

18. *Wages.*—These were paid according to the scale fixed. The price of the staple food-grain in general use, viz., jonna, at the head-quarter station, on the last day of the week, was taken as the basis of the calculation of wages for the ensuing week. The 3rd-class wages was the rule and higher wages were paid according to the results turned out by the coolies; when the quantity of work executed fell short of the task fixed, proportionate reduction as required by the rules was made in the wages paid. There were of course complaints of insufficiency of wages, but these were really unfounded. The wages earned were in a great majority of cases sufficient for the working members.

19. *Remittance.*—The remittance of money required for payment was made from the taluk weekly. It was regular and sufficient. Copper of different denominations was always available to the required extent.

20. *Sex.*—Females and children preponderated in all works. The gangs were composed in the fixed proportions of men, women and children according to the rules. It seems to me desirable that the proportions of women and children should be reduced and that of men increased in the constitution of gangs. There were complaints by the male coolies that they were unable to obtain the full benefit of their labour owing to the preponderance of the female and children element.

21. *Health.*—Health of the coolies was good. There were no epidemics, except a few sporadic cases of cholera on the Bommanahaul road work.

22. *Physical condition of coolies.*—This was generally satisfactory. The reports on the selected laborers were as a rule favorable. Wherever a falling off in condition was observed it was found not due to too much exertion or insufficiency of wages, but was attributable to other causes, such as illness or the fact that the working laborer had more non-working dependents than his earnings could provide for. No cases of particular emaciation on account of over-task or insufficiency of wages have come to notice. The tasks were modified so as to suit the condition of the laborers. The overseers in charge fixed it every day with reference to the soil and distance of carriage, &c. Very few strong persons attended the works and the great majority of laborers were of the middling or weak class.

23. *Bazaars and huts.*—The works were in the vicinity of big villages and at no great distance from them. The laborers arrived in the mornings and returned to their homes in evenings. Bazaars were therefore unnecessary. For the same reason no accommodation was provided for laborers on the works.

24. *Water-supply.*—During the hot season water was supplied to the coolies from the nearest wells in the vicinity of works. Carts with casks were employed for the purpose. Their number was proportionate to the number of coolies on works. Each cart was attended by one or two men for distribution of water. Water was also stored in tubs and pots in one or two convenient places for the use of the laborers. There was no lackness of water-supply which was managed satisfactorily. The water used was of the purest quality available. No wells were specially excavated for the use of coolies, as the scene of work was nowhere too distant from existing water-sources.

25. *Gratuitous relief.*—There was no poor-house or village gratuitous relief, but relief was afforded in kitchens. Children under seven years of age and the old and infirm unfit for admission on works were fed therein. Only one kitchen was established on the Bommanahaul road work in the Rayadrug taluk. It was opened in the middle of May and was under the supervision of the paying officer in charge of the road work. A head cooly was placed in immediate charge of it. The attendance was not large. The maximum number fed did not exceed 20. It was closed on Collector's orders No. 2368, dated 7th July 1892. A small shed was put up, and the poor were fed during the day and returned to their homes during nights. Water-supply was sufficient and the food arrangements also were satisfactory. The kitchen was worked strictly according to the rules.

26. *Special relief—Artisans.*—No artisan class suffered so much as weavers. The chief industry of both the taluks is weaving. Weaving population is large in Rayadrug, Hirehal and Bellary. In the former two places relief was rendered necessary, but local charity was available and assisted the needy. The rich merchants and ryots in those places subscribed amongst themselves and assisted the poorer weavers with grain doles supplemented by a small money payment. This continued for some time until prospects commenced to improve. No special measures were adopted in regard to weavers in Bellary and other places as these were able to find means of living otherwise.

27. No relief was found necessary to Ghosha women.

28. *Frauds.*—There were no complaints of short payment nor were any frauds discovered. There were a few inaccuracies in the measurement of work executed, of which proper notice was taken. The head maistry and overseer's writer on the Siruguppa road were dismissed for preventing the admission of a cooly and keeping him off the work for some days. The registers and cash balance were examined by the Inspecting officers and myself and no noteworthy irregularities were detected. The cash balance was found correct, except on one occasion on the Bommanahaul road work when at my inspection it differed from the balance according to the registers, an excess of Rs. 9 and odd having been found. This amount was under your orders credited to Government.

29. *Migration.*—As distress increased, the needy people began to migrate to places where they expected to obtain a living. They remained in their homes till their last hope of rainfall failed. Family works were started just in time for their relief. Besides those that attended the relief works, a large number went to the western parts, such as Hospet and Sandur, where they found employment mostly in cutting grass and in the harvest of paddy fields and in sugar-cane plantations. The migration was not extensive, but very limited, except to Sandur parts; to those, ryots from all parts repaired with their cattle with the double object of grazing the latter as well as eking out their livelihood. A number of people migrated to the north and south, but many of them returned soon after being disappointed at not being able to find employment there. When rains began to fall they began to return and by the end of July all had joined their homes.

30. *Health of the people in villages.*—The health of the people in the villages was good. Cholera broke out in some of them latterly, and subsided sooner or later. There was no other epidemics. There were no deaths or any diseases due to starvation or defective or bad quality of food. The lower classes who did not resort to works managed to subsist with the limited means at their disposal. Where this was insufficient they curtailed the food, so much so that in many cases they took only one meal a day. Their physical condition was notwithstanding sufferings were principally Madigas, Boyas, Korichas, and the like lower classes who generally live from hand to mouth. The condition of children was also generally fair.

31. *Water-supply.*—Though in some villages water was obtained with difficulty, yet there was no scarcity of water except in a few regad villages where water had to be obtained from a distance both for men and cattle. Difficulty of water-supply was also felt in the Bellary town. The two reservoirs which formed the main source of drinking-water supply were dry for some months.

32. *Prices.*—As rains held off the price of food-grains rose gradually. In the beginning this was due partly to the imports to the south. Towards the close of the past year, when famine became a certainty, the import to the south ceased and holders of stocks withheld their grain and prices began to rise rapidly. Merchants were, however, brisk and large quantities of grain were imported from the more favored places in the north and the market was fully stocked.

Rice and paddy were imported from Anantapur and Kistna. The prices were stationary for some time, and on the fall of rain they began to fall.

33. *Cattle*.—Cattle suffered more than men. Scarcity of fodder was felt everywhere, and the stock of dry fodder with the ryots was limited, and this had been considerably expended by the time they expected the mungari crop to be in, and when this failed they had to find other means of feeding their cattle. Owing to want of rain, pasture also became scarce except in the hilly parts. This led to a large number of cattle being driven to the Sandúr and Joga hill parts. The import of dry grass from Sandúr and other hills increased and its price rose as demand for it became greater, so much so that a cart-load was sold for more than treble the ordinary rate. Grass of the worst description found a ready market and was paid for at dear rates. The sale of jonnd stalks very much decreased. The result was that the ryots unable to maintain their cattle, commenced to dispose of them; large numbers of them were brought to the market and were sold at very low rates, which ranged in the deepest distress from $\frac{1}{3}$ to $\frac{1}{4}$ of the ordinary price. The height of the cattle sale was in the months of March and April. There was no cattle disease, but mortality from starvation increased from month to month. I quote the figures of the Ráyadrug taluk in the margin, but the mortality in the Bellary taluk was not the less.

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The prices of skins fell considerably. The sheep and goats did not, however, suffer to the same extent. The rain fell and agricultural operations were commenced actually, the demand for ploughing cattle rose considerably, so much so that the cart-bullocks were also used to plough the fields; hire was paid at so high a rate at 2 or 3 rupees for a pair of bullocks per day. Instances of men taking the place of cattle were not wanting and were noticed here and there.

34. *Advances under Land Improvement Loans Act*.—Advances under the Land Improvement and Agriculturists' Loans Act were freely given, and this enabled many ryots to find employment locally in their own villages. There was work available both for skilled and unskilled labour. The total amount advanced under the Land Improvement Loans Act was Rs. 1,06,537½ and under Agriculturists' Loans Act was Rs. 21,288.

A Special Sub-Magistrate with a gumastah on Rs. 20 was entertained in the Bellary taluk for the magisterial work.

The following establishment was also entertained in connection with Takavi work:—

Ráyadrug taluk ...	One Revenue Inspector and one gumastah.
Bellary	Two Revenue Inspectors and one gumastah, and also two gumastahs for one month latterly.

RESOLUTION—dated 3rd December 1892, No. 768.

Recorded pending preparation of the general famine report.

(True Copies and Extract.)

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

To the Collector of Bellary.

1892.

Board of Revenue

(Revenue Settlement, Land Records
and Agriculture),

MADRAS.

Printed December 14th.

Proceedings, 3rd December 1892, No. 768.

Recording, report from the Collector of Bellary on famine operation of 1891-92 in the district pending the preparation of the general famine report.

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BOARD OF REVENUE (REV. SETT., L. RDS. AND AGR.), 18TH FEB. 1893, No. 64.

PROCEEDINGS OF THE BOARD OF REVENUE (REVENUE SETTLEMENT, LAND RECORDS AND AGRICULTURE).

READ—the following letter from C. KOUGH, Esq., Collector of Kurnool, to the Secretary to the Commissioner of Revenue Settlement and Director of the Department of Land Records and Agriculture, dated Kurnool, 17th January 1893, No. 166 :—

I have the honour to submit, as directed in Board's Proceedings, Mis. No. 7430, dated 12th September 1892, my report on

Deputy Collector of Cumbum.
Do. of Pyápali.
Do. of Kurnool.

the conduct of the famine operations in this district during the recent distress of 1891-92. The reports of the marginally-

noted Divisional officers who had control of these operations are forwarded herewith in original.

2. I regret the delay that has occurred and which is due to the very late receipt of the report from M.R.Ry. S. Venkata Rama Dos Naidu Garu, who was in charge of the famine work of the Cumbum division, and who, owing to subsequent transfer to Forest duty, was unable to submit his report to reach me earlier than 4th current.

3. This district has an extent of 7,514 square miles, of which nearly 2,500 are covered with hills and forests; and its population, according to the census of 1891, is 817,528 against 678,551 in the year 1881. The Nallamalais running from north to south divide the district into two natural sections and form the western boundary of the Cumbum division, comprising the two taluks of Cumbum and Márkápúr, with an extent of 2,173 square miles and a population of 216,614. It is this division that

Koilkuntla.
Pattikonda.

Rámallakót.
Nandikótkur.

suffered first and most in the recent famine; portions of the marginally-noted four taluks in the western section also

suffered slightly, so that the total affected area in the district may be put down roughly at 2,975 square miles containing a population of 316,000 in round figures. This area does not include those small tracts in the Nandyál and Sirvél taluks which were for a short time classed as "affected." The Márkápúr taluk was the worst off where there is but little wet land, whilst there was a general failure of the crops on dry lands; and the supplies in the wells, upon which much is dependent, ran exceedingly low. In Cumbum the worst portion was the northern, forming the Racherla firka, where there was widespread failure of the crops on dry land, whilst the failure of water-supply in the great Cumbum tank, which led to the total loss of second-crop on about 3,800 acres, crippled the resources of the taluk to a great extent. In Koilkuntla the failure of crops was chiefly in the western portion lying along the Yerramalai hills where the soils are light and often stony. In Pattikonda some light-soil villages on and about the Yerramalai hills where early cholam and castor are the most important crops, and a larger number of heavy-soil villages in which late cholam and cotton are grown, were affected. In Rámallakót and Nandikótkur, where the affected area comprised respectively a score of villages along the Bellary high road and a dozen villages to the extreme south, the failure is ascribable to the withering of the crops sown late in the south-west monsoon of 1891.

4. Rainfall and rice.—The south-west monsoon usually sets in in the first week of June and continues up to the end of September when the north-east monsoon commences and lasts for about 2½ months, i.e., till about the beginning or middle of December. In 1891, however, the south-west monsoon did not burst till the 3rd

week of June, and this is why in my season telegram for the week ending 13th June 1891 I reported that rains were wanted for red soils. The rainfall in the two subsequent weeks was, however, ample and stimulated the cultivation in these soils; but unfortunately the crops then sown began to droop and wither in the first week of August in consequence of the insufficient rainfall of July in parts of Pattikonda; Rámallakót, Koilkuntla and Cumbum taluks; black soils in most places, too, had hardly sufficient moisture in August to justify sowing. As the showers of June turned out to be merely local, the deficiency of rainfall was most keenly felt in Nandikótkur, Cumbum and Márkápúr taluks, and it was at this stage that I suspected that the south-west monsoon might prove a disappointment and accordingly addressed my Divisional officers confidentially about the middle of August on the state of the season, but they all reported that there were no apprehensions of distress then, but that further holding off of rain would alter the aspect of the situation. The Divisional officers' reports were probably affected by fairly heavy showers having fallen on the 10th and 11th of August. Since then, however, reports began to be received of the withering of crops and the insufficiency of fodder. The rain registered in September 1891 was very scanty, and especially so in the Cumbum division, and by the end of the month prices of ragi and cholam, the staple food-grains of the division, rose respectively from 25 to 21 and from 26 to 30 Imperial seers of 80 tolas. It was at this time, that is, about the 25th September 1891, that I received the first alarming reports of the Cumbum Divisional officer and of the Tahsildar of Márkápúr describing the state of the season in that taluk and recommending that the sanction of the Board for the starting of certain irrigation works be obtained with a view to have them in readiness for execution in case of necessity. These reports having distinctly shown that distress was inevitable in case the north-east monsoon should hold off for a fortnight more, I addressed the Board requesting sanction for carrying out a few minor irrigation repairs costing about Rs. 6,200. In reply, I was directed by wire to make a further report after inspection of the taluk in case prospects should not improve in the meantime. I accordingly visited the taluk in the middle of October 1891 and reported the situation to the Board, first by wire and subsequently in my letters, No. 5109, dated 19th October 1891, and No. 5110, dated 20th October 1891, disposed of in Board's Proceedings, No. 695, dated 28th October 1891. Eventually the north-east monsoon, upon which this division is mainly dependent, proved an utter failure, there having been only 2.30 and 3.75 inches of rain at Cumbum and Márkápúr respectively in the first six weeks with long intervals.

5. While this was the case in the Cumbum division, crops were withering and prices gradually rising in the rest of the district also, except in Sirvél. Large extents were left waste, and employment was becoming more and more difficult to procure. All hope of black soils had vanished. The following table exhibits clearly the average and actual rainfall in 1891 over the affected area:—

Taluka.	Average		Actual	
	From April to September.	From October to December.	From April to September 1891.	From October to December 1891.
1. Pattikonda	17.07	5.97	13.05	3.43
2. Rámallakót	21.65	4.28	11.60	2.33
3. Nandikótkur	23.75	4.74	12.65	2.82
4. Koilkuntla	19.10	5.36	15.30	5.27
5. Cumbum	14.23	10.12	14.07	3.30
6. Márkápúr	14.31	10.54	4.43	3.90

In October the rainfall was barely half the average, and this followed, as can be seen from the above table, a very deficient south-west monsoon, so that the situation at the close of that month was really an anxious one. After October there was practically no rain worth mentioning, and there was such an utter scarcity of fodder and water for cattle that they died in large numbers throughout the district. Drinking water also failed in several villages, and small grants were made from Local Funds for sinking and deepening ponds to relieve this distress. The general prospects were

gloomy throughout and grew darker day by day. The prices of the principal food-grains, especially of cholam, by far exceeded the normal, though still below the scarcity rates, which, however, were reached in the case of rice in the middle of November, and in the case of other grains in the middle of December 1891. Matters were especially bad in the Kurnool town, where, owing to a combination among the merchants, a sudden rise was effected in the prices and this resulted in the two grain riots in the town bazaar on the 5th and 17th November 1891. The Military was then sent for from Bellary and was stationed here till after the outburst of the last north-east monsoon. The causes of these riots were investigated into and reported to the Government in the Judicial Department, and the matter was finally disposed of in G.O., No. 1081, dated 9th June 1892. On the 18th November, I telegraphed to the Board that prices had reached scarcity rates in this town and that some relief works should forthwith be started. In reply, I was ordered to employ coolies in breaking and stacking metal on the Kurnool-Gooty road at a spot about 3 miles from Kurnool, and this was accordingly done on the 21st November. On the 25th idem I submitted to the Board the report required by section 34 of the Famine Code, and also called upon my Divisional officers for individual reports regarding the state of their divisions. In reply, I was directed by the Board to submit a detailed report explaining the grounds of my apprehensions and furnishing information as to the then condition and prospects of the different parts of the district. This I did on 11th December 1891 in my letter No. 6169. At about this time the Commissioner also visited the district and sanctioned a few road-works and kitchens personally; he also requested the Public Works Department to take urgent measures for the commencement of all works of repair on which funds could advantageously be spent in the Racherla firka and in the northern portion of the Cumbum taluk—vide Board's Proceedings, No. 798, dated 15th December 1891. In the middle of November Government was addressed for permission to purchase grain for the purpose indicated in section 40 of the Famine Code, but in G.O., No. 6083, dated 27th idem, it was decided that the application of that section to this district was entirely premature. His Excellency the Governor, accompanied by the Commissioner, visited the district in December 1891, and, in January following, the district was declared to be an affected one by G.O., No. 37, dated 12th January 1892, and the provisions of the Famine Code were ordered to be applied to it. It was at this time found necessary that the relief works in the Cumbum division should be entrusted to an Executive Engineer of the Department of Public Works, and accordingly Mr. C. A. Smith was appointed as Special Executive Engineer for the Cumbum division. As directed in G.O., No. 38, dated 12th January 1892, communicated with Board's Proceedings, Mis. No. 430, dated 13th idem, I submitted my report under section 35 of the Famine Code at the end of February 1892, wherein, in view of the increased work in the Revenue offices in the district in general, as well as of the need for stricter supervision of the works started for relief purposes, I recommended the appointment of two Special Deputy Collectors for the Pyápali and Cumbum divisions, a Special Public Works Department officer for the former, and four Special Deputy Tahsildars besides a Special Assistant Collector to relieve me of my office work at head-quarters. The last officer was appointed and entered on his duties on the 20th January 1892. In the Gazette of 16th February 1892 a Special Deputy Collector was appointed for the Cumbum division and relieved Mr. Venkata Rama Dos Naidu, who was the then Divisional officer, of his ordinary duties, and set him free for famine work. The District Board Engineer was also relieved of the charge of that division and was therefore able to devote his full attention to the rest of the district where the road-works were in progress. With regard to the works recommended in my report for purposes of relief, I was, in Board's Proceedings, No. 213, dated 21st March 1892, authorized to put in hand, in consultation with the Executive Engineer, any or all of the irrigation works according as they were required; to have metal broken and stacked on all the existing roads referred to in my report, except the (1) Owk to Koilkuntla road, (2) the Kodumur to Gonedundla road, and (3) the road from Dupad northwards in Márkápúr taluk, which I was asked not to take up until it might be absolutely necessary to do so.

6. Besides the opening of works, relief took several other forms in this district which were (1) gratuitous relief, (2) advances to weavers, (3) remission of dry assess-

ment, (4) postponement of kists of land revenue, (5) permission to cultivate tank-bed lands, (6) grant of loans under the Loans Acts, (7) relief of gosha women, and (8) private charity.

7. *Relief Works*.—The relief works were executed under the supervision of the Public Works Department, the Local Fund Engineering Department and the Revenue Department under the supervision of Tahsildars without aid or interference of either of the professional departments. Statements showing the several works executed as relief works by each agency are appended. Except the Veldurti tank work in Rāmalla-kót taluk, and the Chinna and Pedda Mallalanmah tanks of Rāmapuram in Nandikótkur taluk, which were executed on the piece-work system, the tasks exacted having been from 8 to 12 cubic yards per rupee, the rest of the works were executed on the task system after the introduction of famine regulations.

8. *Gangs*.—The gangs were all formed to a strength of 100 in pursuance of the rules made by Mr. Sewell of Bellary, but, after some time, the strength was on a few works reduced in the Cumbum division by the Special Executive Engineer, Mr. C. A. Smith, to 80. Once every fortnight the gangs which suffered in strength by the absence of some coolies were reformed by the overseer or other supervising officer in charge of the work so as to bring them up to the full strength. The number of nursing mothers was always distinguished from that of other women on every work, and, as a rule, no woman, whose child was older than 2 years, was classed as nursing. In the Cumbum division the Hospital Assistants on special duty used to determine this in their periodical visits to the works. Also a miscellaneous gang of water-carriers, sweepers, &c., was formed on every work.

9. *Tasks*.—On all the works executed under the task system, the third-class or 50 per cent. of "full task" of an ordinary Public Works Department labourer was from the beginning recognized as the standard task of all famine labourers, and the classification of labourers, as contemplated in sections 19 and 24 of the Famine Code, was altogether ignored. The professional officer in immediate charge of each work fixed the task, set out the work to be done, and measured the work actually done by each gang, the measurements being frequently checked by the superior officer of his department as well as by the Revenue, Divisional and Taluk officers. The tasks were carefully scrutinized by the Special Executive Engineer in the Cumbum division and by the Local Fund Engineer elsewhere and modified by them as occasion necessitated, and even on these works one or more piece-work gangs of skilled and able-bodied persons were formed with a view to enable them to earn for a proportionate increase in their work a sum not exceeding one-and-half times the first-class wage per man, as directed in Board's Proceedings, No. 496, dated 6th August 1891. The Famine Code requires that the task for a typical gang shall be fixed by the Collector in consultation with the Executive Engineer, but the task table given in appendix B of the Code, which was reproduced in Mr. Sewell's rules, was adopted as laying down suitable tasks, though in some cases it was found necessary to modify or slightly reduce it according to the circumstances of each particular case. Under instructions from the Commissioner I issued a circular to the effect that tasks should be calculated with reference to the wages payable; that is to say, in order to determine the task of a gang the money which it will get, if paid at third-class rates, should be calculated first and then divided by the value of a cubic yard of work computed with reference to the value of the work of the typical gang as defined in the Code, the quotient representing the task to be performed by any particular gang. The Deputy Collector on Famine Duty in the Cumbum Division states that the tasks prescribed in the Famine Code, appendix B, do not suit our requirements when gangs are formed on principles different from those on which the typical gangs therein mentioned are formed, and suggests that, in all such cases in which the proportion of men is less than that of women, the task of a gang may be fixed with reference to the wages. He also suggested that the task may be made to vary according to the seasons, as coolies cannot turn out as much work in the hot weather as they can during the rest of the year. I concur with him. The condition of the coolies on the road-work in Kurnool town having appeared very poor in the latter part of December 1891, I reduced the task of breaking and stacking metal from 12 to 10 cubic yards and ordered that one gang

should be employed in excavating gravel and clearing side channels along the road when necessary. The tasks on this work having been rigidly enforced, and the labourers, who were mostly people from the Kurnool town, having been unaccustomed to manual labour of such description, under the personal instructions of the Commissioner I had weakly gangs formed and gave them a reduced task of 30 per cent. of the "full task." Under the Commissioner's sanction, the task of a typical gang for breaking and stacking metal was, in February 1892, reduced on all works from 12 to 10 cubic yards. In March 1892 certain frauds were brought to light on the Vemulakota road in Márkápúr and on the road-work near Kurnool town. On the former lots of unbroken stones and boulders were discovered among the heaps of metal stacked by the labourers, and I thereupon ordered the dismissal of all the maistries and head coolies responsible therefor. Similar frauds were detected a second time also on the road-work at Kurnool, and once or twice on the road-works in the Koilkuntla taluk; all the peccant gangs were fined and the maistries and head coolies were either fined their pay or suspended for short periods, the overseers and sub-overseers responsible having been removed in some cases and let off with a warning in the rest.

10. *Lead*.—Mr. Sewell's rules not containing any provision for leads of upwards of 100 yards from the roadside, a deduction of three-fourths of a cubic yard per furlong was fixed and adopted by the Local Board Engineer on the works under his control. In the case of breaking and stacking metal in the Cumbum division, the Famine Deputy Collector issued separate instructions (*vide* paragraph 22 of his report).

