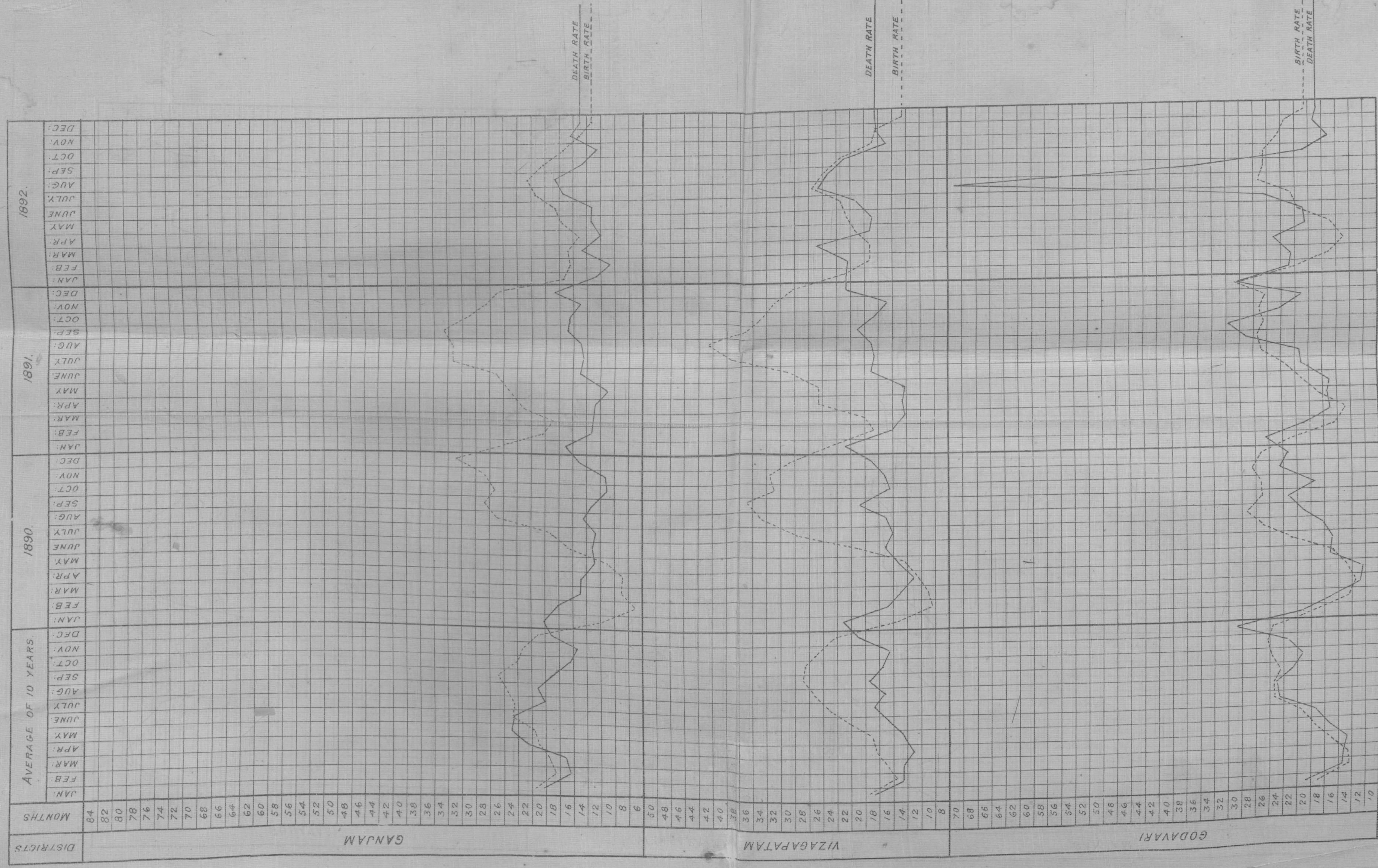
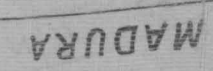


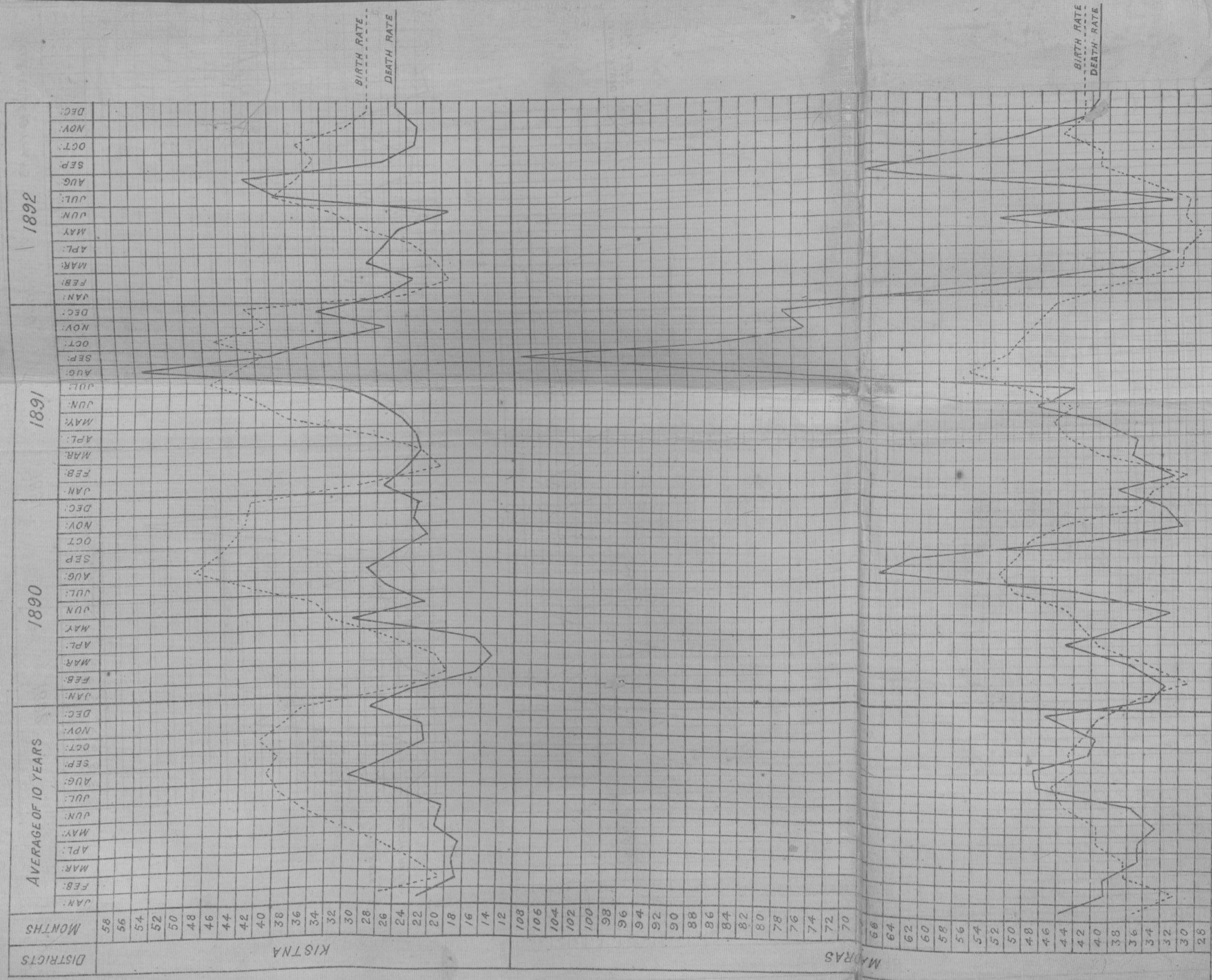
DIAGRAM SHOWING THE BIRTH AND DEATH RATES PER MILLE PER ANNUM IN THE UNDERMENTIONED DISTRICTS.
DURING THE YEAR 1892 COMPARED WITH PREVIOUS YEARS.



in the



DURING THE YEAR 1892 COMPARED WITH PREVIOUS YEARS.



Comparative Statement showing the Mortuary and Meteorological Statistics of different Districts comprised preceding it, required by the Government of India,

Districts.	Population.	Total deaths.	Deaths from				Temperature in shade.			Mean humidity.	Wind.		Rainfall in inches.
			Cholera.	Small-pox.	Fever.	Dysentery and Diarrhoea.	Maximum.	Minimum.	Mean.		Prevailing direction.	Mean velocity (in miles).	
Anantapur.	1892	708,143	14,427	820	129	2,937	222	...	...	...	...	...	27.87
	1891	708,143	17,560	4,373	254	2,638	244	...	...	...	...	...	29.39
	1890	603,656	15,759	39	789	4,189	268	...	...	...	...	...	20.97
	1889	599,889	14,727	859	1,120	2,185	293	...	...	...	...	...	32.69
	1888	599,889	14,528	826	360	2,212	357	...	...	...	...	...	20.24
	1887	599,889	15,741	585	1,244	2,407	386	...	...	...	...	...	26.23
Bellary.	1892	909,661	24,979	2,455	364	9,522	1,087	108.5	53.2	79.9	58	158	27.35
	1891	909,661	23,400	3,115	267	7,001	656	106.6	51.0	81.3	54	173	10.02
	1890	732,361	19,155	...	554	7,438	567	106.7	47.2	80.3	59	155	24.47
	1889	736,128	23,118	1,757	2,782	5,829	838	108.1	52.0	81.2	55	159	29.89
	1888	736,128	20,957	1,651	1,296	5,444	867	108.6	51.8	81.5	52	159	20.11
	1887	736,128	21,160	1,898	813	6,185	728	106.2	55.3	79.3	53	155	20.30
Chingleput.	1892	1,133,901	26,389	1,957	367	7,099	3,646	...	...	...	...	...	36.06
	1891	1,133,901	32,132	4,985	623	7,453	4,088	...	...	...	...	...	31.31
	1890	978,524	23,565	410	684	6,454	2,809	...	...	...	...	...	29.44
	1889	978,524	26,216	1,544	485	5,938	3,964	...	...	...	...	...	38.90
	1888	978,524	25,931	2,561	284	5,393	4,093	...	...	...	...	...	54.39
	1887	978,524	25,051	360	222	6,198	3,956	...	...	...	...	...	60.21
Coimbatore.	1892	2,003,911	36,515	2,091	2,075	14,676	1,108	100.8	57.0	80.3	86	122	21.25
	1891	2,003,911	43,152	8,394	1,894	13,912	1,445	101.3	58.6	79.8	83	96	21.59
	1890	1,657,144	36,284	2,364	558	15,732	1,136	104.3	58.0	79.6	83	96	25.03
	1889	1,657,144	33,727	2,976	800	12,935	1,541	104.3	58.9	80.5	88	88	26.69
	1888	1,657,144	27,986	1,651	766	11,016	1,161	102.3	...	82.9	...	89	19.85
	1887	1,657,144	31,936	2,278	1,507	12,898	1,359	101.4	55.7	77.0	83	104	27.27
Cuddapah.	1892	1,271,721	30,731	3,338	405	21,362	728	113.3	58.3	84.1	66	...	35.31
	1891	1,271,721	28,538	6,270	644	16,861	601	109.8	57.3	85.8	63	...	14.79
	1890	1,120,714	27,602	2,073	1,307	13,444	770	109.3	58.3	84.1	72	...	21.17
	1889	1,120,714	24,348	496	2,285	16,642	693	113.3	58.8	84.2	69	...	30.53
	1888	1,120,714	26,758	2,213	1,015	18,258	753	111.4	54.8	84.6	54	...	27.23
	1887	1,120,714	28,245	3,361	663	18,906	711	109.4	58.3	83.2	57	...	34.88
Ganjam.	1892	1,896,400	27,153	469	498	20,123	809	97.2	54.5	78.9	82	338	49.65
	1891	1,896,400	18,665	136	198	14,165	329	92.2	52.0	79.5	80	316	35.72
	1890	1,346,545	18,074	60	770	13,876	400	93.2	55.0	80.3	81	314	43.09
	1889	977,341	40,037	13,932	4,290	15,852	563	96.2	57.5	80.9	78	339	59.42
	1888	973,102	17,390	688	2,206	11,414	443	95.7	56.4	79.0	...	311	27.09
	1887	874,404	21,296	204	1,071	16,669	437	95.2	56.0	78.8	...	230	46.56
Godavari.	1892	2,077,858	56,341	13,618	6,211	18,446	1,217	116.1	58.9	83.0	75	...	50.53
	1891	2,077,858	39,922	1,496	4,101	17,753	874	114.1	57.9	83.9	73	...	25.34
	1890	1,790,850	34,514	...	1,716	17,536	686	113.6	58.9	82.9	79	...	41.21
	1889	1,790,850	43,694	9,686	197	17,286	1,121	110.1	57.9	83.1	69	...	46.44
	1888	1,790,850	27,270	2,809	42	12,145	695	110.1	57.7	83.2	56	...	31.46
	1887	1,790,850	35,343	3,676	174	17,444	1,070	114.1	57.4	82.5	57	...	37.56
Kistna.	1892	1,855,024	51,080	4,539	6,438	17,514	1,053	114.7	57.7	82.0	85	138	46.22
	1891	1,855,024	47,397	4,353	8,223	14,655	1,234	112.7	59.6	88.5	82	96	21.20
	1890	1,548,355	35,709	9	1,871	15,446	509	113.7	60.2	82.5	83	72	31.84
	1889	1,548,355	38,393	3,757	323	14,780	526	110.7	58.4	81.8	79	110	36.60
	1888	1,548,355	30,226	3,422	63	11,310	432	100.0	57.7	82.3	73	109	25.93
	1887	1,548,355	33,783	2,386	60	14,486	452	114.4	59.1	81.9	73	161	32.43
Kurnool.	1892	817,660	28,701	4,886	421	18,691	428	111.6	51.2	70	...	...	38.96
	1891	817,660	22,381	3,286	214	14,315	550	108.6	46.6	82.9	68	...	15.41
	1890	678,464	20,190	127	421	15,560	314	111.6	47.7	81.4	68	...	29.14
	1889	678,464	21,071	339	2,913	13,586	340	107.6	47.1	81.9	68	...	35.76
	1888	678,464	21,111	411	1,609	15,008	331	109.8	46.8	82.7	46	...	20.37
	1887	678,464	21,083	172	634	15,916	416	106.1	50.2	81.3	54	...	31.68
Madras.	1892	436,375	20,287	565	25	6,794	3,863	108.4	62.6	80.8	76	157	38.40
	1891	436,375	23,181	1,806	65	6,635	4,480	107.3	61.7	82.2	75	179	30.43
	1890	389,984	16,647	687	72	4,588	2,620	109.0	61.7	80.9	78	144	27.99
	1889	389,984	16,618	171	42	4,064	2,930	107.0	61.9	81.2	78	148	43.39
	1888	389,984	14,755	521	35	3,306	2,524	104.1	61.1	81.1	77	160	62.47
	1887	389,984	15,368	471	12	3,973	2,850	106.7	60.6	80.8	77	166	70.24
Madura.	1892	1,573,318	30,687	2,838	2,509	8,499	983	105.5	64.7	83.7	68	66	20.47
	1891	1,563,317	37,515	7,731	3,159	8,770	1,186	104.0	64.2	84.1	69	72	36.19
	1890	1,293,829	30,976	4,015	1,246	9,491	1,023	105.5	62.7	83.8	69	72	28.82
	1889	1,293,829	30,093	4,752	877	7,619	1,281	105.0	64.2	84.4	72	72	28.22
	1888	1,293,829	24,851	859	1,880	7,083	884	106.6	62.2	83.6	59	80	29.91
	1887	1,293,829	24,512	23	1,889	7,760	834	104.8	62.9	81.8	58	77	35.48