11. *Wages*.—The wages paid on all the relief works were regulated according to the provisions of section 185 of the Famine Code, and the actual wages varied with the price of the staple grain. According to rules, the prices of the grain, upon the basis of which wages have to be calculated, are those ruling at the cusbah of the taluk for the time being; but this was once found inconvenient and disadvantageous to the labourers in the Márkápúr taluk, where the staple grain—ragi—having been sold cheaper at the cusbah than in the outlying villages of Dornal and Dupad by a seer, the coolies on the works in the latter places got a pie less than the third-class wage. On my representing this difficulty to the Board and requesting permission to adopt, as the basis of payment on any work, the prices ruling in the villages near it, the Commissioner, on the ground of the great difficulty in getting correct record of the prices in outlying villages, authorised the adoption of the prices of the largest village near a work as the basis for calculation of wages where such village price differed from the cusbah price by not less than a seer per rupee, and ordered that, when prices are cheaper than fourteen seers per rupee at the cusbah of the taluk, no variation in wage should be allowed for the difference in the village prices unless such difference equalled two seers per rupee. This concession was, however, not taken advantage of in the end, as by the time the orders were received, *i.e.*, June 1892, the season improved and the prices became steady and nearly uniform. Some pregnant women on the relief works in the Cumbum division having complained of the hardship of their being paid as ordinary workers, I recommended their being classed and paid as nursing mothers, but this was overruled by the Commissioner—(*vide* Board's Proceedings, Mis. No. 482, dated 15th January 1892). With regard to nursing mothers, however, they were, as directed in Board's Proceedings, No. 206, dated 17th March 1892, paid not less than the subsistence allowance fixed in section 186 of the Famine Code. On the Rāmapuram tank works, in Nandikótkur taluk, first-class wages were paid for some time to weavers with second-class labour; but when this concession was withdrawn in the middle of May under the orders of the Public Works Department Sub-divisional officer, all the weavers deserted the work. The rules having been silent on the point of allowing subsistence allowance to maistries and head coolies for days of rest, I referred the matter to the Board, which decided they should be paid for days of rest as for working days in Board's Proceedings, Mis. No. 2476, dated 12th March 1892. The concession allowed by section 127 of the Famine Code in cases of work being stopped by rain was, with Board's permission, extended to all natural impediments, such as squalls, dust-storms, &c., of not less duration than an hour. Excepting the Veldurti and

Ramapuram tanks, in which, as above stated, the piece-work system was in force and on which first and second class wages were paid, only third-class wages were, as a rule, earned on all the rest of the works, and it was only in the beginning in some rare cases that first and second class wages were earned by some few labourers on the works. The coolies, of course, used to get proportionate increases by tenths for the excess work they turned out over and above the prescribed full third-class task as permitted by the Board on a reference made in January 1892. The tasks having been somewhat heavy in the beginning, and considering the consequent deterioration in the physique of the coolies on the Dupad and Dornal roads, I ordered, under instructions from the Commissioner, as a tentative measure, that fining for short work of the coolies on those two roads should not be carried to such an extent as would reduce the pay below subsistence allowance. On all other works the grant of a minimum wage was in the beginning deprecated as being unnecessary and encouraging idleness; but on the same grounds as those set forth above, I had, in the end of February, to sanction the continuance of the subsistence allowance as the minimum wage payable on all the works in the Cumbum and in the Márkápur taluks. The Commissioner, in company with His Excellency the Governor, visited the road-works at Cumbum on the 9th and those in Márkápur on the 17th April 1892. He seems to have found the condition of the coolies on the latter works not so good as on the occasion of his previous visit, and attributed the deterioration to the decrease in the amount of wages received after the introduction of the rule fixing minimum wage. The labourers, greatly to their own detriment, took advantage of this rule, and, knowing that they were sure of getting the minimum wage, largely reduced their outturn of work. As a consequence gangs which, before the introduction of the rule, had been earning regularly Annas 1-8 and more per man, received for at least 10 days before the date of His Excellency's visit only the minimum wage of Annas 1-5 per man and earned a sum which in the majority of cases was very much below this amount. The minimum wage was thereafter ordered to be abolished on these works, and the gangs to be paid proportionately to the outturn of their work. At the same time, agreeably to the orders of the Board, the aged and the weakly were constituted into separate gangs with a light work task proportioned to their powers, varying from one-half to two-thirds of the standard task. In these weakly gangs were also included, at Mr. Bradley's direction, women in advanced stage of pregnancy, as it was thought they could not work as energetically as other women, and that violent or excessive exertion was likely to result in abortion. The wages of these weakly gangs were never allowed to go below subsistence allowance. The minimum wage was abolished in April, but care was taken to see how this abolition would tell upon the condition of the coolies, and the special statements called for for the purpose showed (1) the number of coolies on each work on every day as compared with the number on the previous day, and (2) the deductions or excess earned by the coolies under or above the third-class wage. On the road-work near Kurnool also subsistence allowance was paid for some time in the beginning, but this was subsequently stopped in favour of task work under orders of the Commissioner. As to the sufficiency of otherwise of the third-class wage prescribed in the Famine Code to keep the coolies in good condition, I quite concur in the remarks made by Mr. Venkata Rama Das Naidu in paragraph 32 of his report.

12. *Payments.*—Payment of wages was made by means of special paymasters, the number of whom is as follows:—

Pattikonda ...	...	...	...	...	...	...	...	1
Rámallakót ...	...	...	...	...	...	...	...	2
Nandikótkur ...	...	...	...	...	...	...	...	1
Koilkuntla ...	...	...	...	...	...	...	...	3
Cumbum ...	...	...	...	...	...	...	...	6
Márkápur ...	...	...	...	...	...	...	...	5
Total ...								18

Two more paymasters for the Cumbum taluk had been sanctioned by the Board, but they were not entertained as they were subsequently found unnecessary. These were

at first paid at the rate of Rs. 40 per mensem as provided in Mr. Sewell's rules, but the Board subsequently fixed a reduced rate of Rs. 30 per mensem. The report of the Cumbum Deputy Collector describes in detail the methods of payment adopted on the Public Works Department and Local Fund works. Wages were paid pretty regularly on all the works in the division, but when some irregular payments were noticed by Mr. Bradley on his inspection of certain Public Works Department works, he set matters right by insisting on bi-weekly payments. Payments were also ordered to be made thrice a week for some time after the opening of each work. In some cases the delay in payment was found due to the existence of the rule that all extracts from nominal rolls should be countersigned by the Taluk overseer before payment. As works were in progress in several places in a taluk, in all of which the overseer could not possibly be present to countersign extracts, I ordered, with a view to save delay, that the rule should be enforced only when the overseer was found stationed at the works, and that in his absence, the countersignature of the Tahsildar or Deputy Tahsildar should be quite sufficient.

13. *Condition of Coolies and General Remarks.*—The famine coolies on all the relief works were on the whole in a very fair condition, though there were a few deaths from cholera. Not a single human death due to privation was reported. Deaths from cholera were many and numbered 4,594.

14. *Cattle mortality.*—The cattle mortality returns show that deaths from want of fodder aggregated in 1892 to 4,375.

15. On the Dornal, Dupad and Giddalur road-works, nine cheap huts were constructed under the Commissioner's orders for the purpose of affording shelter to the coolies. Also a shed was constructed at Márkápur for the admission of cholera patients, and the total costs of all these amounted to Rs. 186-6-2. Want of latrines was much felt on all these works, but the Commissioner took exception to their construction on the ground that closed latrines were likely to become a nuisance, and stated that it would suffice if coolies were made to go to a distance from the roads. The sanitary supervision of the more important relief works, as well as of kitchens, was arranged for by the District Medical and Sanitary Officer, and I authorized the employment in cases of absolute necessity of special sweepers. Cholera broke out on the works in the Cumbum division in June 1892, and four extra Hospital Assistants then dispensed medicines. The District Surgeon inspected the coolies in that division in March and April 1892.

16. *Water-supply.*—Arrangements were made for the supply of water to the coolies on works by the agency of cavadi-bearers, three of whom were allowed for every 100 coolies. This method of supply having been found inconvenient and somewhat inadequate, it was given up, and the supply by casks was introduced with the permission of the Commissioner.

17. *Inspections.*—The Commissioner paid in all 8 visits to the works in this district, ranging over all the months from November 1891 to July 1892 (except May 1892), and His Excellency the Governor visited this district once in December 1891 and a second time in April 1892 and inspected the coolies on some works in the Cumbum division on the latter occasion.

18. *Gratuitous Relief.*—The only form of gratuitous relief adopted in this district was that of distributing cooked food in regularly-established kitchens. Koilkuntla, Cumbum and Márkápur were the only three taluks in which there was any necessity for granting this kind of relief. About the end of January 1892 I called for villagewar lists of persons in need of gratuitous relief from the Divisional officers and Tahsildars as required in section 56 and from the Chairman of the Kurnool Municipality as required in section 70, but subsequently it was discovered that there was no necessity to have recourse to such a systematic relief on any large scale as was contemplated by those provisions. This form of relief was first granted in the first half of December 1891 in Cumbum taluk, in the beginning of January 1892 in Márkápur taluk, and in April in Koilkuntla. The appended statement shows in one view in detail the transactions connected with this form of relief. Of the kitchens enumerated therein, those at Palakavid in Cumbum taluk and at

Márkápúr were stationary, the rest were work-kitchens and were moved from place to place according as the work-spots changed. Besides these kitchens, another not mentioned in the list was sanctioned at Maddikera, in the Pattikonda taluk, to provide relief for the children of the coolies on the road-work there, but none resorted to it, and the Divisional officer, evidently thinking that this method of affording relief was a failure in that quarter, suggested that, as coolies overstated the ages of their children and got them enlisted on the works, all children might be employed on the works at half the wages payable to children of seven years of age and above, instead of being compelled to go to kitchens against their wishes. Mr. Bradley, to whom this suggestion was made, rejected it as calculated to weaken and cripple the gang to which such small children belonged, and directed the closure of the kitchen on the distinct understanding that it should be re-opened whenever a sufficient number of children could be got. Again, in the town of Kurnool a special kitchen was opened with the Board's permission to provide relief for the destitute gosha women and children there, but not a single soul attended it, the fact being that they preferred to die rather than to resort to the kitchen. If food could be conveyed to them by servants, they would take it, but then there would have been immense difficulty in the way of supervision and checking of imposition. It will be seen from the appendices that the number of children was large, but large though it was when compared with the number of adults, it would still have been greater but for the superstition prevailing in all the taluks where kitchens were opened that children fed at kitchens die soon after or, at any rate, do not live long, and I have been made to understand that this superstition owes its origin to the fact that there were numberless deaths among the children who were fed at the kitchens in the great famine of 1876-78. The kitchen rations were the same as those prescribed in section 188 of the Famine Code, and sample wooden measures for measuring out cooked cholum ration of a child of 12 years or under for one meal, the day's ration being divided equally between a morning and an afternoon meal, were supplied to me by the Collector of Bellary, and, under the Commissioner's orders, similar measures were made in this district for ragi. In sanctioning the kitchen for the Cumbum-Mokshagundum road, Mr. Bradley ordered, as an experimental measure, the introduction of the single-meal system, the whole ration permissible under the rules for a day being distributed at one and the same time at midday, precautions of course being taken to prevent the recipients from removing cooked food from the kitchen; but as the change after a short trial was condemned by the Famine-duty Deputy Collector for the following reasons, it had to be abandoned in favour of the old practice of double meal. The reasons are (1) children could not fast till midday and do without further food till that time next day; (2) the whole of the full day's ration could not be consumed by the inmates on one occasion and they required at least four hours to consume what remained after their first eating, which of course, according to the orders, began at midday or 12 o'clock; (3) the inmates had therefore to be kept for four hours or more continuously every day and this was certainly hard on the children who formed the largest proportion of the inmates. The only advantage that made the system desirable was that parents could at midday accompany their children to the kitchen and see whether good food was served or not, but this again was counteracted by the fact that they could not wait to take their children back as that would take so much out of their working day. In Koilkuntla also Mr. Bradley wanted to try this system as an experimental measure, but owing to the Divisional officer's misapprehension of his instructions, the meals were allowed to be taken home where parents ate them instead of their children. The system had therefore to be abandoned here also in favour of the old. In the kitchens in the Cumbum division, sheds were erected for cooking purposes, while the inmates were fed in a broad open enclosure partitioned into four divisions for accommodating Sudras, Muhammadans, Pariahs and Madigas. A warder on Rs. 6 for each of the three kitchens in the Márkápúr taluk was appointed; no warders were, however, sanctioned elsewhere. Each kitchen was managed by a gumastah on Rs. 15 under the supervision of the Stock Inspector. Ragi was the grain generally used in the Márkápúr kitchens and cholum in Cumbum. In May 1892, the Hospital Assistant at Márkápúr suggested the temporary substitution of cholum for ragi in the kitchen there on the score that the flour of the latter grain has a tendency to produce diarrhoea which might lead to cholera.

I sanctioned this proposal until the subsidence of cholera. In the Cumbum taluk also ragi had been first ordered by the Commissioner to be used as being the cheaper grain, but on the receipt of Board's orders contained in its Proceedings, dated 31st December 1891, Mis. No. 7533, I sanctioned the use of cholum there. The Famine-duty Deputy Collector suggested that the children of the labourers in charge of each sub-maistry might be allowed to be fed separately at a spot close to the part of the road where such labourers were for the time being working. As this proposal was opposed to the kitchen rules, and as it appeared to me to be objectionable to multiply feeding places without arrangements and proper supervision, I declined to sanction it, and directed that all the children should be left in the morning at the kitchens, a female being put in charge of every thirty children and brought back by parents in the evening. Section 118 of the Famine Code having authorized the feeding in kitchens of the non-working children of those laborers alone, who are employed on works conducted upon the principles laid down in chapter IV of the Code, no relief could be afforded to the children of those who were doing private work on the wells constructed with the aid of the loans granted by the State, nor to destitute paupers and incapable adult relatives of such labourers. Mr. Bradley ordered, however, that such persons also should be fed in kitchens. In the Cumbum division the principle upon which the inmates were discharged was that they should have picked up sufficient strength to be able to perform the light task assigned to coolies in the weakly gangs. The general health of the inmates of all the kitchens was on the whole very good. In the Cumbum division the Special Hospital Assistants visited each kitchen twice a week. In the Márkápúr kitchen cholera broke out in the latter part of April 1892, but fortunately there were not many deaths.

19. *Advances to Weavers.*—Early in December 1891 I recommended the purchase of thread and employment of the weavers at Kurnool, of whom there were about 700; but the Board said that it was not then prepared to recommend to Government the special concession allowed in section 86 of the Famine Code. In sanctioning the scheme for relief of weavers in the Salem district in Government Order, dated 15th February 1892, No. 150, Revenue, Government at the same time directed the submission of a report as to the advisability of extending the scheme to this district along with some other affected ones; and, in communicating this order, the Commissioner in his Proceedings, dated 18th February 1892, No. 118, first desired a report as to how it was proposed to fix the tasks so that public funds may not be wasted. The village of Kodumur in the Pattikonda taluk and Kurnool town were, as remarked by the Commissioner, the only places where this sort of relief was needed. From inquiries made I ascertained that about 400 weavers required relief at Kodumur and about 1,000 in Kurnool town. As to Kodumur, the weavers had not by that time yet sought the aid of Government, but in Kurnool I found they were actually distressed and sent up my proposals for their relief. In its telegram of the 17th March 1892, the Board sanctioned the grant of advances to weavers as proposed by me, but directed that materials should be paid for in kind, labour alone as well as the cost of dyeing being paid for in money. By the time these orders were received, the weavers of Kurnool declined all assistance. The carpet-weavers said they earned 3 annas per diem and the merchants admitted they had plenty of orders. The cloth-weavers said that sowcars would see them through the distress rather than that they should get State relief. As to Kodumur weavers, the Deputy Collector in May 1892 reported that the pinch of distress had reached them and that about a 1,000 of them were in pressing want of subsistence. I again sent up his proposals to the Board, which sanctioned them in Board's Proceedings, dated 13th May 1892, Mis. No. 4395. The arrangement was that thread and other necessary materials should be advanced to them and the cloths received back into a store as they were prepared. A store clerk on Rs. 20 per mensem for a period of three months was sanctioned to superintend these transactions under the immediate supervision of the Tahsildar. The operations commenced on 9th June 1892 and continued till the end of August 1892, from which date no yarn or thread was issued. 1,792 female cloths and 326 duppatti cloths were prepared on 363 looms by as many men, women and children. It was found that a man assisted by a woman and a child of upwards of 7 years of age could prepare a cloth in two days. The wages of three such souls for two days was accordingly paid on the production of each cloth, irrespective of the number of days and persons. Only third-class wages were sanctioned, and

these of course differed according to the price of the ruling staple. Thread, yarn, &c., were duly weighed before issue, and weighment was again made when the cloths were received, allowance being made for wastage, &c. The expenditure under this head amounted to Rs. 3,555-12-11, and a female cloth was calculated to cost Rs. 1-12-0, and a dungry or duppati cloth Rs. 1. The cloths prepared were all sent to Kurnool where tenders were called for. The highest tender being Rs. 1-2-0 for a female cloth and Annas 7 for a dungry cloth, it was accepted. The cloths fetched Rs. 2,158-10-0, so that Government had to sustain a considerable loss. As the whole correspondence on the subject is already before the Board, I have not thought it necessary to enter into any further details here.

20. *Remissions of dry assessment.*—In December 1891 the Board called for a report from the affected districts as to whether any dry remissions were needed owing to the adverse state of the season. I submitted this report in January 1892, recommending that discretion may be given to Settlement officers to grant such remissions in all cases of proved failure of crops. The Board, however, did not accept this and wanted a more detailed report, which was sent in May 1892. The season necessitated large excess over the normal wet remissions also, and the total amounts thus remitted are shown talukwar below :—

Taluka.	Average remissions for the three faslis ending 1300.		Remissions.			Remarks.
	Wet.	Dry.	Wet.	Dry.	Total.	
1	2	3	4	5	6	7
Pattikonda	Rs. 1,163 0 0	A. P. 15 10 8	Rs. 12,818 10 6	A. P. 25,644 3 0	Rs. 38,462 14 0	* Cows and tops remissions.
Kamallakot	Rs. 686 16 8	A. P. ..	Rs. 4,457 12 8	A. P. 13,145 0 7	Rs. 17,602 12 10	
Nandikotkur	Rs. 1,498 14 7	A. P. ..	Rs. 9,363 1 2	A. P. 182 11 11	Rs. 9,545 13 1	These figures include fixed remissions.
Nandyál	Rs. 7,316 12 2	A. P. 0 7 9	Rs. 4,674 15 1	A. P. 0 7 5	Rs. 4,675 6 6	
Koilkuntla	Rs. 691 1 10	A. P. 1 2 4	Rs. 11,984 9 2	A. P. 14,924 3 5	Rs. 26,908 12 8	
Sirvel	Rs. 2,322 1 3	A. P. 14 16 7	Rs. 1,052 3 9	A. P. 15 0 2	Rs. 1,067 3 11	
Cumbum	Rs. 1,814 3 4	A. P. ..	Rs. 16,812 0 8	A. P. 2,690 2 6	Rs. 19,408 3 2	
Márkápur	Rs. 1,324 4 4	A. P. ..	Rs. 23,002 2 0	A. P. 39,479 6 8	Rs. 62,481 8 8	
Total ..	Rs. 16,815 5 2	A. P. 32 5 4	Rs. 84,166 6 8	A. P. 95,987 4 2	Rs. 1,80,152 10 10	

21. *Postponement of kists of Land Revenue.*—On my recommendation contained in my letters No. 5983, dated 30th November 1891, and No. 435, dated 18th January 1892, the Board ordered the suspension of collections on wet waste and for wet crops withered and on such dry lands as had been entirely left waste or whereon the crops had totally failed owing to insufficient rainfall. The following statement exhibits the amount of kists originally suspended and since proposed to be suspended :—

Taluka.	Number of villages and amount of collections suspended as per Board's Proceedings, dated 27th January 1892, No. 941.		Amount since proposed for suspension.	Total.
	Number.	Amount.		
1	2	3	4	5
Pattikonda	5	Rs. 17,664 3 5	Rs. 1,325 12 7	Rs. 18,989 5 2
Kamallakot	23	Rs. 30,885 4 3	Rs. 3,062 4 2	Rs. 33,947 8 10
Nandikotkur	..	Rs. 7,894 12 11	Rs. 7,394 12 11	Rs. 15,288 4 10
Nandyál	13	Rs. 21,701 0 4	Rs. 51,940 2 3	Rs. 73,641 2 7
Koilkuntla	14	Rs. 9,224 0 0	Rs. 16,170 0 0	Rs. 25,394 0 0
Sirvel	..	Rs. 65,111 0 0	Rs. 32,984 4 2	Rs. 98,095 4 2
Cumbum	50	Rs. 1,44,585 14 5	Rs. 1,13,277 4 1	Rs. 2,57,862 8 6
Márkápur	..	Rs. 1,13,277 4 1	Rs. 2,57,862 8 6	Rs. 3,71,139 12 7
Total ..	..	Rs. 2,57,862 8 6	Rs. 3,71,139 12 7	Rs. 6,28,002 0 0

* Rs. 42,781-9-3 has since been collected.

22. *Cultivation of Tank-beds.*—In view of the severity of the season, I obtained in December 1891 the permission of the Board to allow the cultivation of tank-beds with dry crops paying the highest dry rate of the villages where ryots might be desirous of such a procedure, provided the Public Works Department raised no objections on the score of the tanks being endangered, and this concession was taken advantage of. Ten tanks in Márkápur taluk, three in Cumbum, and four or five in the Koilkuntla taluk have been cultivated with dry crops.

23. *Grant of loans under the Loans Acts.*—The sinking of wells was in a great extent encouraged by the recent distress. The people were hitherto generally apathetic about accepting Government loans. The special well rules, which have been in force in this district since 1886, were largely taken advantage of, and loans were granted to ryots to enable them to sink wells with a view to save crops from failure. Fodder having become very scanty and pasture almost nil, loans were freely availed of under the Agriculturists' Loans Act also for the purpose of purchasing fodder as well as cattle and seed-grain. The appended statement exhibits the actual expenditure under this head in detail from the beginning of distress in October 1891 till the closing of relief in September 1892 :—

Taluka.	Land Improvement Loans Act.			Agriculturists' Loans Act.			Number of applications under.			
	For wells.	Other purposes.	Total.	For fodder.	For cattle and seed-grain.	Total.	Land Improvement Act.		Agriculturists' Act.	
							Received.	Accepted.	Received.	Accepted.
1	2	3	4	5	6	7	8	9	10	11
Pattikonda	Rs. 7,630	Rs. 315	Rs. 7,945	Rs. 5,014	Rs. 320	Rs. 5,334	221	75	777	296
Kamallakot	Rs. 3,050	Rs. 925	Rs. 3,975	Rs. 925	Rs. 320	Rs. 1,245	86	15	36	15
Nandikotkur	Rs. 3,600	Rs. 1,100	Rs. 4,700	Rs. 2,480	Rs. 900	Rs. 3,380	36	18	162	57
Nandyál	Rs. 19,716	Rs. 3,075	Rs. 22,791	Rs. 400	Rs. 400	Rs. 400	307	159	60	5
Koilkuntla	Rs. 6,965	Rs. 250	Rs. 7,215	Rs. 1,045	Rs. 290	Rs. 1,335	63	26	82	40
Sirvel	Rs. 4,900	Rs. 100	Rs. 5,000	Rs. 1,500	Rs. 1,500	Rs. 3,000	120	27	120	11
Cumbum	Rs. 44,037	Rs. 680	Rs. 44,717	Rs. 4,045	Rs. 365	Rs. 4,410	378	371	215	190
Márkápur	Rs. 1,09,600	Rs. ..	Rs. 1,09,600	Rs. 2,432	Rs. 2,167	Rs. 4,599	711	622	241	240
Total ..	Rs. 1,98,498	Rs. 5,520	Rs. 2,04,018	Rs. 16,341	Rs. 5,542	Rs. 21,883	1,922	1,323	1,693	864

It is true that in some localities facilities for well-digging do not exist, but where they do, wells which have been dug have saved not only the crops but have also tended to save the lives of men and cattle during the recent distress. Many people also found employment on well-digging. The operations connected with these loans were supervised as usual by Revenue Inspectors and Tahsildars, but in the Nandyál division one, and in the Cumbum division two, extra Revenue Inspectors were specially sanctioned solely for this purpose. Eighteen wells have been constructed and 1,045 are still under construction.

24. *Relief of Gosha women.*—The Cumbum division and the Kurnool town were the only portions of the district where there were any large numbers of these requiring relief. With regard to the gosha women in Cumbum division, I reported in my fortnightly narrative for the latter half of February 1892, disposed of in Board's Proceedings, dated 14th March 1892, No. 192, that the people who were suffering from starvation declined either to work on roads or to resort to kitchens, and the Board thereupon wanted an estimate as to the numbers requiring relief and desired to know whether any employment could be given to them in their houses, such as picking cotton, pounding grain, &c. At the same time a similar report was required with regard to the gosha females in Kurnool town. Proposals for these latter were accordingly submitted for sanction, but with the gradual falling off of the prices of staple food-grains, the necessity for carrying them into effect ceased to exist, the very

few women still remaining in need of help having been given small money-doles from Holkar's fund. As to Cumbum division, there were 131 of these in Cumbum taluk and 63 in Márkápur found in need of relief, but all these persons did not avail of it, partly owing to superstition that they should not work a loom during the prevalence of cholera, and partly because private charity began to revive in Cumbum after the tank received some supply. Some of these women incapable of working were given money-doles from the Holkar's fund, while others capable of working were employed in grinding ragi for the kitchens in Márkápur taluk, being paid at the rate of 3 pies per measure of husked ragi; and some 36 persons in four villages of the Márkápur taluk and 17 in Cumbum were given spinning work from July to 15th September. This scheme was sanctioned in Board's Proceedings, Nos. 4572, Mis., and 416, dated 18th May and 9th June 1892, respectively. I have not entered into any details of the scheme here as they have been already fully set forth in my letter embodied in the Proceedings last quoted above. The spinning work on the whole cost Government a sum of Rs. 241-6-2. The yarn spun in Márkápur taluk was finally sold by auction for Rs. 52-4-0, the low price fetched being due to the fact that some of the yarn got damaged in transit. The yarn spun in Cumbum was sold for Rs. 42.

25. *Private charity.*—A sum of Rs. 1,000 was sent to me by the Commissioner as having been the allotment for this district out of the Maharajah Holkar's donation of Rs. 4,000 for the affected districts of this Presidency. Rs. 400 of this was sent to the Deputy Collector of the head-quarter division and Rs. 500 to the Famine Deputy Collector of Cumbum. Most of this was spent as daily and monthly money-doles to gosha females, ordinary destitute paupers and weakly coolies on the relief works. The Famine Deputy Collector spent the whole of his allotment; but at Kurnool there is still a balance of Rs. 38-8-0 which I have authorized the Deputy Collector to retain for giving away to any necessitous persons. I have still Rs. 100 of this fund on hand. Further, a sum of Rs. 100 was contributed by the Mahajana Sabha at Madras, which, according to the intentions of that committee, was to be distributed among caste and gosha females alone. At Kurnool town a committee, which styled itself the Famine Relief Committee, was formed for the purpose of raising subscriptions in order to relieve the needy, with the Chairman of the Municipality as its President, and the donation received from the Mahajana Sabha, as well as Rs. 50 contributed by the English Church Committee, Kurnool, and a subscription raised of Rs. 407 were all distributed mostly among the gosha women in the Kurnool town. Also Rajah Sir Savalai Ramaswamy Mudaliar sent from Madras a donation of Rs. 200 and 600 cloths (250 male cloths, 150 female cloths, and 200 children's cloths). The former still remains unspent, while the latter was sent to the Famine Deputy Collector at Cumbum in March 1892 for distribution among gosha Muhammadans. Some of them were distributed to persons selected by the Commissioner in March 1892, and 22 cloths were distributed by His Excellency the Governor in person on the 17th April 1892.

26. *Relief of Chenchoos.*—In the latter part of December 1891 the Cumbum Divisional officer brought to my notice the necessity for providing relief for Chenchoos, the hill tribes living in the Nallamalais generally upon the forest produce. I addressed the District Forest-officer on the subject, and the following were the measures adopted by him: (1) He abstained from collecting departmentally soapnut and other minor forest produce, the collection of which was entrusted exclusively to the Chenchoos with a view to give them as large a field of work as possible; (2) he inserted in the notification regarding the lease of right to collect "madapu leaves" a clause to the effect that Chenchoos only should be employed in collecting these leaves. The Chenchoos were thus amply provided for, and they consequently refrained from those raids upon the villages in the plains which it was apprehended they would otherwise have had recourse to.

27. *Relief to cattle.*—A sum of Rs. 200 was sent to me by the Commissioner out of the Maharajah Holkar's donation for popularising the use of prickly-pear for feeding cattle. Experiments were freely conducted both by Revenue officers and Stock Inspectors in Cumbum. Under the orders of the Commissioner, 13 emaciated cows were bought and fed on prickly-pear in a shed erected for the purpose near the

kitchen at Márkápur. Also at Palakavid, in Cumbum taluk, a similar experiment was tried, but with borrowed animals. The Deputy Collector states that in both the places the system worked wonderfully well, though attended with a few casualties consequent on old age, &c. A taluk peon was also detailed on the prickly-pear duty in each of these two taluks. The sum of Rs. 200 referred to above was spent as follows:—

	RS.	A.	P.
Net cost of instruments	9	11	4
Cost of cows and she-buffaloes	1	5	3
Feeding charges	186	10	7
Total	197	11	2

and the balance of Rs. 2-4-10 was refunded into the treasury. Three sets of pincers for extracting the thorns from the prickly-pear were sent by Mr. Sabhapati Mudaliar from Bellary and some were made locally in Cumbum. Very little use appears to have been made of the implements sent to Kurnool and Kodumur.

28. The following appendices accompany:—

A.—Statement of Public Works Department works executed for relief purposes.

B.—Statement of relief works carried out under the supervision of Local Fund agency.

C.—Statement of relief works executed departmentally under the immediate control of the Tahsildar.

D.—Statement showing talukwar the aggregate number of coolies relieved on works in every week from the commencement of distress till the closing of relief works.

E.—Statement showing the number of persons relieved gratuitously in each taluk in each of the weeks from the beginning of distress till the closing of works.

F.—Statement showing details of gratuitous relief.

29. It remains for me to bring to notice those officers who have done specially good work. As the Cumbum division was the most arduous field so there was the most energy displayed. Too much praise cannot be given to Mr. C. A. Smith, the Special Engineer, for the zeal and efficiency with which he conducted the works under his charge. He was indefatigable. Earlier in the distress Mr. D. P. Chester had to commence operations and did not spare himself. Of the administrative officers, M.R.Ry. S. Venkata Rama Das Naidu, the Deputy Collector of Cumbum, was pre-eminent. Under the most trying circumstances of widespread distress and extended relief operations, aggravated by a virulent cholera epidemic, he never flinched from his duty, which he performed cheerfully and efficiently. I should think a personal distinction of at least as high a degree as was conferred on Mr. Pinto would not be a disproportionate reward. Next to him in the way of arduous duty and able performance of it comes M.R.Ry. K. Rustum Singh, the Tahsildar of Márkápur. This officer would make a most excellent Deputy Collector and has qualified for the grade. His work in the direction of loans is specially worthy of commendation. In the same division, in their respective spheres of action, excellent work was done by M.R.Ry. P. Rajagopal Naidu, Deputy Tahsildar of Márkápur, M.R.Ry. R. Lakshminarsu Pantulu, Tahsildar of Cumbum, as also by his Special Deputy P. Venkoba Row. In Koilkuntla the Tahsildar M.R.Ry. V. C. Gopalachariar had heavy work and did it well.

Lastly, I should not omit the Huzur Sheristadar, M.R.Ry. A. Cooposwamy Mudaliar. The Board well knows the mass of extra work thrown on the head-quarter office of an "affected district," and the necessity for increased check and supervision and punctuality of despatch. In all these points I think I may fairly claim that the Huzur of Kurnool has not been found wanting, and it is due to the able and willing aid of Cooposwamy Mudaliar. He is an officer who does not covet active promotion, but a personal distinction he would be proud of, and has, I think, earned.

ENCLOSURE No. 1.

From M.R.Ry. S. VENKATA RAMADAS NAYUDU, Gamu, Deputy Collector, Cumbum, to the Collector of Kurnool, dated Camp Madras, 29th December 1892, Extra No. 1.

I have the honour to submit my report on the recent famine in the Cumbum division and beg to preface it with a short description of the division.

2. *Position.*—The division comprises the two eastern taluks of the district and is, as it were, cut off from the rest of the district by the lofty and broad range of the Nallamalais. It lies between 15° 9' 45" and 16° 18' 30" north latitude and 78° 47' 20" and 79° 36' 52" east longitude and is bounded on the north by the Palnad and Vinukonda taluks of the Kistna district, on the east in the northern part by the Darsi and Podili divisions and the Kanigiri taluk of the Nellore district and in the southern part by the Veligondas which run almost parallel to the Nallamalais, on the south by the Badvel taluk of the Cuddapah district and on the west by the Nallamalais.

3. *Extent.*—It is on the average 87 miles long and 25 miles broad and has an extent of about 2,173 square miles, distributed as shown below over the two taluks comprising it:—

	SQ. MS.
Cumbum	1,056
Márkápúr	1,117

In the accompanying table are exhibited the extent of the arable and occupied area in the division and how much of the latter is dry and how much wet. It will be seen therefrom that the wet area is infinitely small:—

Name of the taluk.	Total area.	Arable area.	Occupied area.			Percentage of column 3 to column 2.
			Dry.	Wet.	Total.	
1	2	3	4	5	6	7
	ACS.	ACS.	ACS.	ACS.	ACS.	ACS.
Cumbum	675,840	233,501	174,252	11,780	186,032	79
Márkápúr	714,880	248,215	193,532	7,040	200,572	80

4. *Population.*—The total population of the division is 216,614, Cumbum taluk claiming 116,538 and Márkápúr 100,076. I have adopted the figures given by you in paragraph 9 of your docket No. 7600, dated 10th November, as I presume them to be the figures of the census of 1891. In the table below I compare them with the figures of the censuses of 1871 and 1881; the increase in 1891 is, as shown in paragraph 9 *infra*, indicative of the general prosperity of the people of the Márkápúr taluk during the decade preceding the last census:—

Name of the taluk.	Population according to the census of			Increase in 1891 over that in 1881.	Percentage of increase.	Present density per square mile.
	1871.	1881.	1891.			
Cumbum	123,042	109,851	116,538	6,687	6.09	110.
Márkápúr	92,665	84,018	100,076	16,058	19.07	90

Cumbum has not yet become as dense as it was at the census of 1871, but Márkápúr has made an astonishing progress and shown an increase of 7,411 over its population at that census.

5. *Communications.*—But for the existence of the railway the division should enjoy quite as much reputation for bad communications as it now does for malarious fever. Formerly communication with the rest of the district used to be difficult in the extreme, while the fertile deltaic tracts of Kistna, with all their rich stores of food-grains, were as inaccessible as the Nallamalais themselves; but the railway has removed all these difficulties, and is, in fact, the only redeeming feature of the division. It is the only set-off against its many drawbacks. The benefits already conferred by it on the division are innumerable and it has already amply justified its existence as a "protective" line by the large quantities of food-grains which it enabled us to import to supplement the very insufficient local supply in the recent famine. The roads for internal traffic

are deplorably bad, and, had it not been for the two new roads from the railway stations of Márkápúr and Giddalur made in this famine, even the taluk casbas would have had no *metalled* roads. The Taluk Board should leave no stone unturned to improve its roads soon.

6. *Food-supply.*—The following statement shows the total cultivated acreage with the area under each food crop during the last seven years in the two taluks of the division:—

Names of the crops.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	Average.
1	2	3	4	5	6	7	8	9
<i>Cumbum taluk.</i>								
Paddy	9,827	11,424	10,576	8,291	9,442	11,033	7,679	9,753
Jonna	17,364	28,672	24,532	18,514	33,521	24,535	17,967	23,585
Korra	30,090	22,200	30,080	20,100	30,002	28,096	32,672	27,606
Arika	4,002	5,200	1,996	2,100	4,003	10,007	21,736	7,435
Sajja	13,974	14,874	19,364	15,960	14,496	18,650	19,493	16,687
Varagu	60,300	50,032	57,308	60,088	41,025	40,020	34,149	48,986
Ragi	9,938	11,294	6,932	10,475	7,145	10,471	9,950	9,458
Total	145,495	143,696	150,788	155,508	139,634	142,812	146,646	..
Other crops	1,394	3,895	2,767	2,211	2,512	4,366	2,183	..
Total cultivated area	146,889	147,591	153,555	157,719	142,146	147,178	148,829	..
<i>Márkápúr taluk.</i>								
Paddy	4,106	6,587	6,111	6,366	6,725	2,464	783	4,735
Jonna	8,148	8,089	7,295	9,815	14,604	9,209	12,495	9,950
Korra	38,009	37,424	40,090	36,100	28,101	49,365	28,003	36,728
Arika	8,802	7,806	6,900	7,032	7,070	4,600	1,490	6,243
Sajja	29,806	30,889	24,906	26,783	30,418	22,846	22,576	26,789
Varagu	21,254	25,402	40,779	37,621	40,896	44,294	44,880	36,361
Ragi	6,649	7,018	7,111	8,366	10,246	12,126	11,725	9,034
Total	116,774	123,215	132,492	131,483	138,060	144,904	121,952	..
Other crops	..	..	9,548	6,580	12,950	23,803	12,353	..
Total cultivated area	..	..	142,040	138,063	151,010	168,707	134,305	..

Adopting the marginally-noted table of the approximate yield per acre of each food-grain arrived at by Mr. Benson, it will be seen that the average quantity of food produced every year in the division is 915,976 cwts. (as shown below), while, allowing an all-round rate of 1½ lb. per head per diem, the people of the division require 881,928 cwts. or 34,048 cwts. less than what is produced in the division. This shows that the division does not produce much in excess of its own consumption:—

Food-grain.	Cumbum.	Márkápúr.	Total.	—
Paddy	ACS.	ACS.	ACS.	CWTS.
Jonna	9,753	4,735	14,488	119,526
Korra	23,586	9,950	33,536	134,144
Arika	27,606	36,728	64,334	160,835
Sajja	7,435	6,243	13,678	41,034
Varagu	16,687	26,789	43,476	130,428
Ragi	48,986	36,361	85,347	256,041
	9,458	9,034	18,492	73,968
Total	..	..	..	915,976

If the division is to be rendered proof against famine, measures should be taken to augment its food supply in ordinary years, as then, and then alone, can the people hope to save anything against seasons of drought. How this may be done should constantly engage the attention of the Divisional officer. It appears to me that the carrying out of the Tokapalli project and some of the projects referred to in page 74 of the District Manual and the increase of the number of the wells in the division may go a great way in enabling the division to produce more.

7. *Rainfall*.—The subjoined statement shows the amount of rainfall in the two taluks of the division during the last 16 years. It will be seen therefrom that, excluding the famine years of 1876 to 1878, the average annual rainfall of the division is about 27 inches :—

Years.	Cumbum taluk.	Márkápúr taluk.
	INCHES.	INCHES.
1876	9.33	2.12
1877	18.96	15.85
1878	19.68	34.32
1879	22.79	22.28
1880	32.37	34.65
1881	23.94	10.80
1882	31.79	43.38
1883	29.62	31.43
1884	18.82	28.97
1885	30.10	28.63
1886	29.76	32.34
1887	32.58	38.78
1888	25.37	2.86
1889	30.25	29.40
1890	22.00	15.54
1891	17.69	12.88
1892	39.96	36.00

Monthly details of the rain that had fallen in 1890-91 and 1891-92 compared with the average of the last 10 years are noted in the statement below with a view to show that in 1890-91 the division in general and the Márkápúr taluk in particular had deficient rainfall which was followed in 1891-92 by a more serious failure of rain and thus caused widespread distress in several parts of the division :—

Months.	Cumbum taluk.			Márkápúr taluk.		
	Rainfall during		Average rainfall during the last 10 years.	Rainfall during		Average rainfall during the last 10 years.
	1890-91.	1891-92.		1890-91.	1891-92.	
1	2	3	4	5	6	7
	INCHES.	INCHES.	INCHES.	INCHES.	INCHES.	INCHES.
April	..	2.18	0.19	0.87	0.87	0.07
May	..	3.00	2.90	2.88	2.39	0.78
June	2.69	3.67	3.43	0.84	2.32	2.96
July	1.16	4.42	4.85	0.70	1.67	3.86
August	6.27	0.87	2.54	4.67	0.54	4.69
September	4.25	3.23	5.99	0.69	3.55	7.68
October	0.40	0.07	5.47	4.14	0.53	3.70
November	3.26	..	1.92	0.60	..	0.97
December	4.07	..	..	..	..	..
January	..	0.07	0.03	..	..	..
February	0.25	..	0.21	0.77	..	0.22
March	..	..	..	..	..	..

The cultivation in this division ordinarily begins with June and ends practically with November, and unless steady rain with occasional breaks falls during that period, the dry crops of this division are, in my opinion, not safe. As the author of the Kurnool District Manual says 16 inches of rain properly distributed would then be enough, I quote him *in extenso*.

"Judging from the registered rainfall of 10 years before famine (of 1876-78) as compared with the general character of the outturn as stated in annual reports, the amount of rainfall required for cultivation for the whole year for a good crop in this district is about 25 inches. If, however, the rains are regularly distributed about 15 (16 P) inches are sufficient as shown below :—May 2 inches, June 3, July 3, August 4, September 2, October 2."

The author would have been more correct if he had added November to the series as that is a month in which late dry crops are generally sown extensively; thus what the division really wants is moderate rains falling at regular intervals. The character of its soils is described in the following words by Mr. Benson—"East of the Nallamalais the flat country is for the most part composed of clay slates chloritic or talcose in their constitution and therefore probably giving a large percentage of magnesia which is not a desirable element in soils. The soils are generally

poor and thin though occasionally improved by the presence of calcarious matter. In a few places this general property is relieved by the presence of small areas of "cotton soil" or of river alluvium, but for the most part the soils are clay and sandy deposits and in some places much mixed with quartz gravel."

Such soils cannot retain much moisture and surely want rain every now and then. The chief months in which it should fall to keep the dry crops in good condition are June, July, August, October and November and if it should hold off in those months the merchants are sure to play with the prices of food grains.

8. *Prices*.—The following statement shows the average prices of the four important food-grains during the last 18 years in terms of imperial seers per rupee in both the taluks of the division :—

Year.	Cumbum taluk.				Márkápúr taluk.			
	Rice, 2nd sort.	Cholum.	Cumbu.	Ragi.	Rice, 2nd sort.	Cholum.	Cumbu.	Ragi.
1	2	3	4	5	6	7	8	9
1874	13.28	25.28	23.20	27.00	13.28	28.44	23.72	27.00
1875	14.24	25.28	23.20	26.37	14.96	30.02	26.53	31.50
1876	12.86	20.54	18.85	19.50	14.96	29.08	22.47	28.50
1877	6.62	7.90	7.61	8.25	6.01	7.96	7.97	9.00
1878	8.30	12.64	11.96	13.50	7.88	9.18	9.57	11.25
1879	15.43	28.44	21.02	21.37	11.88	17.38	15.95	18.37
1880	15.77	29.00	27.98	31.50	14.24	30.49	24.65	27.75
1881	12.61	36.34	30.88	35.37	13.28	33.18	27.18	29.92
1882	12.61	31.60	27.78	33.00	13.55	31.21	27.55	30.00
1883	12.61	28.44	24.40	28.50	15.21	32.39	27.55	30.00
1884	13.28	28.44	26.08	28.50	14.38	29.62	25.37	28.50
1885	13.69	25.28	24.65	28.50	14.38	29.62	26.10	29.25
1886	13.69	26.86	23.20	29.25	13.28	28.00	23.92	30.00
1887	14.27	31.60	23.20	30.00	14.38	28.44	23.37	30.00
1888	13.28	26.86	21.14	28.50	13.13	28.00	22.62	28.75
1889	13.54	22.12	16.90	23.00	11.34	28.00	18.85	22.50
1890	11.82	26.07	21.75	27.37	10.20	28.00	19.67	22.12
1891	10.45	22.51	20.30	24.00	10.95	18.85	18.85	22.50
1892	8.79	14.22	12.32	14.25	9.57	14.04	12.18	14.30

* The average for this year has been struck on the prices up to the end of September.

It will be seen from the above that general fall in prices had taken place after the great famine up to 1883 when, as Mr. Benson says, they were "forced up by an anticipation of scarcity." After that they have not shown a tendency to decline though, considering the fact that the country has since been opened up by railway, one should expect an appreciable decline as a necessary consequence of the equalization of the prices here and those in the fertile district of Kistna. The reason is probably to be found in the fact that till recently Kistna did not grow much of those food grains which the Cumbum division wants or at all events it had very little to spare of those grains in the past years. I daresay that hereafter Kistna, or rather the upland taluks of Kistna, will grow more cumbu and ragi as, consequent on the capricious character of the season in the Cumbum division, there is sure to be every now and then a run into its markets for those food-grains.

9. *State of the division between 1878 and 1890-91*.—It is evident from the rainfall figures in paragraph 7 *supra* that the character of the seasons between 1879 and 1888 was on the whole not adverse though not very favorable. It can therefore be said that during that period the local supply of food was fairly adequate to meet the local demands and that there was no anxiety felt at any time. Except perhaps in 1881 and 1884 when though the rainfall was deficient in Márkápúr and Cumbum, respectively, the prices remained steady. This fact, and the increase in population referred to above, considered with the amount of sustaining power exhibited by the people in the recent famine, lead to the conclusion that the condition of the landed (agricultural) and of the landless classes had during the period of 12 years following the great famine undergone a marked change for the better. As a matter of fact the lessons of the great famine were not lost on the people. They realized the precarious character of the season in the division, learnt habits of thrift and began to lay by, whenever possible, something for the "rainy day." The construction of the railway was a grand opportunity for all the able-bodied people to labour and make money and right well did the people of this division earn and save then. The wages offered were very liberal and both the landed and the landless classes amassed considerable money. It is not improbable that the "self reliant manner in which the people bore themselves against the recent drought" was due to these savings. I agree with Mr. Dewan Bahadur Srinivasaragava Iyengar in considering that "the creditable self-reliance which they (the people) have shown under the adverse circumstances of the last 2 (3?) years affords satisfactory proof of

the fact that their position has materially improved. Their resources, however, have been already strained a great deal and another bad season will bring them down." Thus with a succession of good seasons and with the advantages afforded by the construction of the railway the people were better prepared and had more money savings to face a drought in 1892 than they had in 1876.

10. *First indication of distress.*—The state of the season in 1888–89 was not free from anxiety on the score of rise in the prices of food-grains caused by deficient rainfall, but no special measures were apparently taken to relieve the distress, as the railway works, then in full swing, afforded sufficient employment to the needy. The rains of the south-west monsoon of 1889–90 were also late and extremely deficient, but fortunately the north-east monsoon, which burst in full vigour, dispelled all anxiety and sent down the prices of food-grains to the limit where they stood in 1887–88. The rains of 1890–91 also were not plentiful, but as they were tolerably well distributed, though scanty, the situation did not cause any anxiety. Some warning notes were stated to have been sounded by a few irresponsible people, but they were neglected as emanating from misinformed alarmists. The dry crops in this year fared moderately well though wet remissions, amounting to Rs. 10,759 in the Márkápur taluk, Rs. 1,739 in the Cumbum taluk, were granted.

11. The anxiety about the season revived again in August 1891, when, apparently noticing the agricultural depression then prevailing and the holding off of the south-west monsoon rains, you sent a confidential demi-official to the then Divisional officer inquiring whether there was any lack of food or employment and whether any distress was anticipated; you were, however, told in reply that there was rain on the 10th and 11th August; that distress was not imminent; and that the future would not be threatening unless the latter half of the south-west monsoon, i.e., the months of August and September, should prove rainless. This reply did not apparently satisfy you and you prescribed a special weekly season report to be submitted by the Divisional officer on every Monday. Such reports were submitted till the 1st October and kept you informed of the state of the season from time to time. A few days prior to the 18th October 1891, the Divisional officer's attention was drawn by the Tahsildar to the unfavorable character of the season in the Márkápur taluk, and a request to start a few minor irrigation works was made. The rains of the 10th and 11th August only tended to retard and not to avert the distress presaged by you. When the serious nature of the situation was reported to the Board, you were requested by wire to visit the Márkápur taluk and to report on its condition*. You thereupon "proceeded to Márkápur on the 12th

* Board's Proceedings, dated 5th October 1891, Mis. No. 5665.

October 1891, and on the 14th telegraphed from there stating that in the *West, Central and Southern* parts of the taluk, if no rain fell for a week, relief works should be started. The Board then sanctioned the commencement of minor irrigation repairs for this purpose wherever necessary.

† Board's Proceedings, dated 24th October 1891, No. 685. You thereupon sanctioned the following minor irrigation works† which were started on the dates noted against them:—

Name of work.	Amount of estimate.			Date of starting.
	RS.	A.	P.	
Tank of Araveed ...	1,000	0	0	30th October 1891.
" of Bommalapuram ...	1,700	0	0	2nd November "
" of Gurijipalli ...	236	12	0	5th "

At this time the Baacherla firka and a portion of the Cumbum firka of the Cumbum taluk were also reported to you to have been affected and you applied to the Board for permission to start a few minor irrigation repairs there also which the Board granted on the condition that "they are absolutely necessary to give employment to the needy"‡. The Tahsildar of Cumbum then started on the dates noted below the following minor irrigation works:—

‡ Board's Proceedings, dated 28th October 1891, No. 695.

Name of work.	Amount of estimate.			Date of starting.
	RS.	A.	P.	
Tank of Yedavalli ...	500	0	0	5th November 1891.
" of Salakalavida ...	600	0	0	5th "

12. *State of the Season in 1891–92.*—It is now necessary to state how the season caused anxiety in October 1891. From paragraph 5 *supra* it would appear that the amount of rain that fell from April 1891 to October 1891 was only 17·37 and 11·56 inches against an average of 21·02 and 23·11 for the Cumbum and Márkápur taluks respectively. The deficiency in Márkápur was particularly noticeable. As a result of this the early sown dry crops, except those under wells, failed or threatened to fail partially. The following statement shows the monthly prices in Imperial sacs per rupee of the food-grains from April 1891 to March 1892:—

Month.	Cumbum taluk.				Márkápur taluk.			
	Rice, 2nd sort.	Cholum.	Cumbu.	Ragi.	Rice, 2nd sort.	Cholum.	Cumbu.	Ragi.
	1	2	3	4	5	6	7	8
April 1891 ..	10·79	25·28	21·75	27	11·62	..	19·67	21·00
May ..	10·79	25·28	21·75	27	11·62	..	19·67	21·00
June ..	10·79	25·28	21·75	27	11·62	..	20·30	24·00
July ..	10·87	22·12	18·75	24	11·62	..	19·67	24·00
August ..	10·79	22·12	21·75	24	11·62	..	19·67	24·00
September ..	10·79	22·12	21·75	24	11·62	..	18·72	24·00
October ..	10·79	20·44	19·21	20·75	9·96	18·96	15·95	21·00
November ..	9·84	18·56	17·04	19·50	9·96	18·96	17·40	22·50
December ..	8·30	15·27	12·14	13·12	9·13	..	11·60	13·50
January 1892 ..	8·30	12·64	11·60	12·00	9·96	13·86	11·60	12·75
February ..	8·30	12·64	11·60	12·55	8·30	12·64	11·60	12·75
March ..	8·30	12·64	11·60	12·75	9·13	12·43	12·32	12·75
Scarcity rate ..	9·5	16·09	14·46	17·06	9·5	16·09	14·46	17·06

It will be seen from this that the prices which were more or less stationary up to the end of September 1891 rose suddenly in October, owing apparently to the partial failure of the early sown crops. The deficient rainfall, the rise in prices, and the partial failure of the early sown dry crops following upon three or four indifferent seasons since 1888 were certainly sufficient to cause anxiety and to necessitate the starting of the above minor irrigation works as test works.