in the Madras Presidency, together with the prices current of the chief food-grains for 1892 and five years vide G.O., No. 1239L., dated 25th May 1892.

Average quantity in seers per rupee of the chief food-grains in general use in the districts.				Remarks.
Rice (2nd sort).	Cholam.	Cumbu.	Ragi.	
9.5	15.9	13.0	17.1	In 1892, although the rainfall was less than in 1891, yet it was a little above the average. The prices of food were high, higher than in any of the preceding five years. The number of deaths registered was less than in any of the previous five years. The mortality from fevers was above the average, but in the beginning of the year influenza prevailed in parts of the district. The deaths from small-pox, and also from dysentery and diarrhoea, were less than in any of the preceding five years.
11.1	23.3	19.6	25.6	
13.4	29.4	24.5	29.8	
14.3	31.6	26.3	32.6	
15.3	31.4	26.0	32.7	
15.4	32.6	24.9	32.5	The rainfall in 1892 was above the average and greater than in any of the preceding five years except 1889. The prices of food were higher than in any of the preceding five years. Relief works were opened, but were closed in September. The deaths registered in 1892 were greater than in any of the previous five years. Cholera prevailed in 1892 for ten months and caused 2,455 deaths, the mortality being greater than in any of the preceding five years except 1891. There was a marked increase under fevers, dysentery and diarrhoea, and more deaths were returned from them than in any of the previous five years. Many deaths, at least 1,000 according to the District Surgeon, were entered under fevers, but these in reality were due to influenza which was prevalent in the district during the beginning of the year.
9.2	17.3	14.9	18.3	
11.2	25.2	20.8	25.4	
12.8	28.3	23.4	30.0	
13.3	28.9	21.3	33.9	
13.7	32.9	23.5	36.4	The rainfall in 1892, although below the average, was greater than in either 1891 or 1890. The decrease in the rainfall was due to the failure of the north-east monsoon. The prices of food were high, higher than in any of the previous five years. The mortality, although less than that in 1891, was greater than in any of the other years (1887-90). Cholera was prevalent throughout the year and many deaths were registered from fever.
13.7	28.6	27.1	34.2	
9.1	...	...	15.5	
10.8	...	17.2	19.3	
11.5	...	17.2	24.1	
13.7	...	18.8	25.3	With the exception of 1888 the rainfall was less in 1892 than in any of the previous five years. The prices of food were high. The mortality was less in 1892 than in 1891, but greater than in any of the four years (1887-90). There was an increase in deaths registered from small-pox and fevers.
15.9	...	19.1	25.4	
15.4	...	20.3	26.6	
10.0	16.3	17.4	17.0	
11.1	17.9	18.8	20.6	
12.2	20.6	22.2	26.2	The rainfall in 1892 was greater than in any of the previous five years, and was more than double that registered in 1891. The prices of food were higher than in any of the previous five years. The mortality was greater than in any of the preceding five years and the increase occurred mainly under fevers. This increase under fevers was chiefly due to the heavy rainfall in 1892. In August and October there was heavy rain and the deaths from fevers in September, October, November and December were above the average.
13.4	22.0	24.2	26.3	
14.3	22.2	23.8	26.6	
14.5	22.6	24.2	27.3	
9.3	15.2	16.5	17.8	
10.3	20.7	18.0	21.9	The rainfall in 1892 was greater than in any of the previous five years with the exception of 1889. The prices of food were also higher than in any of the preceding five years with the exception of 1889. Excluding 1889, which was an exceptional year in Ganjam, the mortality was higher than in any of the previous five years, the increase mainly occurring under fevers.
12.9	22.5	25.9	29.4	
13.3	22.7	26.7	30.6	
14.3	25.1	31.1	32.9	
15.2	24.8	28.7	28.3	
11.2	14.5	...	17.8	The rainfall in 1892 was greater than in any of the preceding five years and nearly double the amount registered in 1891. The prices of food were much higher than in any of the preceding five years. Many more deaths were registered in 1892 than in any other year, the increase occurring under all heads, but most marked under cholera and small-pox.
14.8	...	...	28.2	
12.7	...	...	24.4	
10.7	...	...	19.1	
15.1	...	...	26.6	
15.6	...	...	29.2	Rainfall in 1892 was much greater and prices of food higher than in any of the previous five years. The mortality was greater than in any other year and there was a large increase under fevers.
10.9	15.9	17.9	17.3	
13.7	22.4	24.5	25.0	
15.1	24.7	26.2	28.9	
15.2	24.8	23.8	25.6	
16.3	24.8	21.6	27.9	The rainfall in 1892 was greater and prices of food higher than in any of the preceding five years. More deaths were registered in 1892 than in any other year and the increase was mainly under cholera and fevers. At the beginning of the year influenza prevailed and increased the deaths under fevers. In August, September and October heavy rain fell and the deaths registered from fevers during the latter part of the year were above the average.
15.5	23.7	23.4	20.9	
11.0	16.0	...	18.3	
12.5	18.0	...	25.8	
13.6	18.7	...	27.2	
13.2	20.4	...	24.1	Although the rainfall in 1892 was greater than in 1890 and 1891, yet it was less than in the three years (1887-89). The prices of food were higher than in any of the previous five years. The deaths registered in 1892 were less than in 1891, but greater than in any of the four years (1887-90). The mortality from fevers in 1892 was greater than in any of the previous five years.
14.9	21.4	...	25.7	
15.6	19.0	...	29.3	
9.7	16.6	14.9	...	
11.5	24.0	19.9	...	
11.2	26.1	23.8	31.0	The rainfall in 1892 was much less and the prices of food higher than in any of the preceding five years. The mortality in 1892 was less than in 1890 and 1891, but greater than in any of the three years (1887-89).
11.6	24.3	21.6	28.4	
13.0	27.6	23.3	...	
13.5	23.0	23.2	27.6	
9.3	13.9	14.3	15.8	
10.4	17.3	15.8	19.3	The rainfall in 1892 was much less and the prices of food higher than in any of the preceding five years. The mortality in 1892 was less than in 1890 and 1891, but greater than in any of the three years (1887-89).
11.2	18.9	18.1	24.7	
12.8	19.6	20.9	26.6	
13.0	23.0	23.3	27.8	
13.5	23.0	23.2	27.6	
9.9	14.3	14.3	15.7	The rainfall in 1892 was much less and the prices of food higher than in any of the preceding five years. The mortality in 1892 was less than in 1890 and 1891, but greater than in any of the three years (1887-89).
11.2	17.1	16.6	19.4	
10.8	18.9	17.8	22.1	
13.1	24.1	21.7	26.0	
14.1	24.5	23.5	26.5	
14.0	25.0	24.3	28.5	

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 DIAGRAM SHOWING THE BIRTH AND DEATH RATES PER MILLE PER ANNUM IN THE UNDERMENTIONED DISTRICTS
 DURING THE YEAR 1892 COMPARED WITH PREVIOUS YEARS.