13. I took charge of the division on the 26th October 1891, so that the test works in both the taluks were started only after I had come in, and I had the advantage of organizing and watching them from their commencement. From this time forward, we grew anxious about the north-east monsoon. On the 26th October 1891 there was a pretty heavy shower at Mundlapaud, but it turned out to be only a local shower, and did not, in the least, improve the prospects of the affected tracts. In addition to the works already opened, the repairs of the tank of Rajempalli in the Márkápur taluk and those of Pitikayagulla and Racherla in the Cumbum taluk and the repair of the Mantralammakanama road and the Cumbum town road were put in hand, the latter two having been opened by the Local Fund Engineer. These too were opened as test works, but they proved, beyond all possibility of doubt, the necessity that then existed for starting more extensive relief works. The state of the season in November grew worse. Not a drop of rain fell in some places, though at the two places of registration a slight quantity was measured (Márkápur measured ·55 on one day and Cumbum ·07 on two days) and the clamour for work became more and more pronounced as we got nearer the close of the month. Messrs. Newcomb and Johnson, the American Baptist Missionaries at Cumbum, mustered hundreds of Malas and Madigas at Raripaud and Cumbum to convince me of the existence of distress and the consequent necessity for starting more relief works. I then started on a long tour of inspection and visited several villages in the tracts reported to be affected and submitted to you from time to time the impressions formed in my mind. I take the following extracts therefrom to show the extent and causes of the distress then found to exist:—

"In and around Cumbum there is a large class of landless labourers who depend for sustenance upon such grain and money as the agriculturists of the place give them either as hire for work done or as an advance for work to be done. Those people have all settled in the villages served by the Cumbum tank, as its supply is not precarious and fails only in a year of severe drought following on a succession of two or three bad years. The work they ordinarily do in this month (November) is to transplant ragi and to bring green leaves (green manure) from the forests close by for manuring those wet lands on which a second crop is to be raised. This year, unfortunately, there was hardly sufficient water in the tank for maturing even the first crop, and consequently the landed ryots have refused, or rather are unable, to help the landless classes, which consist chiefly of the Malas and the Madigas, either with advances or with work."—6th November 1892.

"I think I must say that the existence of distress is established. It is thus necessary that we should find some work for these landless labourers in the month of November only. If rain holds off and if the Cumbum tank does not get water in this month, I am afraid that we shall be put to the necessity of opening large relief works for them from the beginning of December."—6th November 1892.

"It looks as if the north-east monsoon is going to fail completely. If so, it is sure to prove the last straw to break the camel's back. The present scarcity will surely deepen into famine and relief measures will have to be adopted in right earnest. The crisis will be reached in a week more, and if no rain should fall before to-day next week, the standing crops of variga, &c., must wither.

Unlike the Cumbum taluk, the distress here (in the Márkápur taluk) has extended to the agriculturists of ordinary means. The cooly class, too, is as bad here as in Cumbum. I am sincerely of opinion that some *famine relief works* will have to be started for the benefit of these classes. The minor irrigation works and the Mantralammakanamu road work will not keep them long engaged and may be over in the course of a month or so."—20th November 1891.

A week afterwards the failure of the north-west monsoon was, beyond all doubt, established. There was only .07 and .55 inches against an average for the month of 5.47 and 3.7 inches in the Cumbum and Márkápur taluks respectively. The failure of the two monsoons of the year had a particularly disastrous effect on the economic condition of the division. Before the opening out of the country by the railway, the surplus produce of the years of plenty, little perhaps though it was, seldom found its way out and stood in good stead in times of scarcity, or apprehended scarcity, but the surplus produce of 1890, small as it was, was taken away by the railway to the distressed tracts elsewhere, and when there was a partial failure of the early sown food-crops and a total failure of the late sown food-crops in 1891. There was an insufficiency of food-supply in the division, and prices rose suddenly, much to the embarrassment of the people who were also unable to find employment as easily as before, owing to the agricultural operations being at a standstill. The money savings they had did not help them at first, as the stocks of the grain ran short. This situation is excellently described by Dewan Bahadur S. Srinivasa Raghava Iyengar in the following passage:—

"Doubtless, when parts of the country which have been hitherto isolated from other tracts are suddenly placed in communication with the latter, the result often is a feeling that they are denuded of food-supplies which are required for their own use. The feeling soon wears away, and, when these parts suffer in their turn from scarcity, the effects of which are mitigated by supplies derived from other regions, the advantages of communications become at once manifest. I suppose this has been the case with Kurnool, where the season of 1890 was excellent, but the surplus produce was drawn off by the surrounding distressed tracts, the new railway assisting in the transport of grain.

"In 1891, when the crop failed in the Kurnool district itself, there were no stores of grain to fall back upon, and the result was that the population was taken by surprise. I believe the recent distress and riots must have, in a great measure, been due to this cause."

Towards the close of November, the cultivation accounts showed that large areas were left waste; further, all the area cropped with *variga* was threatened with a complete loss of crop. The forest produce also proved to be very scanty last year with the result that the hill tribes, notably the Chenchus, were reduced to abject poverty and were coerced into committing thefts and robberies in the plains. All this was reported to you in due time, with a view (1) to your moving the Board to sanction some famine relief works, and (2) to your ordering the suspension of collections for two months. I also proposed that, in those cases in which the water in the tank was so very little as to be likely to disappear soon by evaporation, ryots might be allowed to utilize that water free of water charge for moistening the wet fields with a view to raise a *variga* crop thereon and thus increase the food-supply of the division. Though you approved of the proposal in paragraph 2 of your docket No. 5770, dated 23rd November 1891, the Jamabandi officer seemed to have charged water-rate in such cases also in the Cumbum taluk and thus nullified the concession to a certain extent; but fortunately those cases were very few in this taluk. In the Márkápur taluk, however, the Tahsildar bore the order in mind and carried it out.

So much about the causes of the distress; the extent of the loss of crop required by section 32 of the Famine Code will be referred to under "remissions"—(paragraph 26).

14. The crop prospects as they stood in the first week of December 1891 were noticed in person by the Commissioner, who, between the 3rd and 10th of December 1891, visited all the affected parts in the Cumbum and Márkápur taluks, and his observations were recorded in Board's Proceedings, dated 15th December 1891, No. 798. The Commissioner also noticed at the time the steady rise in the prices and the abnormal importation by rail of the food-grains—a sure sign of the existence of distress—and ordered the immediate employment of labour at the marginally-noted three spots in the Márkápur taluk. Wherever he went, and the places he visited

1. The road between Márkápur and the Márkápur road railway station.
2. The Dupad road.
3. The Dornal road.

in the Cumbum taluk, also near Taticherla, as soon as the Racherla tank-work, which was then in progress, was completed, and sanctioned my opening two permanent kitchens for destitute paupers and non-working children of labourers, one at a central and convenient place in the affected area of the Cumbum taluk, and the other at Márkápur. His orders were duly carried out by opening the following road-work and kitchens at the places and on the dates specified below:—

	Date of opening.
The Taticherla road-work	30th December 1891.
The kitchen at Palakavid in the Cumbum taluk ...	13th "
The kitchen at Márkápur	3rd January 1892.

The relief works could not have been started much later, and I have no hesitation in asserting that the success that attended the famine operations this year is not a little due to this timely help rendered to the distressed labourers. But for this timely help we should probably

have had to report, as the Honorable Mr. Arbuthnot did on the 25th November 1876, deaths by the wayside, abandonment of

children by parents and emigration of not less than 3,000 families to the Kistna district. Probably the existence of the railway would never have rendered the distress as acute as in 1876-78, but it cannot be denied that any further delay in the starting of relief works would have considerably aggravated matters. The railway only brought grain into the division, but, without the relief works, the people would soon have been without the "wherewithal" to purchase it. Their money savings would not have kept them on long.

At this time the Public Works Department also was requested to take measures for commencing, at the earliest possible date, all the repair works in the affected area on which funds could advantageously be spent. So far the health of the people did not cause any anxiety, though a few sporadic cases of cholera were reported here and there. Appendix I shows the names of the villages considered by me at the time to be "seriously affected" and "generally affected." Subsequently the other villages in the division also suffered more or less from the rise in prices and were consequently considered to have been generally affected.

15. It will be observed that at the time the relief works were first started, i.e., in the first week of December, no food-grain was being sold at or below the scarcity rate. The scarcity rates of this division are compared in the following table with what may now be taken as normal rates:—

	Rate.	2nd-sort rice.	Cholum.	Cumbu.	Ragi.
Normal rate	11.5	25.2	21.75	25.5	
Scarcity rate	9.5	16.9	14.46	17.06	
These represent a decrease in quantity of					
	PER CENT.	PER CENT.	PER CENT.	PER CENT.	
	17.4	32.9	33.5	32.7	

According to paragraph 33 of the Famine Code a rise of 40 per cent. above the normal in the price of 2nd-sort rice and of 50 per cent. in that of dry grains should be taken as a criterion for the determination of the existence of severe scarcity. The price of rice does not fluctuate much in this division, as the people here do not use rice much. The food-grains ordinarily used here are cumbu and cholum in the Cumbum taluk and cumbu and ragi in the Márkápur taluk, and we have recognized cholum and ragi as the respective staple food-grains of the two taluks. The prices of these grains do not in ordinary years fluctuate much except in the months of October and November and February and March when, as the harvest begins or rather as an estimate of the future can fairly be made, there is either a rise or a fall, but even this variation is neither sudden nor violent as the rich grain stores of the Kistna and Godáviri districts are always at hand and can at any time be drawn on, so that if we accept the principle enunciated in paragraph 33 of the Famine Code as our rule of action we shall have to postpone the starting of our relief works probably until all the people requiring relief are past the stage of relief. I would therefore suggest that in these days of rapid equalisation of prices due to the railway, the failure of the two monsoons in any year may be regarded as an event sure to lead to severe scarcity, and relief works, or at all events test works, ordered to be opened; rainfall registers are a better index of the state of the season in dry taluks than price lists, but, if price lists should also be considered, I would make a rise of 20 per cent. over the normal to be an index of scarcity as the prices now-a-days are generally high, or in other words as the normal rates are now much higher than what they were at the time the Famine Code was drafted. The so-called food-dearness rates should also be revised, as, if they are meant to mark the time when famine batta to Government servants of limited pay should be granted, such relief should be granted much before the present rates are reached.

16. Just before the opening of the relief works property appeared to be so insecure that several merchants marched off bag and baggage to Vinukonda, Guntur and other places where they thought they would be safe. In reality not a day passed without a report, true or false, of a dacoity, or a robbery, or an house-breaking reaching my ears, and I was every minute

afraid that the example of the rioters of the Kurnool town might be followed in Bestwarapett, Cumbum, Márkápúr and Mundlapad, which were known to contain considerable quantities of grain. The Superintendent of Police had to be addressed to reinforce the Treasury guards at Márkápúr and Mundlapad, while an urgent application was made to you for making some arrangements for the relief of the Chenchus who appeared to me to have not a little contributed to the then prevailing feeling of general insecurity of property. Fortunately, however, nothing serious occurred, though now and then the Taluk Magistrates, Special Deputy Tahsildar-Magistrates and myself had to patrol in the nights through the streets of Márkápúr and Mundlapad to infuse confidence into the public mind. I am sorry I have no information about the exact number of thefts, house-breakings and dacoities reported at this time, but the following statement, prepared with reference to the information obtained from the Taluk offices, shows how many cases of dacoity, house-breaking, &c., were disposed of by the Magistrates from August 1891 to August 1892:—

Cumbum taluk	...	...	...	...	...	...	...	74
Márkápúr taluk	...	...	...	...	...	...	...	41
Total	...	...	...	...	...	...	...	115

The special arrangements made for the relief of Chenchus will be referred to later on.

17. *State of Trade.*—The state of trade was not at first as active as one would wish it to be, partly owing to the fear entertained by the merchants in the towns about the security of the grain and partly owing to the want of enterprise on the part of the merchants in the interior and outlying villages. I had very often to encourage them to import grain from Guntúr, &c., and I am glad to record that, latterly, my attempts were attended with moderate successes. Steps were also taken by me to induce these merchants to sell grain at all the important relief works and it goes without saying that this measure conduced much to the convenience of those labourers who stopped on the works.

18. *Report under section 35 of the Famine Code.*—On the 4th February 1892, I sent a report under this section with a forecast of the outlay required for relief works and gratuitous relief and for making advances under the Loans Acts, and I shall not swell this report by quoting therefrom. Before the submission of the above, the following special establishments were sanctioned on the dates specified below:—

Vide G.O., No. 6534, dated 21st December 1891.

A Special Deputy Tahsildar for Márkápúr.

Date of Appointment.

20th December 1891.

A Special Deputy Tahsildar for Cumbum.

Board's Proceedings, No. 55, dated 5th January 1892.

A Special Revenue Inspector for Márkápúr.

30th "

A Special Revenue Inspector for Cumbum.

About the close of February a Special Deputy Collector was sanctioned, and Mr. Narayana Row Pantulu took charge of that appointment early in March 1892 and relieved me of the ordinary duties of my office till the 14th of May when, as he fell seriously ill, I was once more obliged to perform them. I was, however, relieved of them again early in June 1892, when Mr. Kristnaswami Naidu was appointed to act for Mr. Narayana Row Pantulu.

19. In view of the severity of the season orders were issued by you for the grant of the following concessions to the ryots:—

(a) That the Divisional officer should "allow of tank-beds being cultivated with dry crops on the condition of paying the highest dry rate of the village, provided the Public Works Department raise no objection on the score of the tanks being endangered." The concession was more availed of in the Márkápúr than in the Cumbum taluk, and I have shown on the margin a list of the tank-beds so cultivated.

Cumbum Taluk.

1. Racherla tank.
2. Gadikota tank.

3. Cumbum tank.

Márkápúr Taluk.

1. Márkápúr tank.
2. Nagulavaram tank.
3. Chapalamadugu tank.
4. Ganapavaram do.
5. Chinthakunta do.

6. Devarajugattu tank.
7. Gobbur do.
8. Gajjalakonda do.
9. Gollaidipi do.
10. Enagondapalle do.

(b) That the collection of wet assessment should be postponed wherever it appeared that wet remissions would eventually have to be granted.

(c) That the Tahsildars should not issue coercive process under the Act in those cases in which the harvest on any dry field appeared

very feeble, or where the land had not been sown, or, if sown, when the crop thereon withered.

20. *Progress of Famine.*—I shall under this head briefly review—

- (1) the progress of cultivation as affected by the amount of rainfall;
- (2) fluctuations in the prices of food-grains from week to week;
- (3) the number of coolies for which employment was afforded by the relief works;
- (4) the physical condition of the people in the villages and on the works from month to month;
- (5) the condition of water-supply from month to month and the steps taken to improve it;
- (6) the condition of the cattle in relation to the availability or otherwise of pasture and fodder.

(1) *Progress in cultivation.*—Immediately after the slight rainfall in October 1891, people thought that they might take their chance and sow the late dry crops of variga and horse-gram, and accordingly did so. Consequently at the end of December 135,960 acres of dry, 10,844 of wet in Cumbum taluk, and 120,806 of dry, 2,728 of wet in the Márkápúr taluk, came to be shown under "area cultivated." Most of the wet land in the Márkápúr taluk was sown only with dry crops. But most of the crop so sown was destined to wither for want of rain. Excepting the crops under wells and a portion of the early sown crops which yielded a partial harvest, the cultivation of this year was of no benefit to the ryot. Miles and miles of land sown with korra and variga presented a dismal appearance at the end of December 1891, and got parched up a few days later with the result that the withering plants were pulled up for use as fodder to the cattle. From January till June 1892 there was practically no fresh cultivation, save the second crop under wells. This too existed only on a small scale, and was conducted under very difficult conditions, as the water in the wells went deeper and deeper and even failed eventually in a few cases, but when they failed before the maturity of the crop, they tended to increase the fodder-supply though not the food-supply. From June, however, extensive sowings became possible owing to the south-west monsoon having burst in full vigour. The following statement gives the rainfall in the division from April to August 1892:—

Month.	Cumbum.	Márkápúr.
	INS.	INS.
April ...	0.30	0.21
May ...	1.28	0.31
June ...	6.26	4.66
July ...	5.63	4.11
August ...	7.84	8.82

The failure of crops caused a deficiency in food-supply and necessitated extensive importation from the neighbouring districts until the early sown crops of this year were harvested in October 1892.

(2) *Fluctuations in prices from week to week.*—It is interesting to note how, notwithstanding enormous importation, the prices of food-grains rose steadily from October 1891 till the close of April 1892, when they became slightly easier again; how there were slight rises and falls again between April and August 1892; and how they fell finally in September 1892. The following table shows the weekly prices of the four important food-grains from October 1891 to September 1892. The scarcity rates were also noted side by side, and it will be seen that on many occasions after the first week of December they have been reached and exceeded:—

Months and weeks.	Cumbum taluk.						Markapur taluk.					
	Rice, 2nd sort.	Scarcity rate.	Cholum.	Scarcity rate.	Ragi.	Scarcity rate.	Rice, 2nd sort.	Scarcity rate.	Cholum.	Scarcity rate.	Cumbu.	Scarcity rate.
	2	3	4	5	6	7	8	9	10	11	12	13
October 1891	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
1st week	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
2nd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
3rd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
4th "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
November "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
1st "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
2nd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
3rd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
4th "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
December "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
1st "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
2nd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
3rd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
4th "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
January 1892	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
1st "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
2nd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
3rd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
4th "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
February "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
1st "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
2nd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
3rd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
4th "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
March "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
1st "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
2nd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
3rd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
4th "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
April "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
1st "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
2nd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
3rd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
4th "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
May "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
1st "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
2nd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
3rd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
4th "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
June "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
1st "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
2nd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
3rd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
4th "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
July "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
1st "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
2nd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
3rd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
4th "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
August "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
1st "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
2nd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
3rd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
4th "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
September "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
1st "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
2nd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
3rd "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950
4th "	1073	1073	2014	1885	1950	1950	1950	1950	1950	1950	1950	1950

It would appear from this that the distress culminated in April. The second crop under wells brought into the market considerable quantities of ragi and consequently there was afterwards no further rise in prices. The rainfall of June and July sent them down appreciably from the fourth week of July from which the season may be said to have showed steady improvement, which became quite pronounced in the second week of September 1892, as I had from the very commencement anticipated. A list of the relief works executed will be given in Appendix II.

(3) The number of coolies on all the works in each taluk at the end of each week, so far as information is now available, is shown in the following statement. The number rose gradually till it reached its height, viz., 21,974 in the fourth week of April 1892. It fell down as gradually as it rose:—

Week.	Number of coolies in Cumbum taluk.	Number of coolies in Markapur taluk.	Total.
1	2	3	4
13th December 1891 ..	251	496	747
20th " " " " " "	365	1,378	1,743
27th " " " " " "	345	2,253	2,598
2nd January 1892 ..	1,152	2,459	3,611
9th " " " " " "	1,462	4,249	5,711
16th " " " " " "	1,671	4,625	6,296
23rd " " " " " "	2,215	5,067	7,282
30th " " " " " "	2,406	4,227	6,633
6th February " " " " " "	2,762	5,301	8,063
13th " " " " " "	5,417	6,179	11,596
20th " " " " " "	6,979	6,546	13,525
27th " " " " " "	3,391	7,299	10,690
5th March " " " " " "	7,744	7,806	15,550
12th " " " " " "	7,183	7,906	15,089
19th " " " " " "	9,196	8,152	17,347
26th " " " " " "	9,474	8,175	17,649
2nd April " " " " " "	9,370	7,183	16,553
9th " " " " " "	10,428	7,787	18,215
16th " " " " " "	10,230	7,863	18,093
23rd " " " " " "	11,527	9,347	20,874
30th " " " " " "	13,154	8,826	21,974
7th May " " " " " "	13,694	6,833	20,527
14th " " " " " "	12,797	7,976	20,774
21st " " " " " "	12,741	9,116	21,857
28th " " " " " "	11,422	8,801	20,223
4th June " " " " " "	11,646	8,026	19,672
11th " " " " " "	11,175	7,790	18,965
18th " " " " " "	10,168	8,419	18,587
25th " " " " " "	10,212	6,253	16,465
2nd July " " " " " "	9,217	5,953	15,170
9th " " " " " "	9,425	6,295	15,720
16th " " " " " "	8,621	6,133	14,754
23rd " " " " " "	8,706	5,672	14,378
30th " " " " " "	7,061	5,137	12,201
6th August " " " " " "	5,691	5,751	11,442
13th " " " " " "	4,059	5,169	9,228
20th " " " " " "	3,746	4,843	8,589
27th " " " " " "	3,199	4,125	7,324
3rd September 1892 ..	2,861	3,235	6,096
10th " " " " " "	1,578	1,783	3,361

Besides these a large number of coolies found employment on the wells, for the excavation of which State loans were granted. This number must have been at least 6,000 in the months of April and May 1892. Some wells were also dug by the ryots without the aid of State loans and also was largest in April and all this evidence confirms the statement already made that the distress culminated in that month; nearly 30,000 or more than an eighth of the total population of the division sought and got relief. Though in July and August the falling off in the number is in a measure due to the prevalence of cholera, still the number in the statement may be said to represent pretty correctly the growth and decline of the distress in the division.

(4) Physical condition of the people in villages and on works.—This information is best furnished in the form of a table showing their condition from month to month. I therefore subjoin the following:—

Month.	In villages.	On works.	In the kitchens.
Nov. 1891.	The people in the villages were in this month calculating as to how they should tide over the coming season which they began to apprehend as likely to prove disastrous. The memory of the great famine of 1876-78 was still fresh and so they were more provident than before and began to clamour for work at the sight of every Government official. Their health was good, except that fever and cholera prevailed here and there. This shows that the people began to realize their position and to feel that the agricultural depression was near at hand.	The people that sought employment on the Local Fund works and the minor irrigation works opened in this month kept good health and showed no signs of deterioration. The memory of the great famine of 1876-78 was still fresh and so they were more provident than before and began to clamour for work at the sight of every Government official. Their health was good, except that fever and cholera prevailed here and there. This shows that the people began to realize their position and to feel that the agricultural depression was near at hand.	No kitchens were in existence in this month.
Dec. 1891.	In this month also the people did not show any signs of deterioration. In a few villages within a radius of four miles from Cumbum some people died of cholera, while others appeared panic-stricken, but beyond this and beyond the distinct clamour they raised for work, nothing of importance about the condition of the people was noticeable in this month.	Owing to the completion of the small harvest operations in progress in the last month, the number of coolies that came to the works increased, but their physical condition did not cause any alarm; they looked as strong as ever though, in consequence of the fear for the future, they appeared slightly depressed. I inspected in this month the coolies on all the works in progress. <i>The Commissioner's first visit.</i> Between the 3rd and 10th of this month, the Commissioner inspected the works at Markapur, Aravid and Racherla and saw the distressed poor collected at (1) Markapur, (2) Nagdevaram, (3) Nikanampalli, (4) Aravid, (5) Ramachendrakota, (6) Chinadornal, (7) Dornal, (8) Gudipad, (9) Rajempalli, (10) Dupad, (11) Thangirampalli, (12) Yedavalli, and (13) Racherla. He found the condition of the coolies to be good.	The inmates of the kitchen at Palakavida, the only kitchen then open, were in good condition. I inspected them several times in the month.
Jan. 1892.	Good; only in two villages of the Cumbum taluk cholera prevailed and caused a few deaths. The physical condition of the people in the 21 villages visited by me was good. There was no absolute destitution or extraordinary begging. The relief works were more largely resorted to.	I inspected in the month all the Public Works Department works and the Local Fund works and the minor irrigation work of Aravid. The condition of the coolies was good enough though, owing to the low wages earned by some of them on the Dupad and Dornal works, there was some apprehension about their suffering in health. <i>The Commissioner's second visit.</i> On the last two days of this month and on the 1st of February, the Commissioner visited the coolies at Markapur and found them to be in good condition. <i>Collector's visit.</i> The works at Markapur, Dornal and Dupad were also visited by you.	The inmates of the kitchen kept good health. The Commissioner and yourself also visited the kitchen at Markapur and found the inmates to be in good condition.
Feb. 1892.	No cases of emaciation or want of food came to my notice, though I inspected several villages in both the taluks; on the other hand the condition of the people appeared to be generally good. The condition of the goasha women was also in this month brought to my notice.	The condition of the people on all but the works at Dupad and Dornal was good. On the works specified above, the people began to show a slight deterioration apparently owing to the low wages earned by them. They earned then much less than the subsistence allowance. <i>The Commissioner's third visit.</i> The Commissioner saw the coolies at Dupad on the 12th February 1892 and found it necessary (1) to reduce the task for breaking and stacking metal, (2) to order that the task should in future be calculated with reference to the wages payable (N.B. I have explained this in paragraph 21 <i>infra</i>), and (3) to rule that, in the case of all payments made for 14 days from that date, "the Paying officers should see that, without the specific orders of the Divisional officer or of the Local Fund Engineer, the coolies do not get less than the subsistence allowance admissible under the rules." In this month the sun was very powerful and all the coolies on works looked a little thinner than before, probably because of the exposure to the sun. The heat was so unbearable that even a hardy rustic sympathetically asked the Commissioner, while returning from Dupad to Donakonda at 12 o'clock on the 12th, what momentous business it was that compelled him to ride so hard beneath a scorching and ruthless sun. You visited the Taticherla work and recorded your observations in the letter embodied in Board's Proceedings, dated 4th March 1892, No. 164. The payment of "minimum wage" was subsequently introduced on all the works under your orders and continued until cancelled in April.	Five kitchens were open during the month and the non-working children of the labourers and destitute paupers were fed. Of these two are permanent while the other three are work kitchens started in this month. I inspected all the kitchens and found all the inmates to be in good condition. You visited the kitchen at Palakavida and found the inmates in a good condition.

Month.	In villages.	On works.	In the kitchens.
March 1892.	I inspected about 20 villages in this month and found the condition of the people to be same as in February 1892.	Under the orders of the Commissioner I went and stopped several days in this month on the works at Dornal and Dupad to watch the condition of the people there. I then reported that "after the introduction of the minimum wages, the coolies here have had enough to live upon, and have in consequence improved very well and rapidly. The Malas and the Madigas are especially looking very well as on every Sunday (day of rest) it is said they kill and feast themselves on cow and buffaloes which they can get especially on the Dupad side for a very cheap price (Rs. 4 or thereabouts). The coolies on all the works in general and on the Giddalur road work in particular suffered slightly from influenza and guinea worm. Hot westerly winds blew from the 24th of this month, and the condition of the coolies would have been once more affected but for the circumstance that, almost from the commencement of this month, the system of "minimum wage" was introduced on all the works in the division. From the beginning of this month some of the coolies chose to stop in the nights at the work-spots only and under the orders of the Commissioner three shelter-sheds were erected at each of the work-spots at Dornal, Dupad and Giddalur to afford shelter to the people. These sheds served also as rest-sheds in the day time. In this month I also arranged to form a few light work gangs on all the road works. Cholera broke out on two of the Public Works Department tank works at Cumbum and caused a few deaths among the coolies and consequently the services of two extra Hospital Assistants were obtained for cholera duty. The Public Works Department Sub-Divisional officer, Mr. Lawrence, was attacked with cholera and had a narrow escape at this time. <i>The Commissioner's fourth visit.</i> In this month the Commissioner visited the coolies at Giddalur on the 10th and the people mustered at Vuyyaluvada on the 11th. He found their condition to be good.	I inspected the kitchens in the Markapur taluk and found the people to be in good condition. I arranged to remove to the kitchens such persons on the works as appeared to me to be weak.
April 1892.	About 25 villages were inspected by me in this month. I found the people to be in a generally good condition. In this month I conducted a house-to-house visitation in many villages to ascertain for myself whether appearances were in any way deceiving me. I also checked, wherever I went, the human mortality and the gratuitous relief registers prepared under section 56 of the Famine Code and found no cases of starvation.	In the first-half of the month the condition of the coolies was good everywhere. His Excellency the Governor, the Commissioner and the Collector (Mr. Bradley) inspected the coolies at the Cumbum on the 9th of this month and considered their condition to be moderately good. In the former part of the second-half of the month, i.e., on the 17th, His Excellency the Governor, the Commissioner and the Collector visited the coolies on the five works then in progress near Markapur and characterized their condition to be moderately good. In the latter part of the second-half of this month cholera broke out rather virulently at Markapur with the result that many coolies left the works panic-stricken. How they expected to live on without work caused me no small anxiety at the time. In this month, the Collector visited the works at Kakerla, Basinepalli, Gudimetta and Dupad. <i>The Commissioner's fifth visit.</i> In company with His Excellency the Governor the Commissioner visited the works at Cumbum on the 9th. <i>The Commissioner's sixth visit.</i> In company with the Collector the Commissioner visited on the 14th instant the road work between Dornal and Dupad and the tankwork at Markapur. He found them to have slightly deteriorated and attributed their condition to the introduction of the rule fixing a minimum wage. At this place before the introduction of the minimum wage, coolies earned, on the average, more than the subsistence allowance. The people at Dupad were stated by him to have looked better, having apparently fattened on cheap cows and buffaloes—an advantage which the people of Markapur did not enjoy to the same extent. Orders for the abolition of the "minimum wage" were thereupon issued and carried into effect. Weakly gangs with a light task were also formed on all works to provide for the aged and the weakly. Casks, &c., for the supply of water to the coolies not being available here, the Commissioner arranged with Local Fund Engineer, Bellary, to send me 20 casks, 20 bamboo pipes and 10 iron pots which were found to be of great use and to have greatly reduced the expenditure under this head. From this time forward nursing mothers and the people on the light-work gangs were never paid less than subsistence allowance. <i>The Commissioner's seventh visit.</i> Generally healthy. The abolition of the "minimum wage" system at this time proved a boon rather than a bane. The people improved in condition while those, who were sick or weakly or aged, had an opportunity of earning the full 3rd-class wage by being given the light task of a weakly gang. Cholera, however, caused a regular panic to the coolies at Markapur. There were two deaths from cholera on the Turumella Tank work also.	The inmates in all the kitchens continued to be in good condition.
May 1892.	Fair. I visited almost every village and hamlet in the north-eastern portion of the Markapur taluk and examined the birth and death registers and gratuitous relief works carefully. There were no cases of starvation.		
June 1892.	Good. There were no deaths from starvation, every one needing employment having been able to get it easily enough; but the people were everywhere in the division panic-stricken on account of the cholera that prevailed very virulently. Two more Hospital Assistants came to the division to render help. In this month help was rendered to the goasha females out of the Holkar's money. Also spinning work was given under the scheme sanctioned in Board's Proceedings, dated 9th June 1892, No. 416.	Generally healthy; the pretty good rainfall in this month stimulated sowings and took away from our works several coolies. <i>The Commissioner's seventh visit.</i> The Commissioner visited in the month the coolies at Giddalur and Bestwaraputta and was entirely satisfied with their condition. It was very unfortunate that in this month cholera began to spread to the relief works which had till then been singularly free from it. Under the personal orders of the Commissioner a cholera shed was constructed at Markapur.	In the kitchens the inmates kept good health in this month. The Commissioner inspected the kitchens at Giddalur and Pappayapalli, the latter having been opened in this month for the benefit of the non-working children of the coolies near Cumbum.

Month.	In villages.	On works.	In the kitchens.
July 1892.	Healthy in general, but the cholera scare increased.	Good except that cholera continued to remain on the works. <i>The Commissioner's seventh visit—cont.</i> The Commissioner inspected the works at Márkápur on the 1st and 2nd of this month and found the condition of the coolies to be good. <i>The Commissioner's eighth and last visit.</i> On the 12th of this month the Commissioner saw the division for the last time during the continuance of distress. He stopped at Cumbum on the night of the 11th and made inquiries about the condition of the people which he was told to be good.	The Commissioner inspected the Márkápur kitchen and found the inmates in good condition. The waterman of the place was then had an attack of cholera in the kitchen itself was ordered to be removed at once.
August and Sept. 1892.	Good	Good. No detailed description is necessary; the season having decidedly improved; but for the cholera that prevailed in July and August, it would have been possible, considering the improvement made by the people, to close some of the relief works earlier than the 15th September 1892.	Good.

Thus the coolies on the works kept excellent health except in the month of February, when owing probably to "inefficient supervision and excessive tasking" there was a slight deterioration in the condition of the coolies at Dupad and Dornal. It is also believed that the introduction of "minimum wage" at Márkápur slightly demoralized the coolies there in March 1892, but they improved soon and at the time of the close of the works they looked none the worse for the distress they had undergone.

(5) *The condition of water-supply.*—The following statement shows the condition of water-supply month after month from November 1891 to September 1892, when the relief works were closed.

Months.	Particulars.
November 1891.	No tanks received any appreciable supply in this month; the supply of drinking-water became scanty, as some springs and almost all the wells began to fail, and the people were in some places compelled to scoop out water from the bottom of the wells in small shells.
December 1891.	The Gundalakamma dried up in Márkápur, while the springs and the Dornal wells began to fail. The great Cumbum tank became dry.
January 1892.	Scanty in Márkápur and the Taluk Board took steps to deepen existing wells wherever it was possible to do so.
February 1892.	Water famine was apprehended in the Márkápur taluk owing to the drying up of the Gundalakamma and most of the wells.
March and April 1892.	Water scarcity deepened; several wells were deepened with famine labour when it was available close at hand and several others with the Taluk Board funds.
May 1892.	The Taluk Board placed at the disposal of Tahsildars and myself sufficient funds for the improvement of water-supply and we utilized them to the extent necessary.
June 1892.	The rains in this month have improved the water-supply and dispelled all anxiety about drinking-water.
July, August and September 1892.	Abundant supply.

The marginally-noted figures represent the amount actually spent by the Taluk Board on the improvement of water-supply in the months of January to June 1892, the period when much anxiety for drinking-water was felt. All tanks and rivers dried up and wells began to fail in November 1891 only, but the scarcity of water was felt most in February, March and April.

People excavated their failing wells deeper and deeper in the rocky strata which form their bottom in this division. With the famine labour I had several wells deepened in the Márkápur taluk, and in the towns of Márkápur and Dupad, I had to do so more than once; this accounts for the amount spent by the Taluk Board in the Márkápur taluk being rather small. The villagers living close to rivers "dug for springs in the river-beds" and pulled through. Never within the memory of the living people was the scarcity of water so great as in the recent famine. The drying of the Gundalakamma and the Cumbum tank are not events

of ordinary significance. They were not without a supply in the great famine of 1876–78. The water scarcity was thus a peculiar feature of this famine.

(6) *The condition of cattle.*—Until the recent rains there was a universal dearth of pasturage while fodder was available only for the valuable cattle. All the valueless cattle died away like flies in January and February only while such as the ryots cared for were driven to the Nallamalais, only to die there in the months of March and April for want of water. The grass on the Nallamalais too dried up latterly and from the specimens brought into the plains, I am of opinion that the grass found there was quite dry and non-nutritious, but such as it was it would have saved many cattle, if the ryots had been allowed to drive them into the forest free of charge. I do not know why free grazing was not allowed here as a special concession even in a year of distress. The Forest Department cut and stored hay at several places for sale, but at a place where cart-loads or head-loads can, free of charge, be cut and removed by ryots there will be very little local demand for such hay. I was not at first aware that the ryots here enjoy this privilege. The only concession which the Forest Department granted last year was to allow ryots to cut and collect the "yepi" leaves required for feeding cattle, free of charge, from the trees standing on unreserved area (vide the notice published in the Forest sheet of the District Gazette, dated 2nd April 1892). The ryots availed themselves of this concession largely to save their valuable cattle. Experiments to popularise the use of prickly-pear as fodder were conducted on a large scale with the aid of the Rs. 200 placed at my disposal out of the Holkar's donation fund and a description thereof is given in paragraph 23 *infra*. The following statement shows to what new devices people resorted month after month from December 1891 to June 1892:—

December 1891.	Stumps of dried grass were scraped out of the earth with difficulty and used; hill grass was brought and used in some places.
January 1892.	Ragi leaves and withered variga plants also served as fodder in this month.
February 1892.	The pods of the babul tree and leaves of the nim trees also came into use; also the thatches of the houses and cattle-sheds were removed wherever they consisted of cholum and cumbu straw and used as fodder.
March 1892.	The leaves of the date and palmyra trees were also put in requisition. Also fodder crops, notably palapu cholum, were raised under wells wherever the supply in them did not fail. These were cut in May.
April 1892.	Recourse was also had to prickly-pear here and there and to "yepi" leaves. The ragi straw harvested under wells was also used.
May 1892.	The stacks of the fodder crops sown in March and the leaves of all edible trees were also used; a wagon of the <i>chelum</i> hay sent by the District Forest-officer to Márkápur was sold for Rs. 16; also the hay stored by the Forest Department at Diguvamitta and Dornal was purchased by the ryots.
June 1892.	Green grass became available in moderate quantities in the latter half of the month. In the first-half all sorts of edible leaves were collected as in May.

21. Appendix II gives a list of the several relief works executed in the division. All these were situated either within or near the affected tracts. The dates of their starting and closing, the value of the work done and the state of progress at which each work was left, and the value of work done as compared with the actual expenditure thereon are also shown therein. It will be seen therefrom that almost all the works executed were very useful road or irrigation works and that most of them were either completed or left in an all but complete stage. The roads from Giddalur to Mundlapad and from the Márkápur Road Railway Station to Vemlakota and Márkápur are specially useful. The town of Márkápur has been greatly improved by the clearance of large areas of prickly-pear and by the making of two branch roads between the Taluk office, the Munsif's Court and the Local Fund Hospital. An attempt was made to give the number of coolies on each work at the end of every week but the statement became so voluminous that I thought I had better omit it. It really serves no purpose, as the number on a work varied very often on account of the removal of some of the coolies thereon to another work close by, either on sanitary grounds or for the sake of convenience of supervision or in consequence of the policy of closing a road work whenever an irrigation work is available near. Further the information in my office on this subject does not happen to be complete and an endeavour to get it from the Executive Engineer proved a failure. Roads were resorted to only after all the major and minor tanks requiring repairs of such kind as could be executed by famine coolies had been repaired or when for want of estimates or for any such reason, the repair of a major tank could not be started in time. These were, however, taken in hand subsequently. The result is that all the major and most of the minor tanks situated in the affected tracts have been repaired so far as "earth-work" repairs are concerned.

22. *Execution of relief works—Supervision of works.*—The works started in November 1891 being only test-works, were not conducted under the principles of the Famine Code but were

allowed to be carried on departmentally, so that the minor irrigation repairs were conducted by the Tahsildars, while the road repairs remained under the Local Fund Engineer.

After the opening of the real relief works in the first week of December 1891, the works were managed in the manner stated below :—

Civil agency works—Roads.—Under the personal orders of the Commissioner the principles contained in the book entitled "Rules for the execution of relief works" prepared by the Collector of Bellary on the basis of the instructions given by Mr. Stokes, Collector of Salem, to his subordinates, were followed. Consequently the professional supervision was exercised by the Local Fund Engineer, who appointed a sub-overseer for each work and an overseer for each taluk. The supervision of these works and of the professional agency works referred to below was transferred in the early part of April 1892 to a Special Executive Engineer specially appointed for the purpose.

Minor irrigation works and Special Fund works.—The Tahsildars continued to supervise these works through the Agency of the Revenue Inspectors and the village Raddies except that, after the appointment of the Special Executive Engineer, all the minor irrigation works save that of Tangiralapalli, Gollavidipi and Narasayapalem were transferred to the Special Executive Engineer who managed them in the same manner as the professional agency works.

Professional agency works.—Mr. Lawrence, the Sub-Divisional officer, controlled these works until the appointment of the Special Executive Engineer in April 1892. There was an overseer or a supervisor for every one of these works, though occasionally, when two or more works were very near, one man only was appointed to look after them all. Mr. Smith was the first Special Executive Engineer and took charge in the first week of April 1892. He was relieved in the middle of August 1892 by Mr. Wood.

Formation of gangs.—Until recently, when, on some works, the Special Executive Engineer thought it more convenient to form gangs up to a strength of 80, gangs of 100 used to be formed with a head cooly for each to mark its attendance in a nominal muster-roll kept by him. His work is scrutinized by a sub-maistry and a head-maistry who are expected to exact proper work from the coolies. Once in a fortnight the gangs used to be reformed by the supervisor or overseer or the sub-overseer in charge, so as to bring them up to the full strength which they generally lost on account of the absence of some coolies.

Character of the establishment.—During the time the roads remained under the Local Fund Overseers, the supervision was not satisfactory and I had to recommend the removal of two overseers and to dismiss several head and sub-maistries and head coolies. This measure, harsh though it was, had a very salutary effect and greatly improved the morale of the establishment. By the time the Special Executive Engineer took charge of the works. This power of fining, suspending or dismissing head coolies, &c., was, however, not exercised by me after the transfer of the roads to the Special Executive Engineer, as you thought, that when the works remained under the Public Works Department, the Public Works Department officer only and not a Revenue officer should punish the subordinate supervising staff (vide your docket, No. 2770, dated 15th April 1892). There was not much necessity even for my exercising that power at this time, as by April all the works settled down and every one knew his work thoroughly well.

My interference with the professional agency works was at first limited to merely reporting to the Executive Engineer any irregularities that I might discover, but subsequently I exercised the same powers over them as over the road works. I used

- (1) to supervise and check the classification of labourers and constitution of gangs;
- (2) to check the tasks assigned;
- (3) to control payments;
- (4) to attend, with the help of the Special Hospital Assistant placed at my disposal, to the sanitation of the work-spots; and

- (5) to note any improvement or deterioration in the condition of the coolies.

Classification of labourers.—This matter used to engross my special attention and by constant inspection and careful "shroffing" I always had the coolies on all the works in my division classified correctly under the heads of men, nursing mothers, women and children. All women nursing a child of 2 years or less were placed under the class of "nursing mothers," and this classification was subjected to a periodical check by the Special Hospital Assistant. Women in an advanced stage of pregnancy were placed in weakly gangs. I can confidentially assert that in my division there were no "Dummies fraudulently entered on the muster rolls of the works. No shelter sheds were erected near the works except as a measure of special relief in some places which will be referred to later on.

A miscellaneous gang consisting of water-carriers, sweepers, &c., was always maintained on each work. No frauds of a serious character were discovered on the works. Slight inaccuracies of measurement on some works and the burying of unbroken boulders in a few stacks of material in Markapur were discovered and punished in an exemplary manner. The Tahsildars and

Special Deputy Tahsildars inspected all the civil agency works very regularly and brought to my notice any irregularities detected by them.

Payment of wages.—(a) *On Minor Irrigation and Special Fund works.*—The Tahsildars were entrusted, as in ordinary years, both with the payment and supervision of these works. The task was fixed in accordance with the rates provided for in the estimate. At first people on these works earned pretty high wages, being so much as 3 annas per man, but after it was decided that all works should be conducted under the principles of the Famine Code, no labourer was allowed to earn more than a sum, slightly above the third class-wage.

(b) *On roads so long as the Local Fund Engineer furnished funds.*—An officer whose pay was Rs. 40 per mensem was appointed by me to make payments to the coolies on these works and called "paying officer." He was under my immediate orders and had no connection of any kind with the Local Fund Engineering establishment, which was charged with the execution of these works. He was given an imprest varying from Rs. 500 to Rs. 700 according to requirements and was allowed to apply, as often as necessary, to the Tahsildar for the recoupment of the same; with every such application he had to submit an abstract of expenditure and the paid extract of the nominal muster rolls. It was arranged that the funds required by the Tahsildar should be obtained by him on indent from the Local Fund Engineer to whom he was bound to render an account thereof. This is a new system not spoken of in the Famine Code and contained only in the book referred to above. It worked wonderfully well, and, during its continuance, complaints of short payment or non-payment very seldom reached my ears. It has had enough of trial and I consider this to be the best system adapted to famine relief works. The calculation of wages payable to each individual and the determination of deductions for short work formed a part of the duties of the paying officer and were subject to complete scrutiny in the Taluk office, while the overseer or sub-overseer charged with the supervision and carrying out of the works had only to fix the task, set out the work to be done and measure the work actually done by each gang. The measurements were also subject to check by the Tahsildars, Special Deputy Tahsildars and myself, and also by the Local Fund Engineer whenever he could afford time to do so. The following persons were appointed as "paying officers" on these roads :—

- (1) B. Venkatapathy Nayudu,
- (2) C. Ranganayakulu Nayudu,
- (3) C. Thayannah, and
- (4) S. Rangachariu,

and I am glad to note that they did their work, onerous as it was, to my complete satisfaction. I was at this time able to ensure regularity in the payment of wages by the adoption of the following system in closing up the extracts of nominal muster rolls. I describe it here as it is slightly different from that given in the book referred to above, in that the latter contemplates the closing up of the extracts of all the gangs on a work on one and the same day. The number of gangs on a work used to be divided into three sections and their pay days fixed once for all by me as follows :—

First section	...	...	...	...	Monday and Thursday.
Second section	...	...	...	...	Tuesday and Friday.
Third section	...	...	...	...	Wednesday and Saturday.

The officer of the engineering establishment in charge of the work was asked to close up the extracts of each section up to (including) the day preceding its pay day, which, it will be observed, was not the same in each case, and to hand over the extracts to the paying officer on the morning of the pay day without fail; when extracts are so closed there will be no day when the pay of a gang will be in arrears for more than three days. Paying officers were also instructed to pay each labourer individually. Of course, when sufficient change was not available they were allowed to pay two, three or more together, explaining to them in such cases how much was due to each.

(c) *On works under the management of the Public Works Department.*—After the appointment of the Special Executive Engineer, Public Works Department, the charge of all the road works and the repairs of all the minor tanks, except the Tangiralapalli, Gollavidipi and Narasayapalem tanks, was, as already stated, transferred to him though the supply of funds for the payment of wages on the road works was not undertaken by him till May 1892. The paying officers on the Public Works Department works were also appointed by the Revenue Department on a pay ranging from Rs. 40 to Rs. 30 each, but they did not enjoy the same independence from the control of the engineering establishment which those on works for which funds were supplied by the Local Fund Engineer did. On the former they were treated more as the shroffs of the engineering subordinates in charge than independent officers appointed and controlled by the Revenue Department. The extracts of nominal muster rolls, with the amount of wages payable calculated by the engineering subordinates, were put into the hands of the paying officers for disbursement to the labourers. They were not holding any imprests and were not checking the calculations in the extracts. Under such conditions I do not really see the necessity for the officers being appointed by the Revenue Department nor does it appear to me to be necessary to have paid them so much

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as Rs. 40 or Rs. 30 each per mensem. The system of closing the extracts from nominal muster rolls on different days for different sections was introduced by me into these works also and the following list contains the names of those paying officers :—

- | | |
|-------------------------|-----------------------------|
| (1) J. Danilland. | (5) A. Krishnaswami Naidu. |
| (2) N. Kristna Rau. | (6) C. S. Venkatarama Iyer. |
| (3) P. Seshayya Chetty. | (7) Abdul Ali. |
| (4) Y. Subba Rau. | |

As a rule, payments of wages were made regularly on all the works in the division. The payments were bi-weekly in most cases and tri-weekly in a few cases. The new system of supplying funds to the paying officer through the Tahsildar could with advantage have been adopted on the Public Works Department works also, but it was not so done.

Calculation of wages.—The wages were calculated with reference to the ruling price of *ragi* at the taluk casbas on the last day of each week, and the following statement shows the rate of the third-class wage in the several weeks during which the relief works were in progress :—

Taluk.	Period in which wages were paid.	Third-class wage for		
		Men and nursing mothers.	Women.	Children.
1	2	3	4	5
Cumbum	From 9th January to 21st February 1892	As. P. 1 7	As. P. 1 3	As. P. 0 10
	" 22nd February to 1st May 1892	1 8	1 4	0 11
	" 2nd May to 17th July 1892	1 7	1 3	0 10
	" 18th July to 16th August 1892	1 6	1 2	0 10
	" 12th October 1891 to 19th December 1891	1 6	1 0	0 9
Márkápúr	" 20th to 26th December 1891	1 7	1 3	0 10
	" 27th December 1891 to 15th April 1892	1 8	1 4	0 11
	" 16th April to 13th May 1892	1 7	1 3	0 10
	" 14th May to 17th June	1 6	1 2	0 10
	" 18th June to 16th September 1892.	1 7	1 3	0 11

Except at the beginning when some were able to earn on a few Public Works Department and Minor Irrigation works first and second class wages, the labourers were never able to earn more than a wage slightly above the third-class wage noted above. The method of calculating the wages on the basis of the prices at the taluk casba caused hardship to the coolies in the interior villages in the Márkápúr taluk in the month of May, and, when it was brought to the notice of the Board, it ordered in Board's Proceedings, Mis. No. 4947, dated 2nd June 1892, that "wages may be calculated on the prices of the largest village near a work" in those cases "where the village price differs from the casba price by not less than one seer." "If prices are cheaper than 14 seers per rupee at the casba, no variation in wage should be allowed for difference in village prices unless the difference is equal to 2 seers per rupee." No advantage was, however, taken of this, as, after June 1892, the season showed improvement and prices ruled steadily all over. I think a general principle deduced from this may advantageously be incorporated in the Famine Code.

Sanitation.—The works were singularly free from cholera until June 1892 when gradually it spread thereto and caused slight mortality. Special arrangements were made to have the work spots swept clean, to disinfect them as often as necessary by the free burning of sulphur and tar and to segregate the labourers coming from infected villages. Four extra Hospital Assistants were at work at this time. The District Surgeon inspected the coolies twice, once in March 1892 and a second time in April 1892.

Task.—(a) At first the tasks given in the book referred to above for each description of work were exacted, and the daily task of a woman and a child was taken to be half and quarter respectively of that of a man. This book not containing any instructions for the deduction to be allowed in case the "lead" exceeds 100 yards, I issued the following directions for the guidance of the subordinates in charge of the road works during the time they remained under my immediate management :—

(1) When metal has to be brought from a distance and broken and stacked, a deduction of two-thirds cubic yard for every furlong over and above 100 yards was allowed (this deduction was to be made from the task of the typical gang) subject to the condition that the deduction should never exceed half the task.

(2) When metal has to be carried for purposes of spreading, a deduction of 20 cubic yards for every furlong over and above 100 yards was allowed subject to the condition that the maximum deduction should be 60 cubic yards.

(3) When gravel has to be dug and brought from a distance either for stacking or for spreading, a deduction of 6 cubic yards for every furlong was allowed, the maximum deduction being 36 cubic yards.

(b) I have no record here to show the tasks exacted by the Special Executive Engineer after the works were transferred to his management and do not wish to quote from memory. I therefore request that a copy of the task table introduced by the Special Executive Engineer Mr. Smith may be obtained from the Executive Engineer, Kurnool, and submitted to the Board. I remember, however, that two important modifications were introduced by him, viz., (1) boys between 12 and 15 years of age were classified for the purpose of task and wage as "women," and (2) the rates of equivalents for the purpose of fixing task between a man and a woman and a woman and a child were on some works taken to be "one man=three women=six children." The adoption of these rates was necessitated by the fact that from June forwards, i.e., after the rains fell and the cultivation commenced, there was such a preponderance of women and children and such a lack of men on almost all the works as to have rendered it impossible for the former to keep a sufficient number of pick-axes and spades agoing to complete their task for the day.

(c) The task of the typical gang for the breaking and stacking of metal, viz., 12 cubic yards, was found to be too heavy in January 1892 and was consequently reduced to 10 cubic yards by the Commissioner in February 1892.

(d) The introduction of a method of calculating the task with reference to the wages actually payable was sanctioned by the Commissioner at my request and the following is a succinct description of it :—

"To determine the task of a gang, the money which it will get if paid at third-class rates should be calculated first and then divided by the value of a cubic yard of work computed with reference to the value of the work of the typical gang. The quotient represents the task to be assigned."

(e) From the beginning the third-class task or 50 per cent. of the "full task" of an ordinary Public Works Department laborer was recognized as the standard task of a famine laborer, and he was allowed to earn a proportionate increase in wage for every tenth done in excess of that task.

(f) Section 127 of the Famine Code contains a provision for the payment of subsistence allowance on those days when work is totally stopped by rain. As it turned out that on many days dust storms, heavy squalls and showers of short duration interfered with the work of the laborers during a portion of the working hours, I suggested that "the task be decreased *pro-rata* and that the full third-class wage be paid if the decreased task is done." My suggestion was approved in Board's Proceedings, No. 3307, dated 10th May 1892.