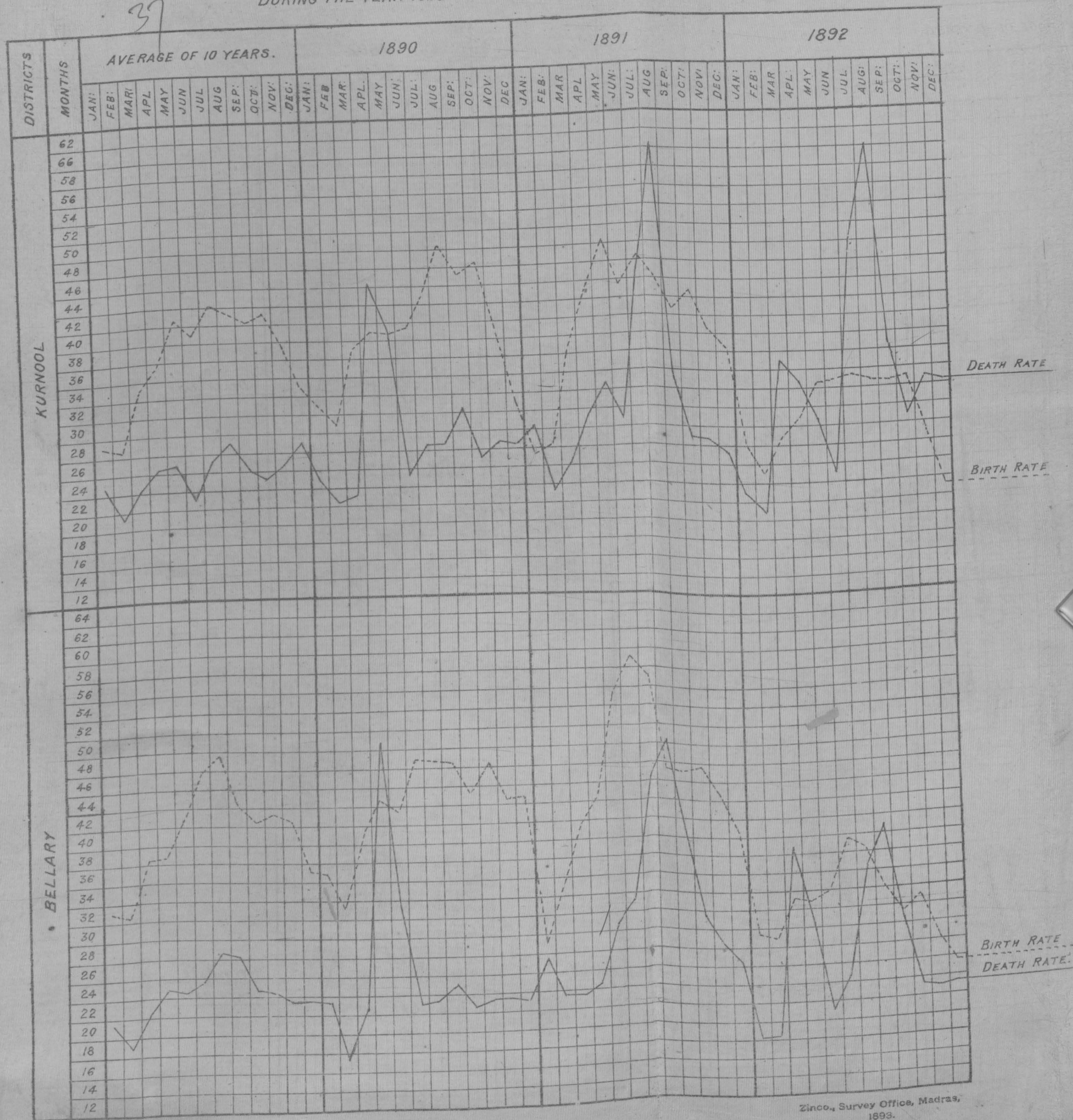
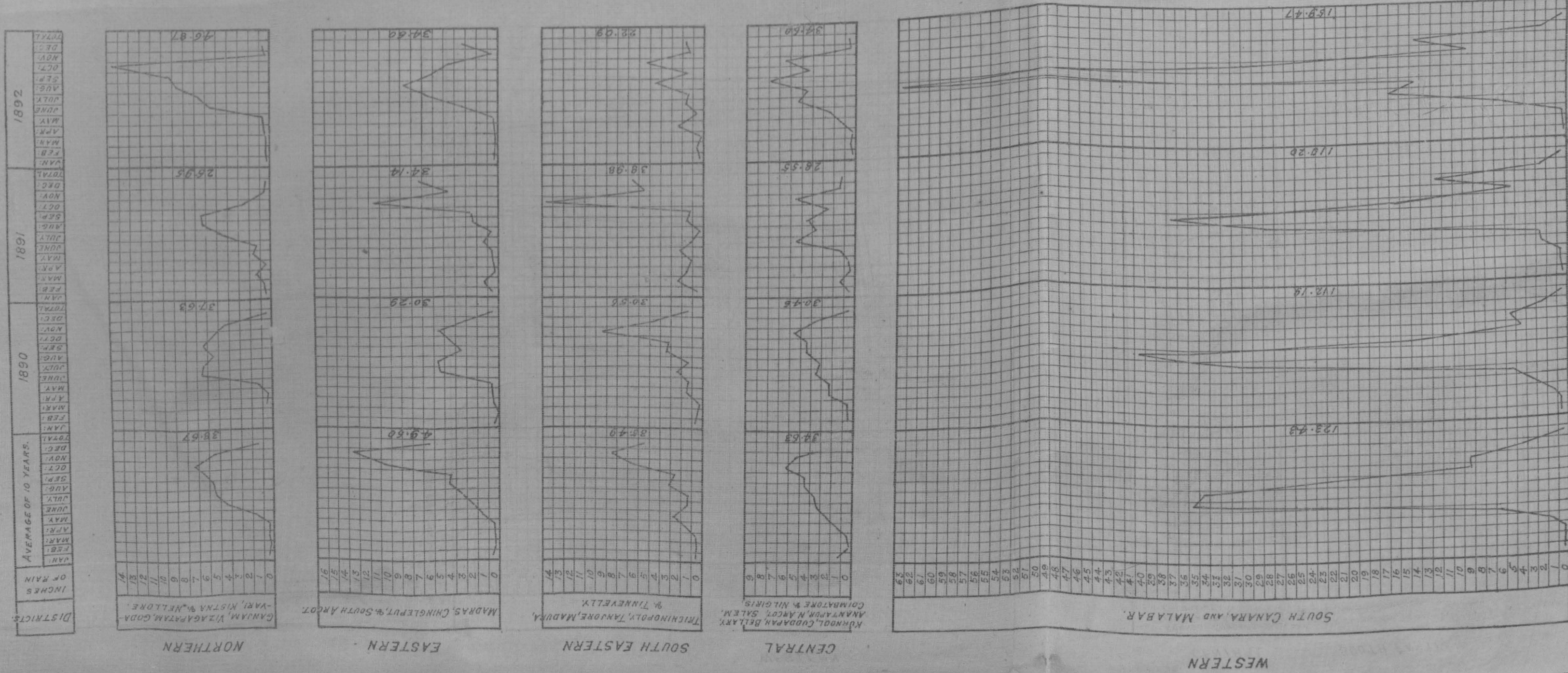
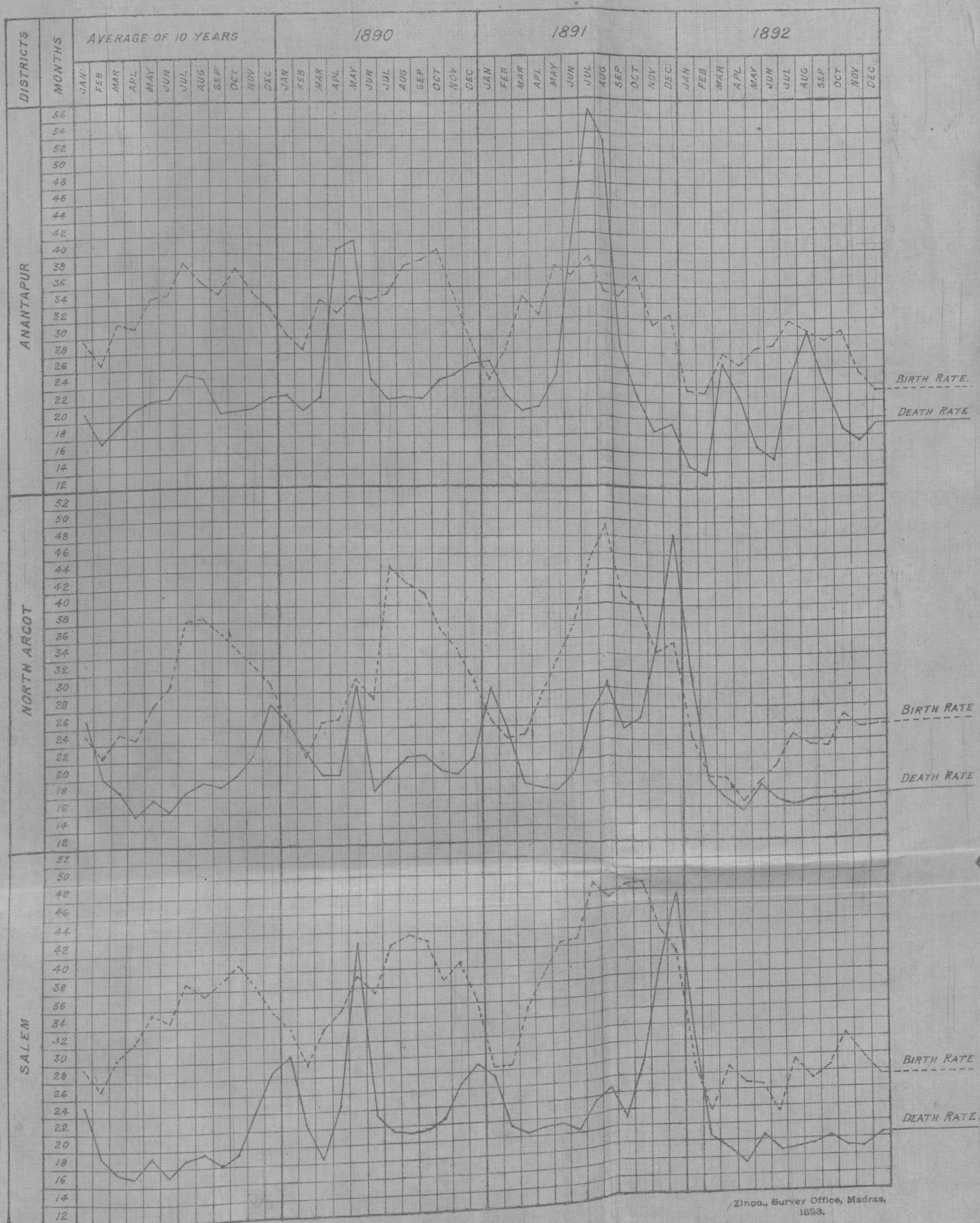


DIAGRAM SHOWING THE RAINFALL IN DIFFERENT GROUPS OF DISTRICTS (NORTHERN, EASTERN, SOUTH EASTERN, CENTRAL & WESTERN) OF THE MADRAS PRESIDENCY DURING 1892 COMPARED WITH THE TWO PREVIOUS YEARS AND THE AVERAGE OF 10 YEARS ENDING 1889.



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DIAGRAM SHOWING THE BIRTH AND DEATH RATES PER MILE PER ANNUM IN THE UNDERMENTIONED DISTRICTS DURING THE YEAR 1892 COMPARED WITH PREVIOUS YEARS.



Zingo, Survey Office, Madras, 1893.

Comparative Statement showing the Mortuary and Meteorological Statistics

Districts.	Population.	Total deaths.	Deaths from				Temperature in shade.			Mean humidity.	Wind.		Rainfall in inches.
			Cholera.	Small-pox.	Fever.	Dysentery and diarrhoea.	Maximum.	Minimum.	Mean.		Prevailing direction.	Mean velocity (in miles).	
Malabar.	1892	2,636,674	61,770	8,225	11,695	20,118	6,116	93.4	66.3	80.3	80	212	143.06
	1891	2,636,674	50,332	5,395	6,485	17,808	5,103	93.9	64.8	80.8	80	130	103.92
	1890	2,351,152	41,250	4,603	391	18,158	4,227	94.0	64.5	80.0	80	126	91.90
	1889	2,351,152	38,168	489	1,267	17,993	4,403	95.3	66.0	80.7	80	156	125.53
	1888	2,351,152	46,312	6,143	2,005	18,617	4,749	94.7	64.0	79.9	79	181	128.94
Nollore.	1892	2,351,152	37,169	175	3,013	17,311	3,780	93.6	64.8	79.2	80	...	105.50
	1891	1,463,357	29,252	1,818	1,345	12,894	887	115.7	62.1	84.4	77	164	34.65
	1890	1,463,357	25,083	1,754	316	11,539	660	111.3	61.1	85.3	75	192	19.18
	1889	1,219,883	19,911	39	230	10,415	540	112.8	61.1	84.1	75	166	23.95
	1888	1,219,883	19,009	1,623	327	7,940	748	110.3	60.6	83.7	79	168	29.07
Nilgiris.	1892	1,184,765	19,902	1,363	444	8,708	694	...	...	...	...	...	29.47
	1891	1,146,503	20,278	1,203	860	9,481	594	...	...	...	...	...	46.88
	1890	96,765	2,463	21	75	1,715	163	81.2	35.7	61.9	72	71	58.77
	1889	96,765	2,259	97	75	1,498	179	79.5	35.6	61.9	73	67	65.50
	1888	88,324	2,158	7	53	1,502	128	80.2	36.2	61.7	69	61	62.46
North Arcot.	1892	88,324	1,421	12	38	980	111	81.4	38.2	62.6	70	63	77.40
	1891	88,324	1,430	...	48	1,050	107	81.2	38.0	62.0	70	68	60.18
	1890	88,324	1,433	5	178	931	97	80.2	37.9	60.7	72	78	71.91
	1889	2,179,585	40,362	3,327	2,072	15,898	1,621	...	...	...	...	...	36.84
	1888	2,179,585	47,934	7,355	3,094	16,097	2,160	...	...	...	...	...	27.96
Salem.	1892	1,822,312	41,372	2,304	3,545	17,275	1,586	...	...	...	...	...	30.43
	1891	1,822,312	38,260	3,799	1,725	14,686	1,452	...	...	...	...	...	39.79
	1890	1,822,312	38,685	4,970	2,205	13,839	1,318	...	...	...	...	...	37.99
	1889	1,822,312	40,361	1,582	3,241	16,901	1,166	...	...	...	...	...	46.97
	1888	1,961,784	36,388	3,861	1,598	14,540	885	107.3	58.1	80.8	66	88	30.48
South Arcot.	1892	1,961,784	40,470	5,896	1,180	15,129	1,391	106.0	58.0	81.6	67	78	43.74
	1891	1,592,274	40,545	2,548	1,388	19,545	935	106.1	56.8	80.6	69	69	30.21
	1890	1,592,274	35,640	2,919	1,607	14,517	976	106.0	56.4	81.5	69	77	36.12
	1889	1,592,274	35,141	3,117	1,433	13,810	860	107.7	56.6	82.1	68	80	29.68
	1888	1,592,274	34,824	669	802	16,142	847	104.7	55.4	79.2	72	87	32.78
South Canara.	1892	2,162,336	40,615	3,831	1,601	12,546	1,000	106.3	62.8	81.9	86	78	29.34
	1891	2,162,336	64,079	16,096	4,805	14,926	2,322	105.8	64.3	83.2	81	72	40.68
	1890	1,815,916	48,797	2,043	8,166	15,216	1,103	107.8	62.2	82.1	80	64	33.45
	1889	1,815,916	45,490	6,377	4,010	12,644	1,180	...	...	...	...	...	33.19
	1888	1,815,916	39,660	2,957	1,530	12,797	1,041	...	...	...	...	...	47.92
Tanjore.	1892	1,815,916	36,546	32	847	13,075	691	...	...	...	...	...	62.67
	1891	1,052,002	23,447	1,206	485	8,766	1,563	95.3	64.5	80.3	83	62	175.88
	1890	1,052,002	19,721	357	147	7,618	1,359	96.8	63.5	81.1	83	48	116.49
	1889	955,595	25,333	...	63	10,303	2,439	94.8	65.0	80.2	82	72	132.56
	1888	955,595	20,013	353	354	6,005	1,779	93.5	60.5	80.4	83	68	168.90
Tinnevely.	1892	955,595	24,184	1,427	1,429	6,680	2,202	93.8	61.9	80.0	78	78	147.26
	1891	955,595	19,933	78	609	6,866	1,681	97.8	65.5	78.2	76	79	148.53
	1890	2,227,081	57,277	9,093	713	4,916	1,782	103.7	65.2	83.0	74	180	28.68
	1889	2,227,081	58,395	6,565	1,201	4,885	1,829	103.2	64.7	83.3	74	120	48.41
	1888	2,129,538	51,953	5,717	1,992	4,101	1,856	104.1	64.2	82.1	77	144	39.89
Trichinopoly.	1892	2,129,538	50,603	6,545	1,787	3,171	1,663	100.6	66.2	82.5	77	128	36.18
	1891	2,129,538	54,903	9,120	1,278	3,196	1,634	101.6	64.9	82.1	74	128	46.74
	1890	2,129,538	48,477	3,551	619	3,556	1,724	102.6	63.9	81.1	76	135	59.30
	1889	1,915,702	42,360	4,458	2,125	5,893	1,291	...	...	...	...	...	15.39
	1888	1,915,702	45,050	4,096	3,690	5,868	1,938	...	...	...	...	...	40.61
Vizagapatnam.	1892	1,699,056	43,042	5,825	999	6,421	1,536	...	...	...	...	...	18.78
	1891	1,699,056	37,416	4,575	228	5,047	1,506	...	...	...	...	...	22.86
	1890	1,699,056	39,451	7,281	461	4,932	1,312	...	...	...	...	...	35.64
	1889	1,699,056	35,527	609	1,881	5,550	1,340	...	...	...	...	...	34.56
	1888	1,371,726	27,401	2,328	419	5,540	641	108.8	62.8	83.1	60	138	23.86
Vizagapatnam.	1892	1,371,726	35,288	5,197	373	6,790	907	106.4	62.4	83.1	63	158	30.71
	1891	1,214,485	31,671	2,415	515	7,802	755	109.0	60.5	83.2	60	153	33.90
	1890	1,214,485	27,302	1,994	652	6,066	642	106.3	62.1	83.7	62	155	33.11
	1889	1,214,485	30,188	4,430	1,023	6,132	856	107.4	60.5	83.6	62	142	28.62
	1888	1,214,485	29,277	4,383	328	6,194	712	105.8	61.6	81.9	66	172	39.73
Vizagapatnam.	1892	1,942,195	42,130	3,229	1,587	32,138	1,205	97.9	62.9	81.0	73	46	53.29
	1891	1,942,195	25,153	80	314	20,773	638	99.9	59.9	82.1	69	70	33.32
	1890	1,493,352	25,887	3	762	22,363	394	96.0	60.5	82.6	68	58	48.11
	1889	1,390,330	35,854	7,065	1,029	24,457	572	96.8	60.0	82.9	67	61	53.56
	1888	1,232,074	16,395	257	452	12,211	408	101.1	59.5	83.6	65	32	34.94
Vizagapatnam.	1892	1,424,400	27,372	718	799	22,011	848	97.5	65.8	82.6	68	68	49.22

of different Districts comprised in the Madras Presidency, &c.—continued.

Average quantity in seers per rupee of the chief food-grains in general use in the districts.				Remarks.
Rice (2nd sort).	Cholam.	Cumbr.	Ragi.	
10.2	...	...	17.8	The rainfall was much greater and the prices of food higher than in any of the preceding five years. Many more deaths were registered in 1892 than in any of the previous five years and the increased mortality was chiefly due to the prevalence of small-pox, cholera and also fevers. Small-pox was very prevalent during the first four months of the year, and in the taluk of Ponani alone, with its large Moplah population, 3,356 deaths were recorded. At the close of the year the epidemic was declining.
10.6	...	...	20.8	
10.9	...	...	22.0	
12.3	...	...	20.4	
13.7	...	...	22.3	
14.4	...	...	22.4	The rainfall in 1892 was higher than in any of the previous five years with the exception of 1887. The prices of food were higher than in any of the previous five years. The mortality was greater than in any of the preceding five years, and there was an increase under all heads, especially under small-pox and fevers.
9.9	14.5	12.8	15.7	
11.0	18.2	18.6	18.9	
12.9	22.2	22.9	25.2	
13.5	23.0	21.7	27.0	
15.3	24.3	22.8	28.3	Rainfall in 1892 was less and prices of food higher than in any of the previous five years. More deaths were recorded in 1892 than in any of the preceding five years, the increase being under fevers.
14.6	25.4	23.1	28.8	
8.2	13.3	13.2	13.7	
8.8	15.8	14.4	15.6	
9.6	20.0	16.0	19.6	
10.7	19.8	16.9	20.4	Although the rainfall was greater in 1892 than in either 1890 or 1891, yet it was less than the amount registered in any of the three years (1887-89). The prices of food were higher. The mortality was less in 1892 than in either 1890 or 1891.
11.5	21.0	16.6	20.1	
12.1	21.3	18.1	21.2	
10.1	16.2	12.6	16.7	
10.3	17.1	15.0	21.4	
11.6	23.7	21.6	28.7	The rainfall in 1892 was below the average and much less than in 1891. The prices of food were higher than in any of the previous five years. Fewer deaths were registered in 1892 than in either 1890 or 1891.
13.1	27.7	24.5	32.8	
15.3	...	...	35.2	
14.6	...	32.2	34.6	
9.3	15.7	15.4	17.4	
10.7	18.8	19.4	21.5	The rainfall in 1892 was much less and the prices of food were higher in 1892 than in any of the previous five years. The mortality was less in 1892 than in any of the previous three years and the deaths from fever were fewer than in any of the previous five years.
12.8	22.7	24.4	28.7	
18.4	26.1	23.5	30.3	
14.2	26.7	24.8	31.2	
14.7	28.6	27.3	31.4	
10.8	16.8	18.5	17.2	The rainfall was greater and prices of food higher in 1892 than in any of the preceding five years. More deaths were registered in 1892 than in 1891 and the increase occurred chiefly under cholera and fevers.
11.4	15.4	19.0	18.3	
11.5	16.8	20.4	21.9	
14.1	20.2	23.5	24.1	
15.2	23.7	25.4	25.6	
15.4	23.5	26.9	26.1	The rainfall in 1892 was much below the average, being due to the failure of the north-east monsoon. The prices of food were also higher than in any of the preceding five years. The mortality, although less in 1892 than in 1891, was yet greater than in any of the four years (1887-90). Cholera was very prevalent in this district from January to August.
11.5	...	...	16.6	
12.1	...	...	19.0	
13.3	...	...	21.6	
12.5	...	...	21.4	
15.5	...	...	22.7	The rainfall in 1892 was less than in any of the previous five years and was due to a deficiency during October, November and December. The prices of food were high. The mortality was less than in either of the two previous years, but greater than in any of the three years (1887-89).
15.7	...	...	23.3	
10.7	...	16.3	17.8	

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DIAGRAM SHOWING THE BIRTH AND DEATH RATES PER MILLE PER ANNUM IN THE UNDERMENTIONED DISTRICTS
DURING THE YEAR 1892 COMPARED WITH PREVIOUS YEARS.

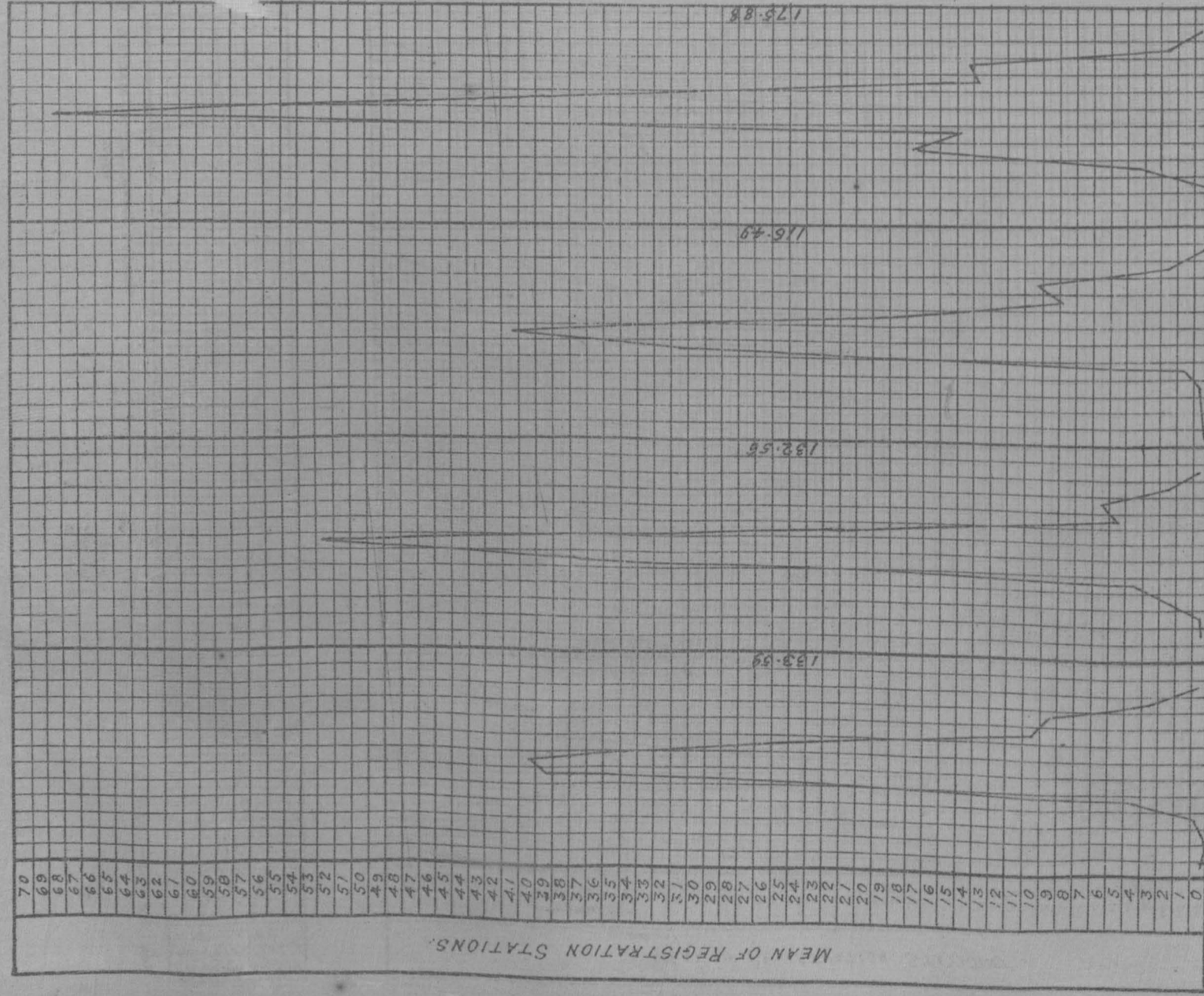


DIAGRAM SHOWING THE RAINFALL & PRICE OF FOOD (RICE) IN THE DISTRICTS OF SOUTH CANARA & MALABAR.
FOR 3 YEARS ENDING 1892. COMPARED WITH AVERAGE OF 10 YEARS.