(g) A task proportioned to their powers, varying from half to two-thirds of the standard was assigned to the light work gangs and their wages were never allowed to go below the rate of subsistence allowance.

(h) All relief works, except the Special Fund works and the water-supply and village-site improvements, were executed on the task work system and not on the piece-work system.

The classes resorting to the Relief works.—All classes in the division, excepting the Brahmins and Comaties, were represented by the laborers on the works. Comaties did not care as the trade, stimulated as it was by the deficiency of local stocks, afforded them sufficient work and profit. Brahmins whose number was 2,353 and 2,307 in the Cumbum and Márkápúr taluks according to the census of 1881 did not suffer much, as the distress did not really reach the very few paupers among them. A few of them who were able to read and write found employment as head-coolies and submaistries on our works. "In India distress reaches the high caste paupers last." Unless the Hindu notions of charity are revolutionised, channels of spontaneous charity to high caste paupers do not dry up soon.

23. *Prickly-pear Experiments.*—Early in February 1892 when the increasing scarcity of pasture and fodder became a serious problem, the necessity for conducting prickly-pear experiments was urged on me, and I at once ordered the Tahsildars, Special Deputy Tahsildars and Revenue Inspectors to demonstrate to the people by actual experiments the importance of prickly-pear as fodder. Several Telugu copies of the instructions for the dressing of the pear and for the use of the implements introduced by Mr. Rai Bahadur Sabhapathi Mudaliar were also obtained from the District Press for free distribution among the ryots. At first, our experiments were not attended with much success, though gram flour and salt were unsparingly used; but the matter took a favorable turn from March 1892, when I was also favored with a remittance of Rs. 200 out of the Holkar money for taking the steps necessary to popularise the use of the pear. The Commissioner also favored me with personal instructions on the subject in his third visit; thereupon the following measures were adopted by me :—

(1) Hundreds of sets of the implements required for the dressing of the pear were made by me locally. I dispensed with the knife in the set, as the ryots' reaping-hook could well take its place, and two taluk peons were deputed to take them to every village, Government or abrothriem, in the two taluks of the division and sell them at As. 1-4 a set to such ryots

as might, after seeing the demonstrations they were instructed to make, offer to buy them. The duffadar of the Márkápur taluk who was told off for this duty in his taluk did his work very well and succeeded in convincing the people that prickly-pear, when properly dressed, would be eaten greedily enough by all cattle, cows and horses included. The peons were also asked to distribute to the reading ryots copies of the Telugu instructions for the use of the pear. Hundreds of experiments were conducted by these peons and every village was visited by them.

(2) The Tahsildar of Márkápur, Mr. Rustum Sing, had by this time trained his cart bulls and all the milch buffaloes and cows in his house to eat cactus. Every one of them maintained its vigour and good condition. Whenever the Tahsildar went, he took his bulls with him and showed to the people how cattle thrive on the cactus. The Tahsildar found that slight heating of the dressed pear—a suggestion made by me—improved its taste and made the cattle eat it more greedily.

(3) The Special Deputy Tahsildar of Márkápur, Mr. P. Rajagopal Naidu, purchased a cow, trained it and conducted experiments in the presence of large crowds in several villages around Dupad.

(4) The Revenue Inspector of Cumbum had been given a cow and a she-buffaloe that ate the pear greedily and was asked to conduct experiments in every village within his firkas.

(5) Under the personal orders of the Commissioner, 13 emaciated cows were brought in Márkápur to be fed mostly on prickly-pear in an enclosure constructed for the purpose close to the kitchen shed at Márkápur. The experiment succeeded wonderfully and several people in Márkápur used to go to the enclosure to see how the cattle were thriving. His Excellency the Governor visited these cows at the time of his visit to the kitchen and found them eating the pear with relish.

(6) Under the personal orders of the Commissioner, a similar experiment was made at Palakavid. Here cows were not purchased but were borrowed from ryots on the condition of their being returned after the termination of the famine. The fact that the ryots lent their cows for the purpose is significant and it is far from likely that they would have done so if they had no faith in the utility of prickly-pear as fodder. The cattle here and at Márkápur prospered well enough though there were a few casualties owing to old age, &c.

(7) The two Stock Inspectors placed at my disposal took with them while touring the strongest cows in the enclosures at Palakavid and Márkápur and conducted successful experiments before large crowds.

(8) The experiments conducted by me in person were also numerous, and I need only add that within a month after the above steps were taken everywhere in the Márkápur taluk in general and in the towns of Vomulakota and Márkápur and in some places in the Cumbum and Raoharla firkas of the Cumbum taluk in particular, prickly-pear was freely used as fodder though on a limited scale. I feel bound to record that when Mr. Bradley once made casual inquiries of certain people who were busy with dressing prickly-pear for their own cattle in Márkápur, he was told that the use of prickly-pear increased perceptibly the quantity of milk in the cows and she-buffaloes. People continued to use the pear till June 1892 when plenty of pasture was available everywhere. Out of the Rs. 200 placed at my disposal, Rs. 197-11-9 were spent, while the balance was credited into the sub-treasury at Cumbum. The details of this expenditure are shown in the following statements—

Particulars.	Amount.
	Rs. A. P.
Net cost of implements	9 11 4
Net cost of the cattle purchased	1 5 3
Feeding and experimenting charges with costs of sheds, &c. ...	186 10 7
Total ...	197 11 2

24. *Gratuitous relief.*—(a) I shall not enter here into the merits of money-dole, grain-dole and cooked food; the question was thoroughly discussed in paragraph 23 of Board's Proceedings, No. 274, dated 9th September 1892. Considering the very small number of high caste paupers in this division I should certainly say that the form of gratuitous relief best suited to this division during the prevalence of distress is distribution of cooked food in kitchens. It is, as Mr. Horsfall says, "the most efficient and cheapest form." Further, as the Board says, "the physical improvement in the appearance of the people fed at a kitchen for a month was manifest even to the casual observer."

(b) I would, however, recommend that the Famine Relief officer be entrusted with a few rupees to relieve those cases, if any, of distress among high caste people and among Gosha women which may come to his notice and which he may consider deserving of help. Of course, when charitable people like the Maharaja of Holkar make funds available for such purposes, the Government need not take any action, but before such charity reaches the distressed tracts, the

Government should set apart a small sum for this purpose. The relief officer may be asked to be specially careful in the distribution of this kind of relief.

(c) In this division all the classes that were really affected could have gone to the kitchens if they had chosen to do so. Perhaps Muhammadan Gosha women should be treated as an exception, and in their case special arrangements, which will be noticed hereafter, were made. Among the classes that have now resorted to the kitchens are—

- | | |
|----------------|-----------------|
| 1. Kapus. | 7. Potters. |
| 2. Boyas. | 8. Muhammadans. |
| 3. Shep-herds. | 9. Pariahs. |
| 4. Barbers. | 10. Chucklers. |
| 5. Washermen. | 11. Christians. |
| 6. Weavers. | |

(d) Six kitchens were opened on the dates specified below and the number relieved therein on the last day of each month is shown in the accompanying statement:—

Taluk.	Name of kitchen.	Date of opening.	December 1891.	1892.								
				January.	February.	March.	April.	May.	June.	July.	August.	September.
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
Cumbum.	Palakavid ..	13th December 1891 ..	199	269	253	195	182	168	119	102	71	64
	Giddalur ..	16th February 1892 ..	..	..	11	43	87	83	52	28	12	..
	Papayapalli ..	24th June 1892 ..	..	..	..	..	..	..	66	58	38	33
Márkápur.	Márkápur ..	3rd January 1892 ..	..	163	77	89	38	65	53	49	45	39
	Dupad ..	20th February 1892 ..	..	..	16	63	78	92	98	84	82	76
	Dornal ..	Do. ..	..	..	51	40	72	39	1	36	23	21
	Total ..		199	432	408	436	457	437	389	357	271	233

The number would have been much more but for the *superstition* with some parents that children fed in kitchens would not live long. Probably the mortality in the kitchens in the great famine of 1876-78 gave rise to this false fear. I know of many instances in which mothers wept and sobbed when pressed to send their badly-looking children to the kitchen.

Two of these kitchens were stationary kitchens, while the other four were work kitchens and were moved from place to place as the work to which they were attached progressed to suit the convenience of the non-working children fed therein.

Appendix III has been prepared to give a short account of each of the kitchens in this division. Ragi porridge was the food distributed in the kitchens in the Márkápur taluk, while *cholam* food was distributed in the Cumbum kitchens. In the Palakavid kitchen of the latter, ragi was used at first for a few days, but on my showing that *cholam* was the real staple of the Cumbum taluk and that the cost of this food would be nearly equal to that of ragi, I was ordered to substitute *cholam* for ragi. Again for a few days after the outbreak of cholera in May 1892 *cholam* food was distributed in the Márkápur kitchen at the suggestion of the Hospital Assistant. Under the personal orders of the Commissioner wooden measures were made to cast the food into cakes of the required size.

The kitchens that were opened here are a kind of mixed kitchens where destitute paupers and the non-working children of laborers were fed together. No poor-houses contemplated in the Famine Code were opened. The supervision of these kitchens was entrusted to the Stock Inspectors placed under my orders, and I am glad to state that both of them did well enough. Their names are—

- (1) M. Venkataramana Sastriar.
- (2) P. Raghava Pillai.

Mr. Venkataramana Sastriar's supervision of the kitchens was specially satisfactory. The immediate management of these kitchens was specially entrusted to the officers named below and was conducted by them with great care:—

Márkápúr kitchen	...	A. Subba Row Pantulu, Taluk Sheristadar of Márkápúr.
Dupad and Dornal kitchens	...	P. Rajagopal Naidu, Special Deputy Tahsildar of Márkápúr.
Papayapalli kitchen	...	P. Venoba Row Pantulu, Special Deputy Tahsildar of Cumbum.
Palakavid and Giddalur kitchens.	...	R. Lakshminarsu Pantulu, Tahsildar of Cumbum.

(d) The expenditure in the above kitchens is noted below :—

	RS.	A.	P.
Márkápúr	1,198	12	4
Dupad	953	11	0
Dornal	736	4	9
Palakavid	2,629	5	2
Giddalur	550	12	11
Papayapalli	267	14	2
Total	6,336	12	4

(e) (1) The average cost of grain and condiments for each person fed in the several kitchens, together with the average cost per adult, taking a child as half an adult, and (2) the average cost per head including other expenditure, * is noted in the accompanying statement :—

* This includes cost of supervision, cooking, shedding, &c.

Taluk.	Name of the kitchen.	Total number relieved.	Average cost per head for the meals of a day.		Average cost of each adult's ration.		Average cost including all kinds of expenditure per head.
			Food.	Condiments.	Food.	Condiments.	
1	2	3	4	5	6	7	8
Cumbum	Palakavid	49,340	PIRS. 6.3	PIRS. 2	PIRS. 9.4	PIRS. 3.1	PIRS. 10.8
	Giddalur	8,237	6.7	2.1	9.6	2.9	11.7
	Papayapalli	4,293	6.3	2	9.4	3.3	13.6
	Márkápúr	16,801	6.4	2.4	10.1	3.2	15.6
Márkápúr	Dupad	11,738	6.8	2.2	10.6	3.3	16.1
	Dornal	8,387	7.1	2.2	10.6	3.3	16.1

† This represents the sum total of the people that attended at the morning meal of every day.

The following are the names of the gumastahs in charge of the several kitchens. Of these, A. Gopalakrishnayya discharged his duties to my complete satisfaction. He was honest and diligent and deserves special credit for his work. In appreciation of his work he has already been made a permanent clerk on Rs. 15 in the Deputy Collector's office :—

Name of the kitchen. Name of the gumastah.

Cumbum taluk.

1. Palakavid ... A. Gopalakrishnayya.
2. Giddalur ... (1) Ramanja Reddy at first and (2) Krisnamurti Row afterwards
3. Papayapalli ... P. Kristama.

Márkápúr taluk.

1. Márkápúr ... (1) K. Subba Row at first and (2) S. Rama Row afterwards.
2. Dupad ... Munisawmi Mudali.
3. Dornal ... Ch. Gurunadham.

25. Other measures of relief.—The following measures were also taken to give relief to the distressed in the recent famine :—

(1) I have already referred to the postponement of the collections of wet assessment. The collection of dry assessment also was suspended in all but the marginally-noted seven villages in the Márkápúr taluk. The issue of coercive processes was stopped and the tank beds were permitted to be cultivated at the highest dry rate of the villages.

1. Marrivenula.
2. Mutukula.
3. Isakatapuravaram.
4. Medapi.

5. Mittapalem.
6. Lellapalli.
7. Ramamudram.

(2) In my special season report for the week ending 26th December 1891, I pointed out the necessity that then existed for providing work for the Chenchus. In reply you said in paragraph 1 of your docket No. 6503 of 1892 that the District Forest-officer had been addressed about it. As a result of the above, the District Forest-officer seemed to have taken the following steps :—

(a) He appears to have abstained from collecting departmentally soap-nut and other minor forest produce, to collect which the Chenchus have also a right, with a view to give them as large a field as possible for their collections; and

(b) He seems to have inserted a clause in the lease of the right to collect "madapu leaves" that Chenchus only should be employed in collecting these leaves.

I may add that from February forward until the close of the famine operations, I did not hear anything of the raids of the Chenchus on the villages in the plains.

(3) A sum of Rs. 500 out of the Holkar money was placed at my disposal in two instalments on the dates shown in the margin and the sum was spent in the manner stated below :—

RS. A. P.

59 15 0

Spent on the 12 old and infirm Gosha women of Cumbum and the surrounding villages to whom was granted a money-dole of one anna per diem from May 1892, till the close of the relief operations.

36 4 0

Spent on the five women in Márkápúr, Tangiralapalli and Davarajugattu.

19 10 6

Spent upon nine women in Dupad.

51 10 6

This sum was given as small gratuities to 100 and more people in the weakly gangs on the Moshagundam section of the Cumbum-Kurnool road on 14th September 1892, i.e., a day before the closing of the work.

20 0 0

Spent in the same manner as above on the paupers remaining in the kitchen attached to the above road. This is the Papayapalli kitchen referred to above.

15 0 0

Given to the weakly people on the Giddalur section of the Cumbum-Kurnool road. There were not many weakly people on this work on the day of its closing.

16 0 0

Spent on the paupers in the kitchen at Palakavid on the day of its closing.

100 0 0

Spent through the Special Deputy Tahsildar of Márkápúr on giving small gratuities—

- (1) to the weakly people on the Tokapalli dam work;
- (2) to the people in the kitchens at Dupad and Dornal;
- (3) to the Gosha women in Dupad to whom the payment of money-dole was stopped on the day of closing relief operations; and
- (4) to the Gosha women in Dupad, &c., to whom the spinning work was given under the Gosha women scheme.

10 0 0

Gratuities to the Gosha women in the Cumbum taluk to whom money-dole was given till the closing of the relief operations.

17 0 0

To the Gosha women in Cumbum to whom spinning work was given till the close of the relief operations.

154 8 0

Spent at Márkápúr—

- (1) on giving gratuities to the paupers in the kitchen;
- (2) to the weakly people on the road-works there;
- (3) to the Gosha women employed on grinding the ragi required for the kitchen;
- (4) to the Gosha women to whom money-doles were given till the close of the relief operations;
- (5) to the Gosha women to whom spinning was given till the close of the relief operations; and
- (6) to a few paupers in the adjacent villages whom I considered deserving of help.

500 0 0

- (4) Spinning work under the scheme sanctioned in Board's Proceedings, No. 416, dated 9th June 1892, was provided to 53 Gosha women in the marginally-noted places from July till the closing of the relief operations, under the supervision of the Taluk Sheristadar, Márkápur, Special Deputy Tahsildar of Márkápur, and Special Deputy Tahsildar of Cumbum at a cost of Rs. 241-6-2. The cost of yarn manufactured by them will be a considerable amount and has yet to be brought into account; it is said that, by selling the yarn at Márkápur in an auction — a mode which seldom fetches the proper price of an article — Rs. 52-4-0 were made; according to my rates, it should have fetched much more; the yarn at Cumbum will also fetch a considerable sum, but has not been sold yet.

(5) Several Gosha women at Márkápur and Tangiralapalli were relieved by being allowed to grind the ragi flour required for the kitchens at Márkápur, Dupad and Dornal. They were paid at the rate of 3 pies for every measure of husked ragi.

- (6) Nine shelter-sheds were erected for the shelter of the coolies stopping on the works, three at each of the marginally-noted places, a cholera-shed was also erected at Márkápur. The total cost of sheds was Rs. 186-8-2.

(7) 250 male, 150 female and 200 child cloths received from Rajah Sir Savalay Ramaswami Mudaliar in the month of March were distributed between that month and the closing of the relief operations among the paupers and the badly-dressed in the kitchens and on the works. Several cloths were given to the persons selected by the Commissioner in his 4th visit, while 22 of these cloths were distributed by His Excellency the Governor in person on the 17th April 1892.

(8) I cannot here omit to refer to the charity of the Commissioner who gave considerable sums of money on every visit of his to the distressed and poor-looking on every work visited by him.

(9) Loans under the Land Improvement Act—Well-digging is "the real famine panacea" obtaining them, but also reduced the amount of famine expenditure considerably. Many people who did not wish to come up to the relief works found employment on the State wells. The number of such persons was at least 6,000 in both the taluks in the months of May and June. The recent distress opened the eyes of the ryots to the advantages of this mode which were explained to them as clearly as possible by me, as well as by the Tahsildars, Special Revenue Inspectors, and by the intelligent of the ordinary Revenue Inspectors. I do not here dilate upon them. Suffice it to say that they are numerous and are now known and fully appreciated by, every ryot in this division. It is no exaggeration to say that the eastern portion of the Márkápur taluk, where the number of State-aided wells newly dug is over a hundred, will not hereafter suffer from famine, even though the rains of two seasons. This is chiefly due to the commendable exertions of Y. Chenchu Subba Row, the Revenue Inspector of the Isakatripuravaram fiska. I think the other portions of the Márkápur taluk similarly be protected from future famines by giving away 4 or 5 lakhs more as loans; it is not difficult to do so now. Very few loans were taken under the ordinary rules and of these that were so taken were also for digging wells in many lands. The following statement shows the transactions under the ordinary and special well rules of the Land Improvement up to the end of November 1892:—

Taluk.	Particulars of loans	Applications accepted up to November 1892.		Loans disbursed up to November 1892.		Wells	
		Number.	Amount.	Number	Amount.	Constructed.	Under construction.
		3	4	5	6	7	8
			RS. A. P.		RS. A. P.		
Cumbum taluk.	Special well rules ..	314	60,503 11 2	284	34,387 3 4	2	
	Ordinary rules ..	51	10,270 0 0	38	7,870 0 0		
	Other purposes ..	3	880 0 0	3	880 0 0		
Márkápur do.	Special well rules ..	614	1,77,755 3 8	612	1,12,265 1 9	100	
	Ordinary rules ..	3	2,125 0 0	7	1,875 0 0		

The following statement shows how much of the amount already disbursed relates to second instalment of the loans, as also the amount which the Tahsildars have reported as urgently required for the immediate payment of second instalments:—

Name of the taluk.	Amount already disbursed.	Amount of second instalment already paid.	Amount stated to be required for the immediate payment of second instalment.	Total of columns 3 and 4.
1	2	3	4	5
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Márkápur ..	1,12,265 1 9	23,687 8 0	17,469 13 0	41,157 5 0
Cumbum ..	44,937 3 4	9,730 4 3	2,667 0 0	12,397 4 3
Total ..	1,57,202 5 1	33,417 12 3	20,136 13 0	53,554 9 3

Second instalments are paid only, if sufficient work has been done with the first instalment. It must therefore be admitted that work to the value of the second instalments advanced was already done. This amounts in both the taluks to Rs. 33,417-12-3 against the total sum of Rs. 1,57,202-5-1 advanced. Further it is not unsafe to assert that work equal to the amount of Rs. 1,57,202-5-1 advanced. The first instalment has already been done in those cases in which the Tahsildars have reported that the payment of the second instalment should urgently be made. This comes to about Rs. 20,136-13-0. The total value of the work done up to date is therefore not less than Rs. 53,554-9-3 against Rs. 1,57,202-5-1 advanced; but, on this point, the Tahsildar of Cumbum Mr. R. Lakshmi Nursimham Pantulu writes to me as follows:—

"I have inspected 100 wells and the value of the work done was Rs. 12,058. The value of work done in the case of 42 wells for which loans have been granted by you was Rs. 4,740. The value of work done in the case of wells inspected by the Special Revenue Inspector and not inspected by me was Rs. 7,960, thus making a total of Rs. 24,758. Sufficient security was taken from all the applicants and most of the wells will come to a working order by the end of the current official year. I fully believe that the instalments will be regularly paid by the ryots and there is no fear for Government incurring any risk on any account. Though the number of wells constructed is only two, still there are nearly 60 wells which have been almost complete and which were left without parapet walls. These petty improvements are now being made by the ryots." The Tahsildar of Márkápur Mr. Rustumsing writes as follows about the wells in his taluk:—

"I inspected almost all the wells in my taluk and did not find a single case of failure. I took measurements of the work done on most of the wells I inspected and found the work to be satisfactory. The value of work done up to the end of October was not less than Rs. 1,00,000 against Rs. 1,14,140 disbursed. Most of the old wells restored and 50 of the new wells are now in working order. I can confidently say that the ryots in this taluk can and will repay the loans punctually without any difficulty and may even in more than three-fourths of the cases discharge the loans long before the time given to them."

I inspected nearly half the wells in the Márkápur taluk and about 60 wells in the Cumbum taluk. I have no misgivings of any kind about the wells in the Márkápur taluk which have been mostly excavated in rocky strata and have the soft portion of their sides if any such should exist, well rivetted with stone. I think the Tahsildar is right in saying that work to the value of at least Rs. 1,00,000 has already been done. I believed that almost all the wells here will be in working order at the cultivation season of the next year, if second instalments are granted in time. I am quite certain that the money already disbursed was paid on sufficient security and that there would be no difficulty whatever in recovering every pie thereof. With regard to the Cumbum taluk I cannot say the same as some wells were sunk in soft soils and have consequently suffered considerably in the recent rains. I have no reason, however, to doubt that, as stated by the Tahsildar, work to the value of Rs. 24,758 has already been done and that the money already disbursed has been advanced on sufficient security. This means that work for Rs. 1,24,758 has already been done against Rs. 1,57,202-5-1 advanced. The author of the Kurnool District Manual says that the cost of a well in the Márkápur taluk would be between Rs. 100 and Rs. 200. He might be right when he wrote; at the present time a substantial well cannot be dug for less than Rs. 300 even under the most favorable conditions. The following statement shows the maximum, the average and the minimum amount required for a well in the Cumbum and Márkápur taluks:—

Name of taluk.	Maximum amount required.	Minimum amount required.	Average amount required.
1	2	3	4
	RS.	RS.	RS.
Cumbum ..	300	100	200
Márkápur ..	500	250	375

(10) *Loans under Agriculturists' Loans Act.*—The following statement exhibits the transactions under the above Act between January and September 1892:—

Name of taluk.	Number of applications.	Purpose for which granted.	Amount sanctioned.	Amount disbursed.	Remarks.
1	2	3	4	5	6
Cumbum ..	97	Purchase of fodder.	Rs. 1,855 0 0	Rs. 1,855 0 0	The grant of these loans was stopped immediately after pasture began to spring up.
Márkápúr ..	167	Do. ..	2,432 8 0	2,432 8 0	
Cumbum ..	2	Tilling cattle and seed-grain.	90 0 0	90 0 0	These loans were granted only in those cases in which the ryots undertook to bring cattle from other districts.
Márkápúr ..	133	Do. ..	2,167 0 0	2,167 0 0	
Total ..			6,544 8 0	6,544 8 0	

26. *Remissions.*—The following statement has been prepared to show the extent of the crops lost during 1891-92:—

Name of taluk.	Occupied area.	Area left waste.	Cultivated area.						Total.
			20 annas.	16 annas.	12 annas.	8 annas.	4 annas.	Withered.	
1	2	3	4	5	6	7	8	9	10
Cumbum ..	ACS. 186,932	ACS. 49,401	ACS. 4	ACS. 3,064	ACS. 934	ACS. 27,000	ACS. 98,511	ACS. 7,115	ACS. 136,621
Márkápúr ..	200,572	78,578	190	3,400	1,214	6,285	31,673	79,232	121,894

From the above it will appear that 214,329 acres yielded nothing, while on 130,181 acres more, the yield was only trifling; consequently a remission of Rs. 86,878-13-1 had to be granted in both the taluks as shown below:—

Name of the taluk.	Wet remitted.	Dry waste remitted.	Dry withered remitted.	Dry remitted for loss of crops.	Total.
1	2	3	4	5	6
Cumbum ..	Rs. 15,998 0 5	Rs. 469 0 0	Rs. 897 0 0	Rs. 1,230 5 7	Rs. 18,594 2 11
Márkápúr ..	23,548 0 5	10,238 7 3	29,403 0 0	5,096 2 11	68,284 10 2
Total ..	39,546 0 5	10,707 7 3	30,300 0 0	6,225 8 8	86,878 13 1

In this connection I beg to state that the dry remissions granted this year had been granted not in the shape of a percentage deduction in the assessment on any large area affected (affected tract), but had dealt with each individual survey field separately. My original proposals referred only to tracts and made no distinction between one field and another in any affected tract, even though the former yielded a six-anna crop while the latter yielded only a two-anna crop, on the consideration that the difference between them must have arisen from a cause other than the adverse character of the season which could only have affected them both alike. I do not also think that the Board meant that "fieldwar" remissions should be granted. The subjoined statement compares the revenue demand of this year with four of the preceding years, and it will be seen therefrom that, on account of the distress of last year, there was a decrease of Rs. 96,911, or 29 per cent. on the average of the preceding four years:—

Name of taluk.	Demand of				Total of the faslis from 1297 to 1300.	Average.	Demand of 1301.	Annual decrease.
	1297.	1298.	1299.	1300.				
1	2	3	4	5	6	7	8	9
Cumbum ..	Rs. 1,97,383	Rs. 1,87,877	Rs. 1,98,875	Rs. 1,91,911	Rs. 7,78,843	Rs. 1,93,160	Rs. 1,69,674	Rs. 23,786
Márkápúr ..	1,19,830	1,17,046	1,25,264	1,13,215	4,75,155	1,18,789	61,774	67,135
Total ..	3,70,010	3,04,923	3,21,959	3,05,126	12,48,998	3,12,219	2,21,338	96,911

Suspension of collections.—The amount remaining suspended at the end of the fasli in each taluk is shown below:—

	RS.	A.	P.
Cumbum taluk ..	19,213	14	2
Márkápúr taluk ..	33,086	0	0
Total ..	52,299	14	2

This sum is being collected in the current fasli. I am sure every pie of it can be collected.