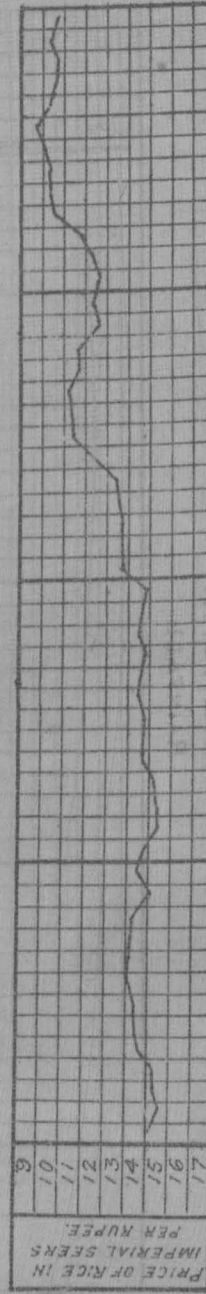
SOUTH CANARA

DISTRICTS	AVERAGE OF 10 YEARS.												1891												1892														
	YEARS																																						
MONTHS	JAN.	FEB.	MAR.	APR.	MAY.	JUNE.	JULY.	AUG.	SEPT.	OCT.	NOV.	DEC.	TOTAL.	JAN.	FEB.	MAR.	APR.	MAY.	JUNE.	JULY.	AUG.	SEPT.	OCT.	NOV.	DEC.	TOTAL.	JAN.	FEB.	MAR.	APR.	MAY.	JUNE.	JULY.	AUG.	SEPT.	OCT.	NOV.	DEC.	TOTAL.

RAINFALL.

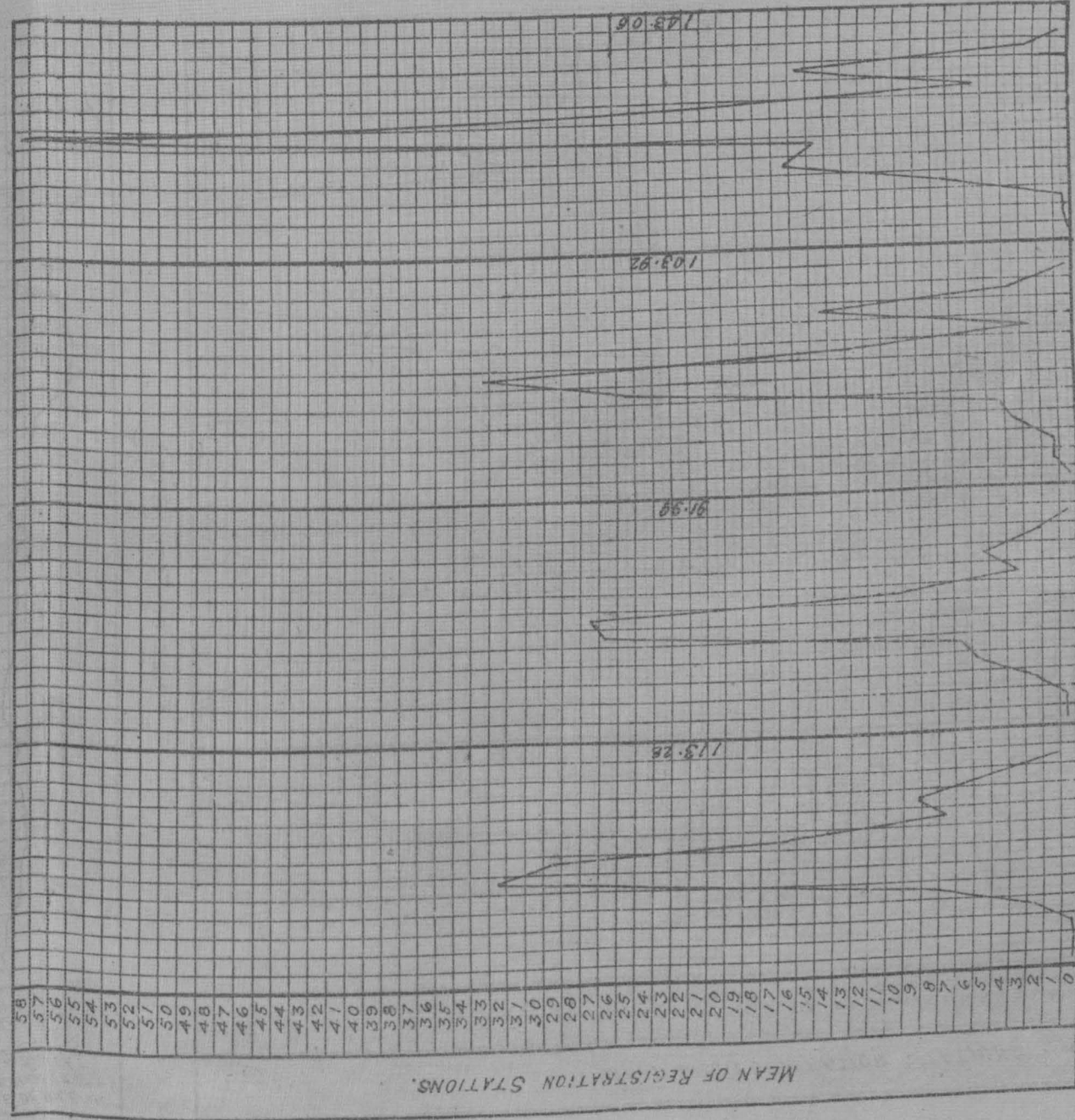


PRICE OF FOOD (RICE)

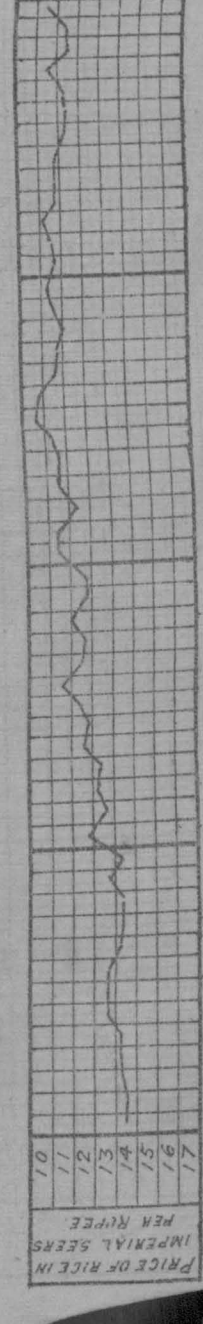


MALABAR

RAINFALL

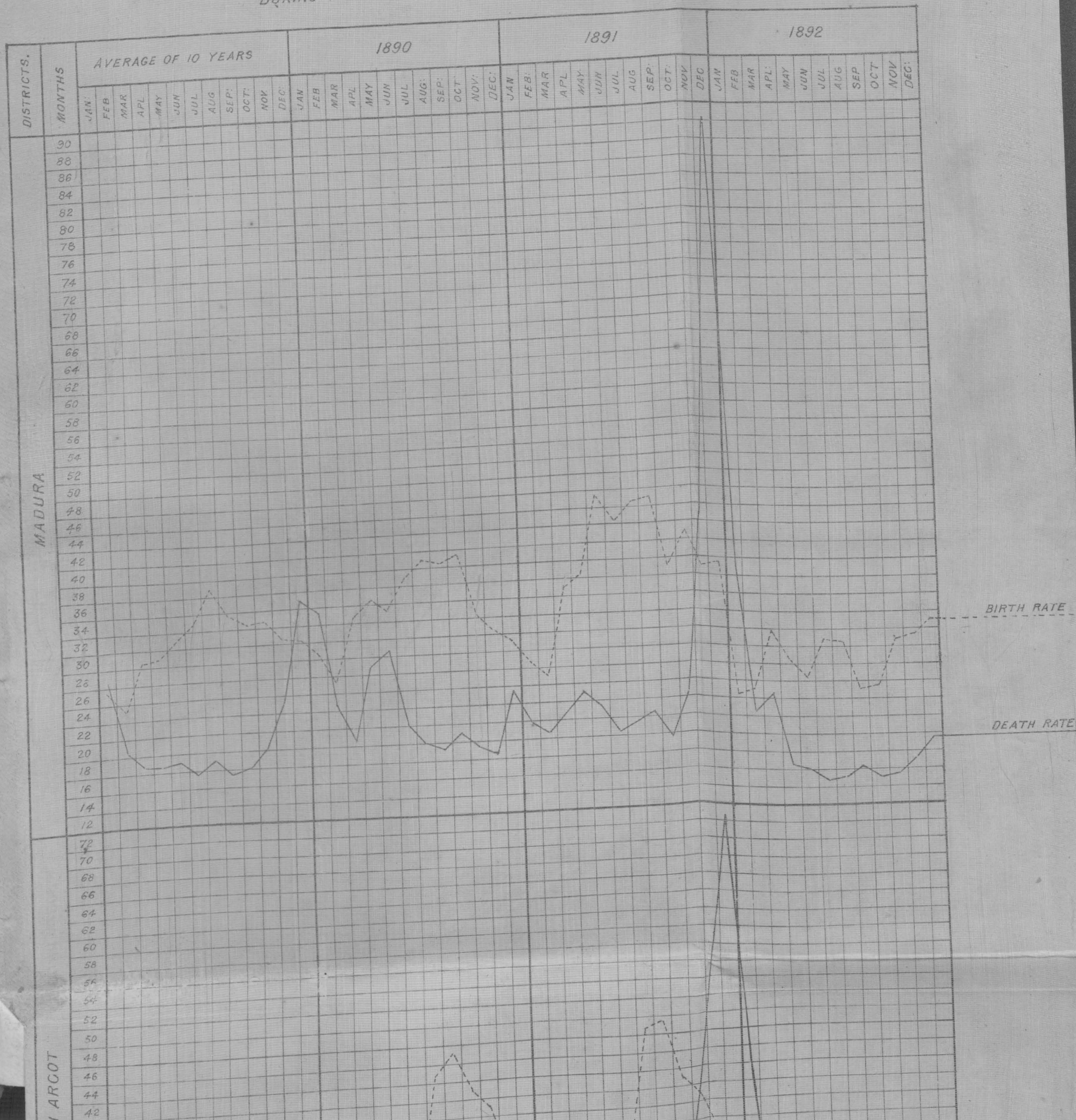


PRICE OF FOOD (RICE)



40

DIAGRAM SHOWING THE BIRTH AND DEATH RATES PER MILLE PER ANNUM IN THE UNDERMENTIONED DISTRICTS
DURING THE YEAR 1892 COMPARED WITH PREVIOUS YEARS.



GENERAL POPULATION.