27. *Human mortality.*—The following statement compares the mortality in 1891 up to the end of November with that in 1892. The excessive mortality is due to the prevalence of cholera and cannot be traced to the existence of distress, unless cholera itself is a "want-induced" disease. The question about the connection between the increase in human mortality and the growth of scarcity is being investigated into by the present Deputy Collector of Cumbum, and I shall not therefore refer to it here. I may, however, state that in years of drought poor people eat all sorts of green leaves and roots in order to reduce their expenditure to the lowest possible limit, and it is possible that much of the cholera and choleric diarrhoea that appear in times of distress is due to this practice of reckless and perhaps unwholesome feeding that prevails then:—

Name of taluk.	Mortality in 1891.		Mortality in 1892 up to the end of November 1892.	
	By cholera.	By other causes.	By cholera.	By other causes.
1	2	3	4	5
Cumbum ..	No. 195	No. 2,430	No. 1,931	No. 2,360
Márkápúr ..	195	2,030	1,176	2,077

• Not known, but it cannot be more than 200.

Before leaving this subject, I must emphasize the fact that, within my knowledge, not one case of death from actual starvation occurred during the prevalence of the distress. I did not even come across any of those specimens of humanity whom we can call "resultants of prolonged hunger." I am sorry that I have no statistics available to compare the mortality of this famine with that of the great famine of 1876-78.

28. *Cattle mortality.*—Correct statistics for 1891 are not forthcoming for the Cumbum taluk, and there is therefore no advantage in comparing the deaths registered this year with those of the preceding year. The registration in this year also was defective inasmuch as it did not take into account the immense number of cattle that died in the Nallamalas. I do not therefore want to give here the figures available in the Taluk offices for 1892 also, but simply content myself with stating that a large number of cattle died in the year for want of pasturage and water. All that human ingenuity could devise was done to save them, but unfortunately it did not lie within the pale of human possibility to check or even reduce this abnormal mortality. Scarcity of water was, for some time, as destructive as scarcity of fodder.

29. *Sickness.*—In addition to the malarious fever of the division, a very virulent type of cholera, influenza, guinea-worm and ophthalmia prevailed to a large extent during the time of famine. May, July and August were very trying months and every one lived in constant fear of his life. The Sub-Registrar of Ravipad fell a victim to cholera, while several taluk officials lost their near and dear relations. The Taluk Sheristadar of Márkápúr had a narrow escape, while Mr. Rustumsing, the Tahsildar of Márkápúr, lost his daughter and niece. The excessive prevalence of guinea-worm was probably due to the dirty water which the people drank when the wells began to fail. It was surprising to find that most of the drinking-water wells had an enormous quantity of silt which did not appear to have been cleared out for several years past. Curiously enough cholera became very virulent this year after a good down-pour of rain. A gentleman for whom I have the greatest respect explained it away by saying that the rain must have washed the sweepings of the villages containing cholera germs into the drinking-water wells and started the disease a second time. The explanation is plausible and is probably true.

30. *Inspections.*—The Commissioner inspected the works in the division on eight occasions. The dates of his visits have already been noted in paragraph 20 *supra*. His Excellency the Governor, accompanied by his Private Secretary Mr. C. F. MacCartie, visited the works in Cumbum on the 9th April 1892 and the works in Márkápúr on the 17th April 1892. The sun was very powerful at the time and the distress was keenest. In honour of His Excellency's

(4.) Spinning work under the scheme sanctioned in Board's Proceedings, No. 416, dated

Márkápúr	4	9th June 1892, was provided to 53 Gosha women
Dupad	32	in the marginally-noted places from July till the
Hasanapur	17	closing of the relief operations, under the super-
Tangiralapalli		vision of the Taluk Sheristadar, Márkápúr,
Cumbum		Special Deputy Tahsildar of Márkápúr, and
		Special Deputy Tahsildar of Cumbum at a

cost of Rs. 241-6-2. The cost of yarn manufactured by them will be a considerable amount and has yet to be brought into account; it is said that, by selling the yarn at Márkápúr in an auction — a mode which seldom fetches the proper price of an article — Rs. 52-4-0 were made; according to my rates, it should have fetched much more; the yarn at Cumbum will also fetch a considerable sum, but has not been sold yet.

(5) Several Gosha women at Márkápúr and Tangiralapalli were relieved by being allowed to grind the ragi flour required for the kitchens at Márkápúr, Dupad and Dornal. They were paid at the rate of 3 pies for every measure of husked ragi.

(6) Nine shelter-sheds were erected for the shelter of the coolies stopping on the works, three at each of the marginally-noted places, a cholera-shed was also erected at Márkápúr. The total cost of sheds was Rs. 186-6-2.

(7) 250 male, 150 female and 200 child cloths received from Rajah Sir Savalay Ramaswami Mudaliar in the month of March were distributed between that month and the closing of the relief operations among the paupers and the badly-dressed in the kitchens and on the works. Several cloths were given to the persons selected by the Commissioner in his 4th visit, while 22 of these cloths were distributed by His Excellency the Governor in person on the 17th April 1892.

(8) I cannot here omit to refer to the charity of the Commissioner who gave away considerable sums of money on every visit of his to the distressed and poor-looking on every work visited by him.

(9) *Loans under the Land Improvement Act—Well-digging* is "the real famine panacea." Advances granted by the State for that purpose not only mitigated the distress of the person obtaining them, but also reduced the amount of famine expenditure considerably. Many people who did not wish to come up to the relief works found employment on the State-aided wells. The number of such persons was at least 6,000 in both the taluks in the months of May and June. The recent distress opened the eyes of the ryots to the advantages of this measure which were explained to them as clearly as possible by me, as well as by the Tahsildars, by the Special Revenue Inspectors, and by the intelligent of the ordinary Revenue Inspectors. I need not here dilate upon them. Suffice it to say that they are numerous and are now known to, and fully appreciated by, every ryot in this division. It is no exaggeration to say that the north-eastern portion of the Márkápúr taluk, where the number of State-aided wells newly dug is nearly a hundred, will not hereafter suffer from famine, even though the rains of two seasons fail. This is chiefly due to the commendable exertions of Y. Chenchu Subba Row, the Revenue Inspector of the Isakatripuravaram firká. I think the other portions of the Márkápúr taluk can similarly be protected from future famines by giving away 4 or 5 lakhs more as loans and it is not difficult to do so now. Very few loans were taken under the ordinary rules and most of these that were so taken were also for digging wells in inam lands. The following statement shows the transactions under the ordinary and special well rules of the Land Improvement Act up to the end of November 1892:—

Taluk.	Particulars of loans.	Applications accepted up to November 1892.		Loans disbursed up to November 1892.		Wells.	
		Number.	Amount.	Number.	Amount.	Constructed.	Under construction.
		3	4	5	6	7	8
			Rs. A. P.		Rs. A. P.		
Cumbum taluk.	Special well rules ..	314	60,503 14 2	284	36,337 3 4	2	275
	Ordinary rules ..	61	10,270 0 0	38	7,870 0 0		
	Other purposes ..	8	680 0 0	8	680 0 0		
Márkápúr do.	Special well rules ..	614	1,77,765 3 8	612	1,12,265 1 9	100	519
	Ordinary rules ..	8	2,125 0 0	7	1,875 0 0		

The following statement shows how much of the amount already disbursed relates to the second instalment of the loans, as also the amount which the Tahsildars have reported to be urgently required for the immediate payment of second instalments:—

Name of the taluk.	Amount already disbursed.	Amount of second instalment already paid.	Amount stated to be required for the immediate payment of second instalment.	Total of columns 3 and 4.
1	2	3	4	5
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Márkápúr	1,12,265 1 9	23,687 8 0	17,469 13 0	41,157 5 0
Cumbum	44,937 3 4	9,730 4 3	2,667 0 0	12,397 4 3
Total	1,57,202 5 1	33,417 12 3	20,136 13 0	53,554 9 3

Second instalments are paid only, if sufficient work has been done with the first instalment. It must therefore be admitted that work to the value of the second instalments advanced was already done. This amounts in both the taluks to Rs. 33,417-12-3 against the total sum of Rs. 1,57,202-5-1 advanced. Further it is not unsafe to assert that work equal to the amount of the first instalment has already been done in those cases in which the Tahsildars have reported that the payment of the second instalment should urgently be made. This comes to about Rs. 20,136-13-0. The total value of the work done up to date is therefore not less than Rs. 53,554-9-3 against Rs. 1,57,202-5-1 advanced; but, on this point, the Tahsildar of Cumbum Mr. R. Lakshmi Nursimham Pantulu writes to me as follows:—

"I have inspected 100 wells and the value of the work done was Rs. 12,058. The value of work done in the case of 42 wells for which loans have been granted by you was Rs. 4,740. The value of work done in the case of wells inspected by the Special Revenue Inspector and not inspected by me was Rs. 7,960, thus making a total of Rs. 24,758. Sufficient security was taken from all the applicants and most of the wells will come to a working order by the end of the current official year. I fully believe that the instalments will be regularly paid by the ryots and there is no fear for Government incurring any risk on any account. Though the number of wells constructed is only two, still there are nearly 60 wells which have been almost complete and which were left without parapet walls. These petty improvements are now being made by the ryots." The Tahsildar of Márkápúr Mr. Rustomsing writes as follows about the wells in his taluk:—

"I inspected almost all the wells in my taluk and did not find a single case of failure. I took measurements of the work done on most of the wells I inspected and found the work to be satisfactory. The value of work done up to the end of October was not less than Rs. 1,00,000 against Rs. 1,14,140 disbursed. Most of the old wells restored and 50 of the new wells are now in working order. I can confidently say that the ryots in this taluk can and will repay the loans personally without any difficulty and may even in more than three-fourths of the cases discharge the loans long before the time given to them."

I inspected nearly half the wells in the Márkápúr taluk and about 60 wells in the Cumbum taluk. I have no misgivings of any kind about the wells in the Márkápúr taluk which have been excavated in rocky strata and have the soft portion of their sides if any such should exist, well protected with stone. I think the Tahsildar is right in saying that work to the value of at least Rs. 1,00,000 has already been done. I believed that almost all the wells here will be in working order at the cultivation season of the next year, if second instalments are granted in time. I am quite certain that the money already disbursed was paid on sufficient security and that there would be no difficulty whatever in recovering every pie thereof. With regard to the Cumbum taluk I cannot say the same as some wells were sunk in soft soils and have consequently suffered considerably in the recent rains. I have no reason, however, to doubt that, as stated by the Tahsildar, work to the value of Rs. 24,758 has already been done and that the money already disbursed has been advanced on sufficient security. This means that work for Rs. 1,24,758 has already been done against Rs. 1,57,202-5-1 advanced. The author of the Kurnool District Manual says that the cost of a well in the Márkápúr taluk would be between Rs. 100 and Rs. 200. He might be right when he wrote; at the present time a substantial well cannot be dug for less than Rs. 300 even under the most favorable conditions. The following statement shows the maximum, the average and the minimum amount required for a well in the Cumbum and Márkápúr taluks:—

Name of taluk.	Maximum amount required.	Minimum amount required.	Average amount required.
1	2	3	4
	Rs.	Rs.	Rs.
Cumbum	300	100	240
Márkápúr	500	250	375

(10) *Loans under Agriculturists' Loans Act.*—The following statement exhibits the transactions under the above Act between January and September 1892:—

Name of taluk.	Number of applications.	Purpose for which granted.	Amount sanctioned.	Amount disbursed.	Remarks.
1	2	3	4	5	6
Cumbum ..	97	Purchase of fodder.	Rs. 1,855 0 0	Rs. 1,855 0 0	The grant of these loans was stopped immediately after pasture began to spring up.
Márkápúr ..	167	Do. ..	2,432 8 0	2,432 8 0	
Cumbum ..	2	Tilling cattle and seed-grain.	90 0 0	90 0 0	These loans were granted only in those cases in which the ryots undertook to bring cattle from other districts.
Márkápúr ..	133	Do. ..	2,167 0 0	2,167 0 0	
Total ..			6,544 8 0	6,544 8 0	

26. *Remissions.*—The following statement has been prepared to show the extent of the crops lost during 1891-92:—

Name of taluk.	Occupied area.	Area left waste.	Cultivated area.						Total.
			20 annas.	16 annas.	12 annas.	8 annas.	4 annas.	Withered.	
1	2	3	4	5	6	7	8	9	10
Cumbum ..	ACS. 186,032	ACS. 49,401	ACS. 4	ACS. 3,064	ACS. 934	ACS. 27,000	ACS. 98,511	ACS. 7,118	ACS. 136,631
Márkápúr ..	200,572	78,578	190	3,400	1,214	6,285	31,673	79,232	131,894

From the above it will appear that 214,329 acres yielded nothing, while on 130,181 acres more, the yield was only trifling; consequently a remission of Rs. 86,878-13-1 had to be granted in both the taluks as shown below:—

Name of the taluk.	Wet remitted.	Dry waste remitted.	Dry withered remitted.	Dry remitted for loss of crops.	Total.
1	2	3	4	5	6
Cumbum ..	Rs. 15,998 0 6	Rs. 469 0 0	Rs. 897 0 0	Rs. 1,230 5 7	Rs. 18,594 2 11
Márkápúr ..	23,548 0 0	10,238 7 3	20,403 0 0	5,095 2 11	68,284 10 2
Total ..	39,546 0 5	10,707 7 3	30,300 0 0	6,325 8 6	86,878 13 1

In this connection I beg to state that the dry remissions granted this year had been granted not in the shape of a percentage deduction in the assessment on any large area affected (affected tract), but had dealt with each individual survey field separately. My original proposals referred only to tracts and made no distinction between one field and another in any affected tract, even though the former yielded a six-anna crop while the latter yielded only a two-anna crop, on the consideration that the difference between them must have arisen from a cause other than the adverse character of the season which could only have affected them both alike. I do not also think that the Board meant that "fieldwar" remissions should be granted. The subjoined statement compares the revenue demand of this year with four of the preceding years, and it will be seen therefrom that, on account of the distress of last year, there was a decrease of Rs. 90,911, or 29 per cent. on the average of the preceding four years:—

Name of taluk.	Demand of				Total of the fasli from 1297 to 1300.	Average.	Demand of 1301.	Annual decrease.
	1297.	1298.	1299.	1300.				
1	2	3	4	5	6	7	8	9
Cumbum ..	Rs. 1,97,389	Rs. 1,87,877	Rs. 1,96,875	Rs. 1,91,911	Rs. 7,73,843	Rs. 1,93,460	Rs. 1,69,674	Rs. 23,786
Márkápúr ..	1,19,630	1,17,046	1,26,264	1,13,215	4,75,155	1,18,789	51,774	67,125
Total ..	3,17,019	3,04,923	3,23,139	3,05,126	12,48,998	3,12,249	2,21,448	90,911

Suspension of collections.—The amount remaining suspended at the end of the fasli in each taluk is shown below:—

	RS.	A.	P.
Cumbum taluk ..	19,213	14	2
Márkápúr taluk ..	33,086	0	0
Total ..	52,299	14	2

This sum is being collected in the current fasli. I am sure every pie of it can be collected.

27. *Human mortality.*—The following statement compares the mortality in 1891 up to the end of November with that in 1892. The excessive mortality is due to the prevalence of cholera and cannot be traced to the existence of distress, unless cholera itself is a "want-induced" disease. The question about the connection between the increase in human mortality and the growth of scarcity is being investigated into by the present Deputy Collector of Cumbum, and I shall not therefore refer to it here. I may, however, state that in years of drought poor people eat all sorts of green leaves and roots in order to reduce their expenditure to the lowest possible limit, and it is possible that much of the cholera and choleric diarrhoea that appear in times of distress is due to this practice of reckless and perhaps unwholesome feeding that prevails then:—

Name of taluk.	Mortality in 1891.		Mortality in 1892 up to the end of November 1892.	
	By cholera.	By other causes.	By cholera.	By other causes.
1	2	3	4	5
Cumbum ..	No. 195	No. 2,430	No. 1,931	No. 2,360
Márkápúr ..	195	2,030	1,176	2,077

* Not known, but it cannot be more than 200.

Before leaving this subject, I must emphasize the fact that, within my knowledge, not one case of death from actual starvation occurred during the prevalence of the distress. I did not even come across any of those specimens of humanity whom we can call "resultants of prolonged hunger." I am sorry that I have no statistics available to compare the mortality of this famine with that of the great famine of 1876-78.

28. *Cattle mortality.*—Correct statistics for 1891 are not forthcoming for the Cumbum taluk, and there is therefore no advantage in comparing the deaths registered this year with those of the preceding year. The registration in this year also was defective inasmuch as it did not take into account the immense number of cattle that died in the Nallamalas. I do not therefore want to give here the figures available in the Taluk offices for 1892 also, but simply content myself with stating that a large number of cattle died in the year for want of pasturage and water. All that human ingenuity could devise was done to save them, but unfortunately it did not lie within the pale of human possibility to check or even reduce this abnormal mortality. Scarcity of water was, for some time, as destructive as scarcity of fodder.

29. *Sickness.*—In addition to the malarious fever of the division, a very virulent type of cholera, influenza, guinea-worm and ophthalmia prevailed to a large extent during the time of famine. May, July and August were very trying months and every one lived in constant fear of his life. The Sub-Registrar of Ravipad fell a victim to cholera, while several taluk officials lost their near and dear relations. The Taluk Sheristadar of Márkápúr had a narrow escape, while Mr. Rustumsing, the Tahsildar of Márkápúr, lost his daughter and niece. The excessive prevalence of guinea-worm was probably due to the dirty water which the people drank when the wells began to fail. It was surprising to find that most of the drinking-water wells had an enormous quantity of silt which did not appear to have been cleared out for several years past. Curiously enough cholera became very virulent this year after a good down-pour of rain. A gentleman for whom I have the greatest respect explained it away by saying that the rain must have washed the sweepings of the villages containing cholera germs into the drinking-water wells and started the disease a second time. The explanation is plausible and is probably true.

30. *Inspections.*—The Commissioner inspected the works in the division on eight occasions. The dates of his visits have already been noted in paragraph 20 *supra*. His Excellency the Governor, accompanied by his Private Secretary Mr. C. F. MacCartie, visited the works in Cumbum on the 9th April 1892 and the works in Márkápúr on the 17th April 1892. The sun was very powerful at the time and the distress was keenest. In honour of His Excellency's

visit, the coolies were paid 2nd-class wages for the day of the visit. You inspected thoroughly all the works in progress and the kitchens then open in the Cumbum and Márkápur taluks in the months of January and February, while Mr. Bradley inspected almost all of them thoroughly in the month of April. Example is better than precept. These inspections undertaken at considerable personal discomfort, nay personal risk, encouraged me and the other officers in charge of the relief works greatly and made us all work cheerfully, unmindful of the verulent type of cholera that prevailed for a long time.

31. *Close of the relief works.*—The south-west monsoon of this year burst in time and enabled the people to carry on agricultural operations as usual. Almost all the tanks overflowed their calingulas and all the rivers were in floods. The great Cumbum tank overflowed its calingula on the unusually early date of 13th September 1892. The following statement shows the extent of cultivation in the months of June, July and August 1892, while a reference to paragraph 20 *supra* shows the amount of rainfall and the fluctuations in the prices of food-grains during the period:—

Taluk.	Extent cultivated in		
	June.	July.	August.
1	2	3	4
Cumbum	..	ACR. 30,046-39	ACR. 26,445-36
Márkápur	..	40,721-00	33,875-00

It will be seen from these that the improvement in the season was so marked as to have enabled me to recommend, and you and the Commissioner to sanction, the closing of all the relief works and kitchens in the first fortnight of September. In fact most of the works open in the first week of September closed themselves automatically by the agriculturists and the landless people having obtained agricultural employment which they naturally preferred to our task work. The following table shows the number of coolies in the first fortnight of September 1892 on each work then open:—

Name of work.	September 1892.						
	1st	2nd	3rd	4th	5th	6th	7th
1	2	3	4	5	6	7	8
Ardaveed tank	249	235	235	..	Closed on the 4th.		
Mulliah tank	247	353	353	..	297	Closed on the 6th.	
Moshagundam section of Kurnool- Cumbum road	830	830	830	..	829	825	816
Giddalur section of do.	1,067	1,050	1,073	..	261	240	248
Márkápur to rail station road	827	827	607	..	582	546	456
Vemulakota road	1,217	1,240	1,088	..	905	860	828
Ammavaripalli tank	224	..	..	Closed on the 2nd.			..
Tokapalli reservoir	824	1,079	1,037	..	807	816	778
Annagari tank of Medapi	224	224	249	..	Closed on the 4th.		

Name of work.	September 1892.							
	8th	9th	10th	11th	12th	13th	14th	15th
	9	10	11	12	13	14	15	16
Ardaveed tank	..	..	..	Closed on the 4th.			..	..
Mulliah tank	..	..	..	Closed on the 6th.			..	..
Moshagundam section of Kurnool- Cumbum road	807	796	789	..	683	658	654	622
Giddalur section of do.	..	..	..	Closed on the 8th.			..	..
Márkápur to rail station road	466	468	405	..	418	431	407	417
Vemulakota road	659	695	692	..	640	646	535	661
Ammavaripalli tank	..	..	..	Closed on the 2nd.			..	..
Tokapalli reservoir	649	603	475	..	161	278	278	274
Annagari tank of Medapi	..	..	..	Closed on the 4th.			..	..

All relief operations were brought to a close on the 15th September 1892, and the services of all but the special Revenue Inspectors sanctioned for loan work were dispensed with on the 16th September 1892. As stated above in paragraph 25 *supra*, gratuities were given by me to such of the coolies on the works and the paupers in the kitchens as appeared to me to be weak on the day of closing, with a view to enable them to pull on for a fortnight or a month more, even if they should not get work elsewhere immediately. Most of the works and the kitchens were closed by me in person, and the amount spent in the manner indicated above was the largest at Márkápur. As the number that remained on the rolls on the last day exceeded a thousand and contained many people who asked for

Márkápur and Vemulakota roads put together.

further work, I referred to them in the following terms in my narrative for the fortnight ending 15th September 1892:—

"The only place where the number that stuck on to the last was large is Márkápur and Vemulakota road work. This is certainly not due to their condition being bad or anything of that sort, but is due (1) to the transplantation under the Márkápur tank having been delayed, and (2) to the work being situated very near a town. These coolies can surely find employment elsewhere if they walk 5 or 6 miles to the north of their homes, i.e., near Aravid and Gobbur." Thus did the famine of 1891-92 pass away more or less confirming by a curious coincidence the popular belief that the year "Nandada" will always be a year of famine. Both the dry and wet crops this year yielded either bumper or full average harvests and once more placed food within the reach of all.

32. *Sufficiency or otherwise of famine wage.*—I shall not refer here to the controversy about this question in the great famine which Mr. Digby gives in full in pages 165 to 252 of his "famine campaign in Southern India," farther than to say that the temple wage for class II labourers was quite insufficient as contended by the Madras advocates. Prevention is better than cure. To prevent emaciation or deterioration in the condition of coolies should be the paramount consideration in times of famine of course there should be no unnecessary waste of money, but on the other hand the wage given to the famine coolies should be something more than what is just sufficient to keep them alive. In other words, it should be such as would be necessary to keep them in fair health. To keep them alive and to keep them in good condition are two different matters. "The effects of insufficient food, long continued may shorten life after a period of some years, or it may be of months or days." The Indian cooly though generally living from hand to mouth exhibits a power of endurance which is simply astonishing. The effects of a low wage and consequent underfeeding in times of distress do not therefore manifest themselves so strikingly as they would in the cases of coolies in indifferent health, and it would therefore be difficult to say by simply watching persons in normal condition, whether the wage given to them is sufficient or not. On the other hand, the result of good feeding on persons of indifferent health can be easily perceived, and it may therefore be assumed that the true test of the sufficiency or otherwise of a wage is the improvement or the reverse in condition which labourers in indifferent condition may show after being kept on such wage for sometime. If, when kept on such wage, labourers in indifferent condition are found to improve in condition perceptibly, we may safely conclude that the wage is sufficient. In Cumbum and Márkápur the condition of the coolies in April was a little unsatisfactory as noticed by the Commissioner; but early in July, i.e., at his seventh visit, it was found that they improved perceptibly, and this showed that the wages earned by them in May and June enabled them to recover their normal condition. The statistics which I then collected proved that the average pay earned by an adult male labourer on the works in the two taluks during June was something slightly less than the 3rd-class wage of one anna seven pies then prevailing. If something less than the 3rd-class wage improved the condition of the people perceptibly, there could be no doubt about the sufficiency of the 3rd-class wage itself. It is, I confidently assert, quite sufficient to keep the labourers in good condition. It may even be said that it was enough for the coolies and their non-working children also, whom out of scruples they did not send to the kitchens meant for them.