4. The first regular census which was taken on the night of the 14th November 1871 returned the population of the Madras Presidency, excluding the Native States of Travancore, Cochin and Pudukóta, as 31,281,177. In the next census which was taken on the night of the 17th and on the morning of the 18th February 1881, the population had fallen to 30,868,504, showing a decrease of 412,673. In the last enumeration, however, made on the night of the 26th February 1891 the figure rose to 35,677,324. The total area of the Presidency being 141,605 square miles, the average population per square mile is 251.9. The following table shows the density of population for the different districts:—

Districts.	Population according to the Census of 1891.	Area in square miles.	Average population per square mile.
Madras	452,518	29	15,604.1
Tanjore	2,228,114	3,709	600.7
Malabar	2,652,565	5,585	474.9
South Arcot	2,162,851	5,217	414.6
Chingleput	1,136,928	2,842	400.0
Trichinopoly	1,372,717	3,631	378.0
Tinnevely	1,916,095	5,387	355.7
Madura	2,608,404	8,808	295.3
North Arcot	2,180,487	7,616	286.3
South Canara	1,056,081	3,902	270.6
Godávary	2,078,782	7,857	264.6
Salem	1,962,591	7,529	260.7
Coimbatore	2,004,839	7,860	255.1
Ganjam	1,896,803	8,370	226.6
Kistna	1,855,582	8,397	221.0
Nellore	1,463,736	8,765	167.0
Vizagapatam	2,802,992	17,242	162.6
Bellary	911,514	6,136	148.5
Cuddapah	1,272,072	8,722	145.8
Anantapur	708,549	5,275	134.3
Kurnool	853,307	7,769	109.8
Nilgiris	99,797	957	104.3
Total	*35,677,324	141,605	251.9

* Includes the European and Eurasian population.

The most thickly populated district is Madras, where 15,604 persons live in each square mile. Next to this stands Tanjore followed by Malabar, South Arcot and Chingleput. In all these districts the density varied from 600 to 400 per square mile. The most sparsely inhabited tracts of country are Kurnool and the Nilgiris.

5. The subjoined table compares the results of the Censuses of 1881 and 1891 exhibiting the increase in population for each district and the percentage it bore to the 1881 figure:—

Districts.	Population		Increase.	Percentage of increase.
	As per Census of 1881.	As per Census of 1891.		
Anantapur	599,889	708,549	108,660	18.11
Bellary	736,807	911,514	174,707	23.71
Chingleput	981,381	1,136,928	155,547	15.85
Coimbatore	1,657,690	2,004,839	347,149	20.94
Cuddapah	1,121,038	1,272,072	151,034	13.47
Ganjam	1,749,604	1,896,803	147,199	8.41
Godávary	1,791,512	2,078,782	287,270	16.03
Kistna	1,548,480	1,855,582	307,102	19.83
Kurnool	709,305	853,307	144,002	20.30
Madras	405,848	452,518	46,670	11.49
Madura	2,168,880	2,608,404	439,524	20.28
Malabar	2,365,035	2,652,565	287,530	12.16
Nellore	1,220,236	1,463,736	243,500	19.95
Nilgiris	91,034	99,797	8,763	9.63
North Arcot	1,817,814	2,180,487	362,673	19.95
Salem	1,599,595	1,962,591	362,996	22.69
South Arcot	1,814,738	2,162,851	348,113	19.18
South Canara	959,514	1,056,081	96,567	10.06
Tanjore	2,130,383	2,228,114	97,731	4.59
Tinnevely	1,699,747	1,916,095	216,348	12.73
Trichinopoly	1,215,033	1,372,717	157,684	12.98
Vizagapatam	2,485,141	2,802,992	317,851	12.79
Total	* 30,868,504	* 35,677,324	4,808,820	15.58

* Includes Europeans and Eurasians.

6. The total increase for the Presidency was 4,808,820 yielding a percentage of 15.58 on the previous census. In every district there had been an increase, but it varied considerably from 4.59 in Tanjore to 23.71 in Bellary. In 12 districts the rise in population was great being more than 15 per cent. In only 3 districts the increase was below 10 per cent. The increase in population may have been due to one or all of the following causes:—

- (1) Greater accuracy of enumeration in one census than in another.
- (2) Migration of people.
- (3) Natural increase in population as measured by the excess of births over deaths.

7. With regard to the first cause some part of the increase may, I think, be attributed to greater accuracy in enumeration, as from the condition of things in India it is natural to expect that successive enumerations should have been marked by increasing accuracy and that greater accuracy should have been attained in 1881 than in 1871 and in 1891 than in 1881. In this connection the Superintendent of Census Operations states in his letter No. 490, dated 13th March 1891, that "part of the increase is possibly due to more accurate enumeration and does not, therefore, represent a real addition to the population; but it was the general opinion of the officers who took part in the census of 1881 that the enumeration was fairly accurate, so there seems no reason to doubt that the real increase in numbers has been considerably greater than was anticipated."

As regards the effect of migration on population it would appear that the Presidency, as a whole, has not gained by immigration to any great extent.

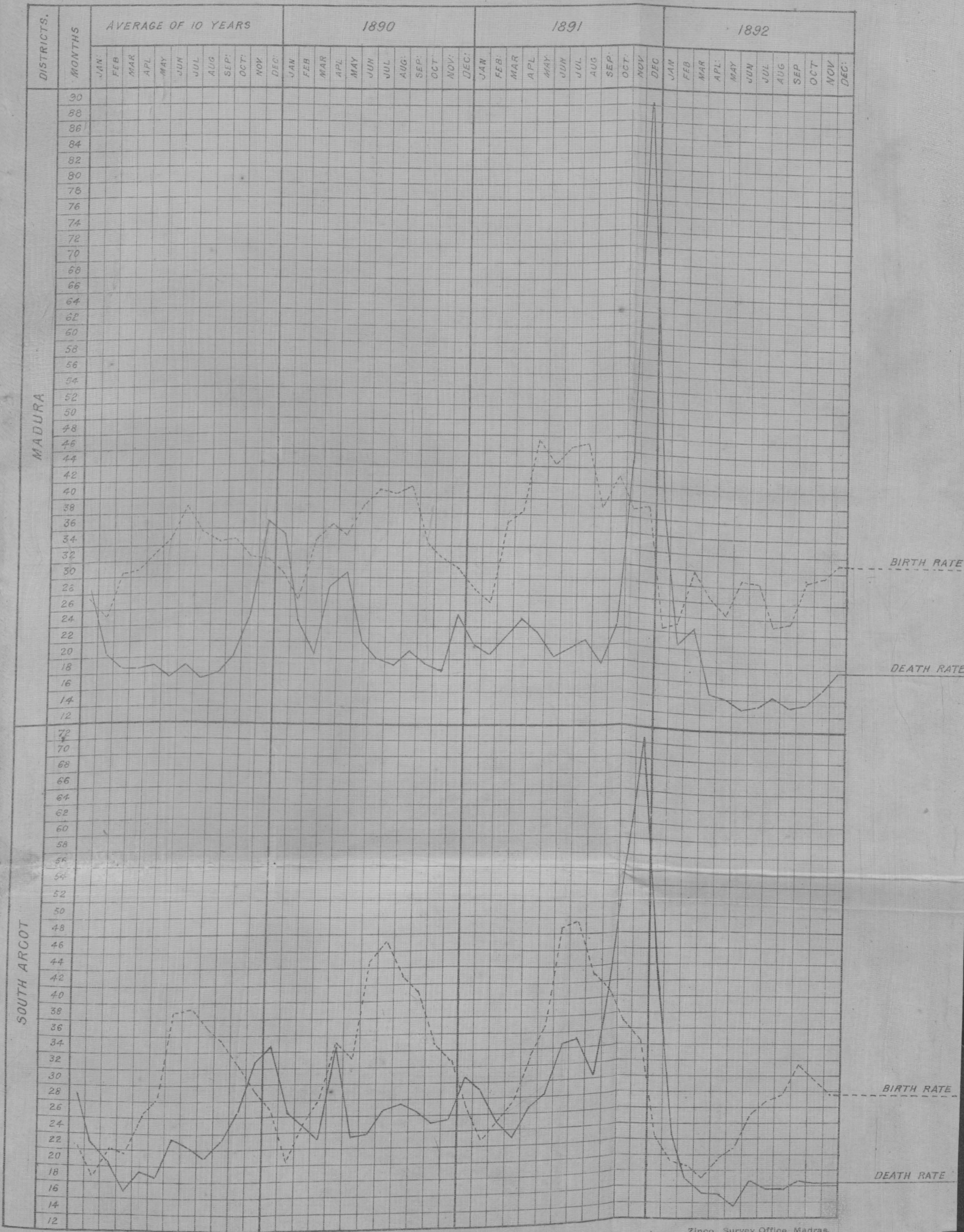
Turning to the last of the causes alluded to above, viz., the number of births exceeding the number of deaths, this may be stated to have been the chief reason of the increase observed in the population of 1891 as compared with that of 1881. The following table shows the excess of births over deaths in the districts during the ten years ending February 1891 and the proportion it bore to the 1881 population:—

Table showing the Average Quantities of Food Grains, in seers of 10 tola, procurable for a Rupee in the Madras Presidency during 1890, 1891 and 1892, compared with the average of previous ten years ending 1889—continued.