The quantity of husked ragi which can be purchased with one anna and seven pies (As. 1-7) when ragi is selling at 12 imperial seers a rupee—the lowest limit reached here in the recent famine—is 2½ lbs. or nearly 2½ lbs. per diem. This is quite sufficient for an adult male to live and thrive on. The ration allowed to an adult pauper in a kitchen is 20 oz. of husked grain and 3½ oz. of condiments. This quantity was found to be quite sufficient to keep him in strength and health. It may be assumed that a working adult male labourer requires at most half as much ration again as is enough for an adult inmate of a kitchen. On this hypothesis 30 oz of grain and 5½ oz. of condiments may be taken as a fair ration for the former. The cost of 5½ oz. of condiments has been ascertained by a laborious calculation made, with reference to the expenditure in the kitchens here, to have never exceeded 5 pies, which will give us 10 oz. of ragi when husked ragi is selling at 12 imperial seers. The aggregate ration required for an adult male labourer will then be 40 oz. or 2½ lbs. in terms of husked grain; 12 imperial seers per rupee is a fair rate of conversion for ragi, the staple grain here, and as I stated above, is the lowest limit reached in the recent famine. It is thus clear that calculated in this way also, an amount with which 2½ lbs. of ragi can be purchased, viz., As. 1-7 (our present 3rd-class wage), would be a sufficient wage. This also proves that the wage of 2½ lbs. which the

Commissioner proposed to have as the 3rd-class wage in future and which the Government sanctioned in G.O., dated 11th August 1892, No. 839, Revenue, is a fair wage for a male labourer. It is more profitable to him than the wage now obtaining, when ragi sells at less than 18 imperial seers, as the cost of 1½ lbs. will then be more than 9 pies. The prices of condiments are seldom rule high when ragi is selling cheaper than 13 imperial seers, so that, even then, I will not be a loser by "1½ lbs." of grain being substituted for 9 pies in the determination of the 3rd-class wage.

The Commissioner has discussed this question thoroughly in Board's Proceedings, No. 396, dated 27th May 1892. The table appended to Board's Proceedings, dated 3rd September 1892, No. 618, calculates the value of 2½ lbs. of ration when grain was selling at a certain rate. The grain sold in the bazaars is husked and not cleaned, and I would recommend that, for determining the value of 2½ lbs. of ration, husked grain may be taken as the standard. What the coolie wants is 2½ lbs. of husked grain, and as this leads only to a slight fraction in favour of the labourer, I recommend the adoption of the above suggestion. The deduction on account of wastage need not be 20 per cent., as the table published in page 73 of Board's Proceedings, No. 274, dated 19th September 1890, contemplates, but may be fixed at 10 per cent. Actual experiment with ragi, the staple food of the Márkápúr taluk, showed the wastage to range between 5 and 7 per cent., but it is better to be a little liberal and fix the wastage at 10 per cent. While on this subject, I beg to add that the rule in paragraph 7 of G.O., dated 1st August 1892, No. 839, Revenue, that "in no case fining should be carried so far as to reduce the wage below a certain limit" called the "penal wage" will bring about the same state of things which was described as follows in the first sentence of the same paragraph. "If the coolies can earn a certain sum, whatever may be the work turned out, they end in practically doing nothing." Now, if the labourers come to know of the existence of the "penal wage," they will not do any work but will content themselves with earning that "penal wage," and as it is less than the rate of "the subsistence allowance" that prevailed at Márkápúr in March 1892, it is not unreasonable to expect that worse results than those observed in April 1892 may follow the introduction of the penal wage system. Rapid deterioration in condition—the greatest danger which we should guard against in times of famine—will thus be the result of placing any restrictions on fining, and I really think that by so doing we shall simply be offering premium to laziness which soon takes the coolies over the stages described by Mr. Price in the following words: "It will lead to much misery and want, to the necessity of opening relief houses, kitchens, and to increased crime and disease." Once they suffer in condition by earning the penal wage for some time, we shall be compelled to transfer them to light-work gangs or to kitchens and thus unnecessarily add to our famine expenditure.

It seems to me that the formation of light-work gangs on each work with a wage not less than the subsistence allowance gives those people who are weak and out of condition an ample opportunity of regaining their health and strength, and that the able-bodied people whom it may be considered unnecessary to draft to the weakly-gangs should always be expected to earn only wages proportioned to their work. The Supervising Agency if efficient ought to have no difficulty in exacting proper work from such labourers. If, however, owing to a general deterioration in the condition of all the labourers on any work it may be considered imperative necessary to show them some concession, a reduction in the task will be better than the introduction of the "penal wage." In my experience of the management of relief works, I have found that the coolies prize nothing so much as a reduction in task. I hail with pleasure the proposal to raise the subsistence allowance for Sundays and other non-working days to 2 lbs.

33. General remarks.—I beg to add the following general remarks:—

(1) Now the Divisional-officers are only required to prepare a programme of suitable famine relief works with a view to start work in the event of a necessity arising. I think they had better be also directed to report from time to time, in consultation with the Public Works Department officers, what measures should be taken to improve the material resources of any tract in their division which is known to be subject to seasonal disadvantages. Márkápúr, for instance, is a taluk with poor soils, and apprehensions of distress are entertained herein whenever there is any slight deficiency in the rainfall of any season. It is also well-known that there is scope for several large irrigation projects calculated to protect several villages in it from distress arising from an ordinary drought. Again, some parts of the taluk have now very few wells and can, with State aid, dig many more. If the Divisional-officer exerts himself systematically, he can increase their number considerably.

(2) I think every Divisional-officer should be asked to say at the end of every year what has been done in this direction and what has yet to be done in his division.

(3) I think in times of scarcity of fodder the Forest department should arrange to throw open Forest Reserves either for free-grazing or for grazing at nominal rates.

(4) The test work that may first be opened to gauge the extent of distress prevailing at any time, should be a difficult kind of work with pretty high tasks, say, 75 per cent. of the full Public Works Department tasks. The breaking and stacking of metal with a task of 12 cubic

yards for a typical gang of 12 men, 60 women and 28 children is, I think, the most suitable work. The metal may first be broken near big villages, with a view to its being eventually utilised in improving the communications therein. Minor irrigation works with increased tasks conducted on task work system may also be advantageously opened as test works.

(5) Several tools were lost in the last famine, and I therefore beg to suggest that a rule requiring the engineering subordinates in charge of the works to collect the tools on the evening of every Saturday with a view to make them personally responsible for them be inserted in the Code.

(6) As soon as the test works show that distress of a severe type exists, one or two large works for each taluk with sheds for shelter and with kitchens for non-working children should be started, as the opening of numerous small works wide apart is difficult to supervise efficiently at the beginning. After the work settles down and when apprehensions are entertained of an outbreak of any epidemic, coolies may be drafted to any small work or works which may require attention.

(7) It is not necessary to have the labourers classified into three classes, as stated in paragraph 4 of the Government Order embodied in Board's Proceedings, dated 3rd September 1892, No. 618. In the works executed in this division in the last famine, only two classes were recognized and the system worked wonderfully well. Labourers placed in all but the light-work gangs were allowed to earn a slight margin above the "3rd-class average," whenever they turned out a tenth or more in excess of the 3rd-class task; after the receipt of Board's Proceedings, dated 19th June 1892, No. 415, no body was allowed to earn more than the 2nd-class wage.

(8) I think it advisable to have a few masonry works set apart for execution on the "piece work system" for the benefit of the artisans and other skilled labourers usually employed by the Public Works Department, as it is very hard to make them also live on the "famine wage," which is really intended only for agriculturists and agricultural labourers "thrown out of their profession" by the adverse character of the season. Of course such a step need not be taken when remunerative private employment is available.

(9) "Task work" system is the system best adopted to famine relief works. I therefore suggest that a provision to execute all works on this system be introduced into the Famine Code, and that the Executive Engineer of the district be required to prepare and revise, if necessary, every year, a table showing the task, lead and lift for each description of work suited to the conditions of each taluk.

(10) I strongly recommend the adoption of the system described in the book entitled "Rules for the execution of relief works" in making payments on the Professional Agency works also. This and the proposal in (6) *supra* contemplate the abolition of all distinction between "Professional Agency" and "Civil Agency" works so far as classification and payment of labourers are concerned.

(11) The Famine Code had better be so altered as to keep all kitchen including work kitchens under the management of the Revenue Department, as with the whole fabric of the village establishments under his control the Divisional-officer will be better able to make these arrangements than a Public Works Department officer.

(12) Section 12 of the Famine Code does not make it clear whether a Divisional-officer relieved of his ordinary work by the appointment of a Special Deputy Collector can exercise any control over the village establishments. I suggest that the necessary alterations may be made to give him that power clearly, as otherwise it would be impossible for him to conduct relief operations efficiently; he must be empowered to fine, suspend or dismiss any village servant who may be found lax in the discharge of any "relief" duty assigned to him. Further, in disposing of the applications for loans, he has very often to punish village servants that may misbehave themselves. I have referred to this matter here, as my action in having punished one or two village servants in the division was characterised as *ultra vires*. I was not a Famine Deputy Collector but the Divisional-officer giving my whole attention to the administration of famine relief.

(13) Merchants are afraid in times of scarcity to import large quantities of grain lest they might be robbed. I think it is necessary to increase the Police force in towns immediately after the recognition of distress.

(14) Medical assistance should not be deferred until the appearance of an epidemic. Special Hospital Assistants equipped with the necessary medicines should be appointed immediately after the opening of relief works. In this famine Hospital Assistants were for sometime without any medicines, as they had reported themselves to me without medicines.

(15) The formation of weakly gangs on each work should, I submit, be insisted upon, and they should, I think, include all women in an advanced state of pregnancy and all nursing mothers with a baby not older than two months.

(16) Boys between 12 and 15 years should, I think, be grouped for purposes of task and pay with "women."

(17) The Divisional-officer should, I think, be provided with funds to grant money doles (1) to high-caste paupers who may feel the pinch of the distress; (2) to Gosha women without means; and (3) to female labourers who are obliged to absent themselves from work for a month or so owing to confinement.

(18) Increased tasks should be enforced after the season prospects take a favourable turn, with a view to prevent coolies from sticking on to the works even when agricultural employment is available.

34. *Appendix IV*—shows the amount of direct and indirect expenditure on account of the famine in the division.

35. Before conclusion, I most respectfully beg to bring to your notice the names of those officers and clerks who have zealously and cheerfully performed the arduous work assigned to them during the continuance of the relief operations.

Public Works Department.—I received much help from Mr. C. A. Smith, Special Executive Engineer, whose ability and energy were already appreciated by the Commissioner and referred to with approbation in Board's Proceedings, dated 18th July 1892, No. 504.

Mr. J. Lawrence, the Sub-divisional officer, Public Works Department, also showed much energy by his efficient supervision of the relief works executed by his department.

Messrs. Pereira and T. Vencatarama Iyer, Overseers, also deserve special credit for their able management of the works entrusted to them.

Medical.—Of the Medical subordinates, Messrs. Thamman, Daniel, Peter and Muthu Naidu did good work; the first two did specially good work during the outbreak of cholera at Markapur. Mr. Thamman did also well at Giddalur, where he and his mother were afflicted with cholera and got over it.

Local Funds.—The only officer that did good work in the Local Fund Department was Mr. Subraya Mudaliar; but I regret to record that he died, apparently, from the effects of overwork, in the middle of the operations.

Revenue.—The Tahsildar of Markapur, Mr. Rustumsing, rendered me invaluable help, and the Commissioner and yourself know personally the capital manner in which he acquitted himself; he was indefatigable both in his inspection of the relief works in his taluk and in moving about from village to village to grant loans under the special well rules of the Land Improvement Act. He is thoroughly honest and much of his very splendid success in the matter of "loans" is due to it and to his extraordinary activity. I most respectfully request that his services which were specially meritorious and were performed at great personal sacrifice may be brought to the notice of the Board and Government with a view to their recognising and rewarding him in the manner they deem proper.

The Special Deputy Tahsildar of Markapur, Mr. P. Rajagopaul Naidu, worked very hard and zealously, and I beg to specially commend him to your notice with a view to his being advanced soon to the position of a Tahsildar, for which he is eminently fitted. I was completely satisfied with his management of the kitchens and the relief works specially entrusted to him. Both these officers are intelligent and honest, and I was really fortunate in having them in me in that most distressed taluk.

The Tahsildar of Cumbum, Mr. R. Lakshminarasu Pantulu, also did his work honestly; he had some experience of the great famine of 1876-78 and toiled well in granting loans under the Land Improvement Act.

The Special Deputy Tahsildar of Cumbum, Mr. P. Vencoba Row, showed himself to be a capable man.

Of the clerks, &c., the following deserve special mention:—

(1) Y. Chinchu Subba Row, the Acting First class Revenue Inspector of the Markapur taluk, who worked very well in encouraging "loans."

(2) B. Venkatapathy Naidu, Clerk of the Markapur taluk, who did very hard paying officer on the Darul, &c., roads.

(3) C. Viswanadam Devana, my Head Clerk from November 1891 to May 1892.

(4) P. Venkataraghulu Naidu, my Head Clerk from June to September 1892.

(5) A. Gopalakrishnayya, Kitchen gumastah.

(6) H. Sundaramoorti Row, the water Superintendent of the Cumbum taluk, whose services I have utilized as a clerk with your permission.

The first five are passed candidates and I request that you will be pleased to reward them for their services with promotion to higher posts. I specially commend to your notice Nos. 1 and 2. The last, H. Sundaramoorti Row, is an unpassed candidate, but his services have been so useful to me that I am really at a loss to say what should be done to him. He is a very hard-working man and writes a neat and fast hand; but for him I should not have been able to get through my office work so fast as I used to do. He was always ready with references and was doing hard famine work under me from January till September 1892. If possible, I request that the Board may be moved to make him a manager of a small estate or an amin in a large estate under the Court of Wards, and thus reward him for his services which, I once more repeat, were very valuable to me.

ENCLOSURE No. 2.

From K. SUBBA RAU Pantulu Gari, Deputy Collector, Pyapali Division, to the Collector of Kurnool, dated 29th September 1892, No. 974.

Adverting to your foot-note No. 6500 of the 15th instant to Revenue Board's Proceedings, No. 7430, Misc., dated 12th idem (Revenue Settlement, Land Records and Agriculture), I have the honour to submit my report as follows:—

2. I took charge of this division on the 14th July last (1891). In August and September, I had been on tour of inspection through Pattikonda and Koilkuntla taluks, respectively. Though south-west monsoon rains were not as usual, dry crops on red soil were tolerably well in a large number of villages. Tanks received no supply and regad dry lands were as usual, lying waste in the said taluks. I visited Owk on the 30th September; the tank of that village was then being dried up. I have then received numerous applications from ryots of Owk, Cherlopalli and one or two surrounding villages, asking permission to cultivate the bed of the Owk tank. Distress was then commenced. As it was too premature, I assured the ryots that their applications would be taken into consideration, if rains fail by 15th October, to allow bed of tanks cultivated.

3. I had obtained your orders in the meanwhile. The failure of the north-east monsoon caused the distress severe. On the 24th October last, when I was at Maddikera, ryots of Owk and Cherlopalli appeared before me and asked permission to cultivate the bed of the Owk tank. Thereon I proceeded to Owk and Cherlopalli and assigned the bed lands for cultivation at the highest dry rate. In October, November and December, I was on constant tour through the two taluks, and selected affected villages and sent up my reports for postponement of kist collections as the first stage of relief to ryots.

4. I had moved the Taluk Board to open works of repairs to ponds mostly in the affected villages in Owk division in November and December 1891 and January 1892.

5. In the latter part of December, M.R.Ry. V. C. Gopala Charriar, the present Tahsildar of Koilkuntla, assumed charge of Koilkuntla taluk, and I am glad to state that he has within a short period inspected most of the villages in the taluk. In the month of December, M.R.Ry. Gopalar Setu Rau, Tahsildar of Pattikonda, inspected almost all the affected villages with me in his taluk. A minor irrigation work was opened at Maddikera in the latter part of December, not as a relief work and it was carried out on normal rates.

6. Ever since the news of the loots of Kurnool bazaar had reached the two taluks in the division, there had been signs of disturbance at Nossam, Koilkuntla, Pyapali and Maddikera. Timely precautions had been taken and all these anxieties disappeared, since the receipt of the news of the Kurnool town having been guarded by military force.

7. Attempts had been made to open relief works at Owk and Maddikera in January last. Ryots refused to do the work.

8. In the middle of February, M. R. Ry. Gopala Charriar, Tahsildar of Koilkuntla, opened relief works at Owk and Itikala under your instructions. I had proceeded to those sections and made requisite arrangements for the conduct and inspection of the works. I had also opened relief work of Maddikera section in Pattikonda taluk.

9. Deputy Tahsildar M.R.Ry. J. Gundu Rau was directed to inspect the works of Owk and Maddikera section under the general control of the Tahsildar. Pyapali Deputy Tahsildar inspected the Tahsildar of Pattikonda had general control of Maddikera section throughout.

10. In April last, relief work was opened by me on Nossam road with a kitchen near Gulladurto. The Special Deputy Tahsildar was placed in charge under the general control of the Tahsildar. When there was no work at Owk and Itikala sections, I had opened, under orders, the new formation of road-work from Owk to Koilkuntla on the 3rd July last.

11. No kitchen was opened in connection with Maddikera and Owk to Koilkuntla section relief works as coolies refused to send their children below 7 to kitchens.

12. I and Tahsildar tried to open relief work near Kodumūr on two or three occasions in vain. Till 15th June no coolies had come forward to work on roads. When some have expressed their wish to work, I had reported to Mr. Bradley, and as there had been copious rain from the third week in that month, the necessity for opening the work was given up.

13. From December, when the Famine Commissioner passed through Kodumūr, inquiries had been made now and then as to the necessity of opening relief operations to weavers thereof. On the 3rd May last, I and the Tahsildar found that some weavers locked up their houses and left Kodumūr for livelihood in the Nizam's territory. A report was thereon sent by me. Sanction had been received in June to open relief operations. From 9th to 15th of the said month, I had remained at Kodumūr and started relief to weavers.

14. South-west monsoon of the current year, having been turned out favorable, I have closed all relief operations one after another in August last.

15. There was no death by starvation anywhere. Metal breaking and stacking were the chief works carried out on all roads. Gravel-digging and spreading works also had been carried out to a small extent on Maddikera and Owk to Koilkuntla road sections. Gravel-digging and stacking took place on Itikala and Owk sections to a small extent.

16. In May and June the Tahsildar of Koilkuntla and myself had detected unbroken stones mixed in the heaps of broken metal in Nossam and Owk sections, respectively. I had punished the head coolies and maistries, &c. Of course deductions had been made proportionately in the wages of the gangs concerned.

17. The system of carrying out works under the immediate supervision of the overseers and of making payments by paying officers under the control of Revenue authorities, had been worked very satisfactorily, and there was not a single complaint that the coolies were not paid their wages regularly.

18. All the famine expenditure has already been accounted for.

19. Loans under Land Improvement and Agricultural Loans Acts had been given almost in all cases with my sanction in this division. The very real want only had been taken into consideration in sanctioning the loans.

20. There was no increase of crimes during the distress.

21. I have settled the jamabandi of the two taluks in this division for fasli 1301 and granted remissions for wet lands, without reference to affected tracts. I have also granted remissions, under orders, for dry lands in the affected villages.

22. My Tahsildars had been on constant move and I believe that they have done their work carefully. Of the two, M.B.Ry. Gopala Charriar, Tahsildar of Koilkuntla, had to do more work as regards arrangement and inspection of relief works. Koilkuntla taluk had an excellent officer in him when the services of such an officer were urgently required. I consider that he has done specially good work.

ENCLOSURE No. 3.

From M.B.Ry. P. SEETHA RAO Pantulu Garu, Deputy Collector of Kurnool, to the Collector of Kurnool, dated 16th November 1892, No. 960.

Referring to your endorsement No. 6500, dated 15th September 1892, calling for a report on the conduct of famine operations in this division, I have the honour to state that, as I have joined the division after the works were closed and as I have not conducted the operations in person, my report is necessarily brief, based on information and experience not personal.

9. So far as this division is concerned, the period of famine proper may be said to have begun in January and ended in July 1892; before that it was a period of distress, the symptoms of which made themselves visible in October, when the north-east monsoon which followed a deficient south-west monsoon fall, began to prove a failure and when the lands brought under cultivation held out no hopes of normal yield.

3. The area affected is 723 acres being about one-third of each of the two taluks of Rāmālakōt and Nandikōtkūr forming this division as shown below containing a population of 71,177:—

Taluka.	Total area.	Total population.	Affected area.	Affected population.
Rāmālakōt	846	124,971	283	41,667
Nandikōtkūr	1,322	58,660	441	29,510

Nandikōtkūr which had the benefits of the Kurnool canal and which enjoyed better rainfall

farred better, and even in Rāmālakōt the distress was keenly felt only in and around Kurnool, where there is a large population of landless classes living from hand to mouth. Want of work and rapid, and sudden rise in prices brought matters to a crisis and led to the grain riots of November 1891. The way in which these riots were dealt with having formed the subject of separate correspondence, I do not touch upon it here. It was not until the occurrence of these riots that the necessity for throwing open relief works was recognized. The first test work-breaking and stacking metal on the Sunkesala road was opened on the 21st November 1891 under the supervision of the Local Fund Engineer. It was started with 131 coolies and the number gradually increased, so that on the 13th January 1892, the provisions of the Famine Code were brought into force and the following works were opened as relief works under that Code:—

Rāmālakōt taluk—

- (1) Breaking and stacking metal on Gooty road.
- (2) Repairing the tank at Veldurti.
- (3) Do. do. at Tadakanapalli.

Nandikōtkūr taluk—

- (4) Repairing the tank at Ramapuram.

The first work was executed under the supervision of the Local Fund Engineering Department and the rest under that of the Public Works Department.

The following statement shows the number of coolies employed on all the works on the last day of each month from January to June. The expenditure incurred is Rs. 29,152-1-3:—

Months.	Men.	Nursing mothers.	Women.	Children.	Total.
January 1892	89	144	96	174	603
February	610	26	516	154	1,306
March	377	64	634	303	1,378
April	689	216	774	519	2,198
May	636	198	957	562	2,353
June	223	65	376	104	768

With the outburst of the south-west monsoon of the current year the numbers began to fall considerably, so that on the 24th July all works were finally closed. It is reported that the coolies, while employed on works, kept up good health, and that every care was taken to prevent starvation and death.

4. The other forms of relief resorted to in addition to the opening of works are:—

I. Grant of wet and dry remissions to the extent of Rs. 1 7,602-12-10.

II. Suspension of kists to the amount of Rs. 10,957-1-1 in the marginally-noted villages which suffered most.

III. Money dole from His Highness the Maharaja Holkar's charitable donation, out of which Rs. 400 were allotted to this division, and from a fund raised in the town by a private committee, headed by Messrs. Kough and Weld, to the extent of Rs. 602.

IV. Advances under the Land Improvement Loans Act and Agriculturists' Loans Act to the extent of Rs. 12,055 as shown in the margin.

5. To relieve such of the gosha women as would not go out on works, an attempt was made to open a kitchen, but it proved a failure, none having attended it. It was also proposed in the beginning to give some help to the weaving classes by way of advances, but the proposal was subsequently abandoned.

Taluka.	Total area.	Total population.	Affected area.	Affected population.
Rāmālakōt	846	124,971	283	41,667
Nandikōtkūr	1,322	58,660	441	29,510

Taluka.	Total area.	Total population.	Affected area.	Affected population.
Rāmālakōt	846	124,971	283	41,667
Nandikōtkūr	1,322	58,660	441	29,510

6. It is a matter of satisfaction that during the period of distress no human deaths were allowed to occur from starvation, but the same cannot be said of cattle, many of which died a slow death for want of fodder.

The following statement shows their mortality :—

Months.							Bāmāllakōt.	Nandikōtkār.
June 1891	...	...	...	...	...	...	350	401
July	"	...	...	...	...	...	133	345
August	"	...	...	...	...	...	94	90
September	"	...	...	...	...	...	75	28
October	"	...	...	...	...	...	62	80
November	"	...	...	...	...	...	43	83
December	"	...	...	...	...	...	87	127
January 1892	...	...	...	...	...	...	119	152
February	"	...	...	...	...	...	49	75
March	"	...	...	...	...	...	89	83
April	"	...	...	...	...	...	315	135
May	"	...	...	...	...	...	494	139
June	"	...	...	...	...	...	414	212
July	"	...	...	...	...	...	130	145

7. As a natural consequence, there was an increase in crime. In addition to the cases connected with the grain loots there were 17 robberies and 13 dacoities besides minor thefts as shown below :—

Nature of crime.	Reported from 1st July 1890 to 30th June 1891.	Reported from 1st July 1891 to 30th June 1892.	Increase.	Decrease.
Murders	2	9	7	..
Attempts at murder	1	..	..	1
Culpable homicide	3	5	2	..
Causing death or grievous hurt by rash or negligent act	1	3	2	..
Dacoity	2	13	11	..
Robbery	18	17	..	1
House breaking	69	93	24	..
Attempts	38	32	..	6
Theft	132	168	36	..
Attempts	2	2	..	..
All other offences	164	224	60	..
Special and Local Laws	109	69	..	40
Total	541	635	142	48

8. As regards the conduct of officers who had anything to do with the operations, I am not in a position to say anything, as I have not seen the work of any of them.

Resolution—dated 18th February 1893, No. 64.

Recorded, pending the preparation of the general famine report.

(True Copies and Extract.)

P. RAJARATNA MUDALIAR,

Secretary.

To the Collector of Kurnool.



Ext. A. Grubert.

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