Grain.		Canjian.	Vizagapatam.	Godavari.	Kistna.	Nellore.	Cuddapah.	Amantapur.	Bellary.	Kurnool.	Madras.	Chingleput.	N. Arcot.	S. Arcot.	Tanjore.	Trichinopoly.	Madura.	Tinnevely.	Coimbatore.	Nilgris.	Salem.	S. Canara.	Malabar.		
Cholum.	January	Average of 10 years...	29.3	29.5	29.5	15.3	25.6	29.4	*	31.6	30.5	16.3	13.2	27.9	33.4	25.3	40.8	30.4	25.8	24.7	21.2	26.1	...		
	1890	...	23.1	27.0	23.0	21.9	22.4	31.9	32.9	29.2	27.0	21.1	15.4	20.0	23.5	...	29.8	22.8	18.8	22.6	22.1	24.8	...		
	1891	...	33.6	36.4	24.1	21.2	20.9	23.9	28.5	27.8	28.8	18.7	17.4	22.2	24.8	...	28.1	21.6	15.9	18.6	18.4	20.8	...		
	1892	...	17.5	16.5	16.1	14.2	13.0	12.9	13.6	14.4	15.9	11.9	11.1	12.6	18.7	20.2	22.6	12.9	15.9	13.6	11.8	12.3	...		
	February	Average of 10 years...	32.5	29.5	30.1	25.3	25.5	28.9	*	31.3	30.5	17.6	8.6	27.0	34.8	26.7	45.5	34.3	26.4	24.5	21.5	26.0	...		
	1890	...	23.4	25.5	27.9	22.0	24.2	30.7	32.5	28.3	27.8	20.9	18.4	23.0	24.2	...	29.3	23.2	17.9	22.2	21.7	25.0	...		
	1891	...	34.4	36.1	26.8	21.9	21.2	24.0	27.7	28.5	29.0	18.7	18.7	20.9	23.5	23.0	27.4	23.6	15.7	18.6	18.7	20.3	...		
	1892	...	18.5	16.7	16.1	14.7	12.8	13.3	14.2	15.3	14.5	11.5	12.2	13.1	17.8	17.8	22.5	17.7	14.8	14.7	12.1	12.9	...		
	March	Average of 10 years...	32.3	28.7	31.1	20.0	25.6	28.4	*	30.4	30.0	17.7	10.1	27.6	34.3	26.7	44.3	34.2	25.0	25.7	20.8	24.7	...		
	1890	...	24.3	24.8	27.5	22.4	22.9	30.4	31.6	28.0	28.4	18.8	18.4	27.5	25.5	...	29.1	24.0	15.6	18.4	18.0	20.8	...		
	1891	...	34.9	35.7	27.2	22.0	21.8	24.4	27.3	28.6	29.0	18.7	18.7	20.4	21.8	26.1	25.1	24.0	15.6	18.4	18.0	20.8	...		
Cholum.	April	Average of 10 years...	32.2	28.7	30.9	25.2	25.2	29.3	*	31.1	29.6	17.8	8.3	27.6	26.2	27.6	...	48.1	24.5	27.1	25.6	20.9	26.8	...	
	1890	...	24.7	25.4	27.2	21.7	23.3	30.3	32.3	27.2	28.9	18.9	15.4	25.3	23.0	...	29.5	24.4	19.0	22.6	20.4	24.3	...		
	1891	...	34.5	33.9	27.5	21.6	22.5	26.1	28.0	28.4	29.0	19.2	17.3	20.8	23.5	...	25.9	23.1	17.9	18.4	18.5	21.5	...		
	1892	...	17.5	15.9	17.2	15.5	14.9	15.3	15.2	13.6	13.5	12.9	13.0	18.1	13.5	13.9	...	14.6	19.4	15.4	15.8	12.9	...		
	May	Average of 10 years...	29.5	27.8	30.5	24.4	25.2	19.8	*	30.6	28.9	19.0	8.4	27.3	29.4	26.5	...	35.5	27.8	25.4	20.8	24.5	...		
	1890	...	23.8	24.9	26.1	21.3	22.9	29.7	32.6	28.9	28.3	18.9	13.4	26.8	24.4	18.2	26.8	23.8	18.9	18.5	18.4	21.2	...		
	1891	...	36.5	34.0	26.7	21.9	22.2	27.0	28.4	28.6	28.8	19.4	18.0	21.7	23.5	25.4	26.9	20.4	19.8	18.5	18.4	21.2	...		
	1892	...	16.8	14.6	16.9	15.5	14.9	15.3	16.1	14.1	13.5	13.7	13.0	17.1	13.9	13.9	...	14.5	15.9	20.1	15.3	18.5	12.4	...	
	June	Average of 10 years...	30.3	26.6	30.6	23.8	26.4	29.2	*	29.8	28.6	17.4	8.5	27.7	29.9	26.1	...	27.7	23.9	25.1	21.9	27.7	...		
	1890	...	24.2	24.9	25.8	20.4	23.8	29.6	30.3	28.0	26.7	18.4	19.1	20.3	21.0	18.1	26.2	23.1	17.8	22.1	22.2	24.4	...		
1891	...	36.6	33.0	26.6	20.9	22.3	25.1	27.8	27.5	28.3	18.5	...	20.1	22.1	24.0	26.5	21.8	18.0	17.6	21.3	...				
Cholum.	July	Average of 10 years...	15.1	14.2	16.7	15.3	14.4	14.9	15.7	14.0	13.4	13.9	11.5	19.1	13.3	14.2	14.3	...	18.3	18.1	15.0	17.9	14.0	...	
	1890	...	27.6	25.5	29.1	24.3	26.1	29.0	*	29.7	28.6	17.6	11.4	39.8	28.3	24.6	...	32.7	26.0	24.2	21.2	27.3	...		
	1891	...	35.6	24.6	24.6	20.4	23.6	29.8	29.5	25.8	26.3	18.5	18.4	24.8	19.6	17.5	24.3	18.3	16.9	19.0	20.7	22.6	...		
	1892	...	15.0	14.0	16.9	15.6	16.3	16.3	18.5	14.6	13.9	13.0	12.0	15.9	13.7	14.3	13.5	17.8	17.3	14.1	15.8	14.4	...		
	August	Average of 10 years...	23.5	23.6	28.4	23.9	25.7	27.8	*	30.2	29.1	19.4	16.4	29.2	27.6	20.5	...	36.4	31.4	25.7	23.8	20.7	26.4	...	
	1890	...	25.1	25.9	24.1	20.3	23.6	29.0	27.9	26.0	26.5	18.7	16.0	26.3	19.3	...	23.9	17.6	16.8	19.4	19.8	23.3	...		
	1891	...	31.6	28.4	23.3	18.2	20.7	29.7	26.0	26.1	26.1	15.6	15.2	19.9	16.4	21.1	22.8	17.5	19.5	17.9	17.5	18.9	...		
	1892	...	15.1	14.5	17.9	16.2	16.7	19.2	19.5	15.2	14.5	13.5	13.5	19.6	16.1	16.7	18.0	17.9	16.1	14.4	15.0	14.8	...		
	September	Average of 10 years...	24.1	23.8	28.3	24.0	24.3	32.0	*	30.8	29.2	21.7	10.7	29.1	28.2	20.7	...	35.4	24.8	26.4	24.2	21.0	27.9	...	
	1890	...	20.3	23.1	23.6	19.7	22.6	26.5	27.6	26.8	27.4	19.3	18.1	30.4	24.8	...	20.7	33.4	24.8	26.4	24.2	21.0	27.9	...	
1891	...	32.2	27.2	21.7	18.0	19.7	18.8	22.4	22.7	21.6	16.3	14.2	15.9	15.4	18.3	31.4	16.3	17.4	15.2	16.6	18.2	...			
Cholum.	October	Average of 10 years...	15.7	15.8	30.3	17.6	19.2	22.9	20.8	17.0	16.7	14.4	16.4	17.9	16.9	19.4	16.7	...	17.6	15.5	15.2	15.3	...		
	1890	...	25.1	25.5	27.9	23.7	33.3	29.5	*	31.4	30.0	19.9	11.0	28.6	28.6	24.2	36.0	30.2	27.3	24.6	22.7	29.0	...		
	1891	...	26.5	28.7	23.2	20.0	22.0	29.1	29.0	27.0	28.2	19.3	17.8	25.4	23.9	23.1	15.9	17.0	18.5	21.1	22.0	...			
	1892	...	24.9	21.3	20.8	18.4	19.6	17.8	21.0	21.9	21.5	15.1	14.3	16.2	16.1	18.3	20.9	14.9	16.9	16.5	14.5	16.0	...		
	November	Average of 10 years...	17.0	18.4	20.8	18.6	19.7	23.2	20.0	17.5	18.4	18.2	17.5	20.2	18.5	20.3	18.9	19.2	18.2	15.1	15.5	17.3	...		
	1890	...	25.4	25.2	26.7	24.1	25.4	30.0	*	32.0	31.2	20.0	13.1	29.3	23.2	25.7	36.4	30.2	25.9	25.2	21.1	29.4	...		
	1891	...	27.0	30.8	23.4	20.2	21.8	27.1	28.6	27.1	28.4	17.0	16.0	24.8	25.0	27.8	26.0	16.0	16.6	18.7	20.9	21.5	...		
	1892	...	22.5	21.2	19.5	17.5	18.6	16.4	16.6	17.1	17.1	14.4	13.3	15.0	15.2	21.2	20.5	13.9	16.3	16.2	14.1	17.8	...		
	December	Average of 10 years...	17.3	18.8	20.1	17.3	19.5	23.7	20.2	18.7	18.9	17.8	19.3	19.4	20.5	18.6	18.0	17.4	14.8	14.1	17.8	...			
	1890	...	27.4	28.0	28.3	24.8	25.3	30.8	*	32.3	30.9	29.0	14.9	28.8	30.7	14.1	38.0	52.3	25.7	25.4	21.8	28.4	...		
Cholum.	January	Average of 10 years...	31.2	34.8	23.2	20.8	21.3	29.0	28.6	28.0	28.8	18.7	15.2	23.1	21.8	25.9	19.8	16.1	18.8	20.3	21.6	...			
	1890	...	18.2	16.6	17.0	15.1	14.9	12.7	13.4	14.2	13.3	12.7	11.5	11.4	18.7	20.7	18.1	15.2	13.1	12.6	12.0	...			
	1891	...	21.3	19.3	17.0	18.6	24.9	20.2	16.8	18.1	...	...	...	...	...	...	16.3	13.9	13.0	12.6	15.9	...			
	1892	...	28.3	27.2	20.2	23.8	26.4	28.2	*	30.9	29.8	18.2	11.0	29.1	29.5	24.0	40.7	26.3	24.3	21.3	27.4	...			
	February	Average of 10 years...	25.5	27.2	27.0	20.9	22.8	29.4	30.3	27.2	27.7	19.1	17.7	25.0	23.9	21.5	28.5	20.4	17.7	20.7	20.9	23.4	...		
	1890	...	31.1	29.5	23.8	19.7	20.4	21.7	24.5	24.8	24.8	17.0	13.2	18.4	19.5	20.6	23.5	18.9	17.5	17.4	18.0	18.6	...		
	1891	...	17.1	16.2	17.9	16.1	16.0	18.0	17.4	15.6	15.8	12.6	13.7	16.7	16.3	17.1	17.6	17.3	16.9	14.6	14.8	14.5	...		
	March	Average of 10 years...	32.7	29.3	31.9	30.6	29.2	32.8	*	36.1	30.6	27.3	31.8	36.1	31.0	30.9	31.2	34.1	35.9	30.7	21.7	40.8	21.6	20.8	...
	1890	...	25.8	23.3	29.1	29.0	29.0	32.7	36.1	39.0	29.2	27.6	26.4	29.9	24.4	23.0	25.7								

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DIAGRAM SHOWING THE BIRTH AND DEATH RATES PER MILLE PER ANNUM IN THE UNDERMENTIONED DISTRICTS
DURING THE YEAR 1892 COMPARED WITH PREVIOUS YEARS.



Number.	Districts.	Population for which returns were received according to the Census of 1881.	Births from 1st March 1881 up to 28th Feb. 1891.	Deaths from 1st March 1881 up to 28th Feb. 1891.	Increase of column 4 over column 5.	Percentage of increase.	Population (as per Census of 1891) for which returns were received.	Percentage of increase of population in 1891 over that of 1881.
1	2	3	4	5	6	7	8	9
1	Anantapur ...	599,889	203,559	124,671	78,888	13.15	708,549	18.11
2	Bellary ...	736,807	296,262	172,653	123,604	16.77	911,514	23.71
3	Chingleput ...	981,381	382,890	239,296	143,594	14.63	1,136,328	15.85
4	Coimbatore ...	1,657,690	475,309	293,030	182,279	10.99	2,004,839	20.94
5	Cuddapah ...	1,121,038	332,170	226,419	105,751	9.43	1,272,072	13.47
6	Ganjam ...	1,740,604	230,784	201,558	29,226	1.67	1,896,803	8.41
7	Godavari ...	1,791,512	378,723	356,388	22,335	1.24	2,078,782	16.03
8	Kistna ...	1,548,480	501,370	330,062	171,308	11.06	1,855,582	19.83
9	Kurnool ...	678,551	264,510	173,209	91,301	13.45	817,811	20.52
10	Madras ...	405,848	161,681	157,851	3,830	0.94	452,518	11.49
11	Madura ...	1,294,382	402,483	259,704	142,779	11.02	1,563,836	20.81
12	Malabar ...	2,354,234	559,080	442,034	117,046	4.97	2,641,928	12.22
13	Nellore ...	1,220,236	299,618	176,020	123,598	10.12	1,463,736	19.95
14	Nilgiris ...	91,034	15,815	14,969	846	0.92	99,797	9.63
15	North Arcot ...	1,817,814	547,675	352,232	195,443	10.75	2,180,487	19.95
16	Salem ...	1,599,595	545,185	311,002	234,133	14.64	1,962,591	22.69
17	South Arcot ...	1,814,738	505,999	380,838	125,161	6.89	2,162,851	19.18
18	South Canara ...	955,842	283,105	214,158	68,947	7.21	1,052,359	10.09
19	Tanjore ...	2,130,383	598,603	517,904	80,699	3.79	2,228,114	4.59
20	Tinnevelly ...	1,699,747	483,824	388,739	95,085	5.59	1,916,095	12.73
21	Trichinopoly ...	1,215,033	368,581	274,566	94,015	7.73	1,372,717	12.98
22	Vizagapatam ...	1,790,468	309,555	237,390	72,165	4.03	1,943,211	8.53
	Total ...	* 29,254,306	8,146,681	5,844,698	2,301,983	7.87	* 33,723,120	15.28

* Includes Europeans and Eurasians.

8. The above table shows that taking the Presidency as a whole the births exceeded the deaths by 2,301,983 or at the rate of 7.87 per cent., while according to the results of the 2 census tabulations the increase was 4,468,814 or at the rate of 15.28 for every 100 of population. In every district there is an increase shown both according to the results of registration of vital statistics and according to the results of the 2 census tabulations. The difference between the two rates of increase obtained for the districts is as per margin. In a few districts the differences are very slight and where they are great they

may be attributed in part to defective registration, especially in the registration of births.

9. The rate of increase of population in the municipal towns is given in the following statement:—

District.	Difference in the two rates of increase.	Districts.	Difference in the two rates of increase.
Tanjore ...	0.80	Malabar ...	7.25
Chingleput ...	1.22	Salem ...	8.05
S. Canara ...	2.88	Nilgiris ...	8.71
Cuddapah ...	4.04	Kistna ...	8.77
Vizagapatam ...	4.50	N. Arcot ...	9.20
Anantapur ...	4.96	Madura ...	9.79
Trichinopoly ...	5.25	Nellore ...	9.83
Ganjam ...	6.74	Coimbatore ...	9.95
Bellary ...	6.94	Madras ...	10.55
Kurnool ...	7.07	S. Arcot ...	12.29
Tinnevelly ...	7.14	Godavari ...	14.79

Municipal Towns.	Population according to the Census of 1881.	Total Births from 1st March 1881 up to 28th February 1891.	Total Deaths from 1st March 1881 up to 28th February 1891.	Difference between columns 3 and 4.	Percentage of increase or decrease.	Population according to the Census of 1891.	Percentage of increase or decrease.
Anantapur ...	4,907	2,300	1,472	+828	16.87	6,994	42.53
Bellary ...	53,460	13,790	+14,539	-749	-1.40	59,467	11.23
Adoni ...	22,441	8,535	5,185	+3,350	14.90	26,243	16.94
Conjeevaram ...	37,275	14,520	12,350	+2,170	5.82	42,548	14.14
Coimbatore ...	38,967	15,372	11,526	+3,846	9.86	46,383	19.03
Erode ...	9,864	3,465	2,323	+1,142	11.57	12,330	24.94
Karur ...	9,205	4,116	3,049	+1,067	11.59	10,750	16.78
Cuddapah ...	18,982	4,615	+6,207	-1,592	-8.38	17,379	-8.44
Chicacola ...	18,902	4,107	3,976	+131	0.71	18,241	-0.09
Berhampore ...	23,599	7,555	+8,727	-1,172	-4.96	25,653	8.79
Ellore ...	24,555	6,982	+7,273	-291	-1.18	28,397	15.65
Rajahmundry ...	25,092	6,786	+6,905	-119	-0.47	29,382	17.10
Cocanada ...	30,441	8,058	7,106	+952	3.13	40,553	33.22
Masulipatam ...	35,056	8,940	5,688	+3,252	9.28	38,809	10.71
Guntur ...	19,646	4,860	4,309	+551	2.80	23,359	18.89
Kurnool ...	20,329	6,912	6,378	+534	2.63	24,376	19.91
Madras ...	405,848	164,209	100,364	+63,845	0.95	452,518	11.50
Madura ...	76,847	26,830	23,278	+3,552	4.62	87,428	13.77
Dindigul ...	14,182	6,220	3,565	+2,655	18.72	20,203	42.45
Tellicherry ...	24,581	7,719	5,900	+1,819	7.40	27,196	10.63
Calicut ...	57,085	21,896	19,639	+2,257	3.97	66,078	15.78
Palghat ...	36,339	13,104	10,951	+2,153	5.92	39,481	8.65
Cochin ...	15,698	6,232	5,763	+469	2.99	17,601	12.12
Cannanore ...	26,386	8,943	6,736	+2,207	8.36	27,418	3.91
Nellore ...	27,505	7,065	5,867	+1,198	4.36	29,336	6.66
Ongole ...	9,200	3,324	2,297	+1,027	11.16	10,860	18.04
Ootacamund ...	12,335	3,722	3,283	+439	3.56	15,033	22.03
Coonoor ...	4,778	1,018	+1,168	-150	-3.14	6,049	26.60
Vellore ...	40,958	12,637	9,029	+3,608	8.81	44,925	9.69
Wárajápet ...	10,387	4,066	3,088	+978	9.41	10,485	0.94
Salem ...	59,631	17,798	13,245	+4,553	7.64	67,710	13.55
Cuddalore ...	43,545	11,619	7,761	+3,858	8.86	47,355	18.75
Chidambaram ...	19,837	4,098	+4,601	-503	-2.54	18,640	-6.03
Mangalore ...	32,099	10,740	8,862	+1,878	5.85	40,922	27.48
Tanjore ...	54,745	12,770	+13,654	-884	-1.61	54,390	-0.65
Kumbakonam ...	50,098	13,987	+16,636	-2,649	-5.28	54,307	8.40
Máyavaram ...	23,044	6,733	+6,906	-173	-0.75	23,735	3.13
Negapatam ...	53,776	10,596	+14,464	-3,868	-7.19	59,221	10.12
Mannargudi ...	19,409	5,634	5,058	+576	2.97	20,395	5.08
Tinnevelly ...	23,221	6,483	+7,148	-665	-2.00	24,768	6.66
Palamcottah ...	17,964	5,678	5,255	+423	2.35	18,686	4.02
Tuticorin ...	16,281	5,785	5,751	+34	0.21	25,107	54.21
Trichinopoly ...	84,449	16,694	+22,285	-5,591	-6.62	90,609	7.29
Srirangam ...	19,773	6,488	+6,806	-320	-1.62	21,632	9.40
Vizagapatam ...	30,291	9,804	9,151	+653	0.50	34,487	13.85
Bimlipatam ...	8,582	2,499	2,215	+284	3.31	9,827	14.51
Vizianagram ...	22,577	7,239	6,435	+804	3.51	30,881	36.78
Anakápallo ...	13,341	4,249	3,064	+1,185	8.89	17,010	27.50
Total ...	* 1,746,913	* 565,790	* 527,238	+38,552	2.21	* 1,965,207	12.49

* Includes Europeans and Eurasians.

10. The natural increase or the excess of births over deaths amounted to 38,552 or 2.21 per cent., but the results of the enumeration of 1891 show that the population advanced during the last intercensal period at the rate of 12.49 per 100. In 3 towns (Cuddapah, Chidambaram and Tanjore) there had been a decrease in population both according to the results of registration of vital statistics and the census of 1891. Taking vital statistics alone into consideration in 11 + more towns the population decreased. The fluctuations in the rates of increase in either case are very marked. Taking the census of 1891 they varied from 54.21

per cent. in Tuticorin to -8.44 per cent. in Cuddapah and according to the results of registration the range was from 18.72 in Dindigul to -8.38 in Cuddapah. The great differences observed between the two sets of figures exhibited in the above table must, in the case of vital statistics, be set down partly to defective registration and partly to immigration.

11. There has been no change in the system of registering births and deaths—being as heretofore carried on in municipal towns by a separate agency (Registrars) employed specially for the purpose, and in villages and rural towns by Kurnams.

DIAGRAM SHOWING THE BIRTH AND DEATH RATES PER MILLE PER ANNUM IN THE UNDERMENTIONED DISTRICT.

DURING THE YEAR 1892, COMPARED WITH PREVIOUS YEARS.

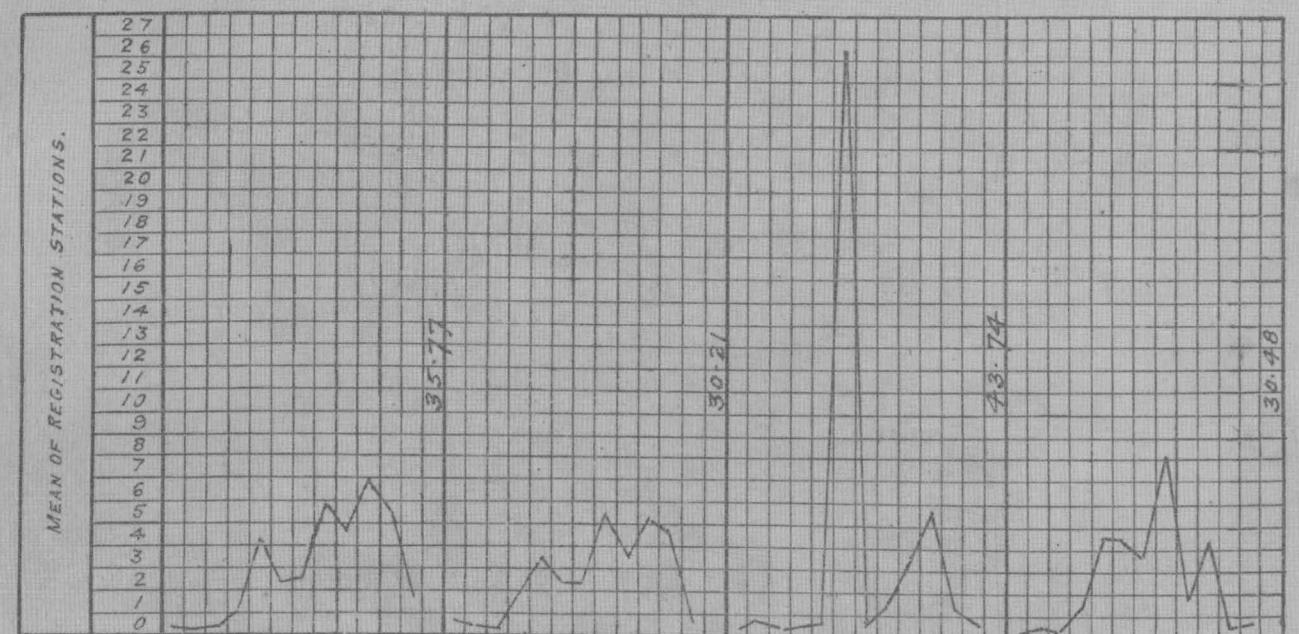
DURING THE YEAR 1892, COMPARED WITH PREVIOUS YEARS.

DIAGRAM SHOWING THE RAINFALL & PRICE OF FOOD (RAGI) IN THE DISTRICT OF SALEM & (CUMBU) IN THE DISTRICT OF SOUTH ARCOT, FOR 3 YEARS ENDING 1892 COMPARED WITH AVERAGE OF 10 YEARS.

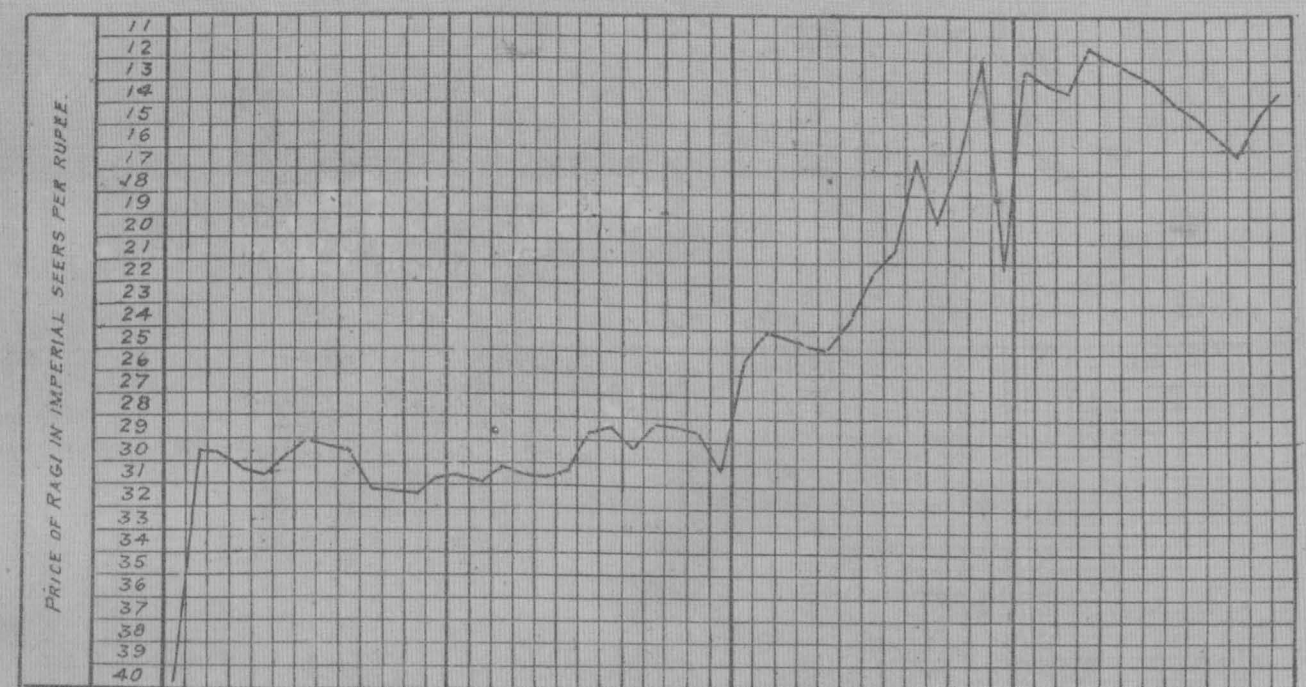
SALEM

DISTRICTS	YEARS	AVERAGE OF 10 YEARS.												1890												1891												1892.											
	MONTHS	JAN.	FEB.	MAR.	APR.	MAY.	JUNE.	JULY.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL.	JAN.	FEB.	MAR.	APR.	MAY.	JUNE.	JULY.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL.	JAN.	FEB.	MAR.	APR.	MAY.	JUNE.	JULY.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL.									

RAINFALL

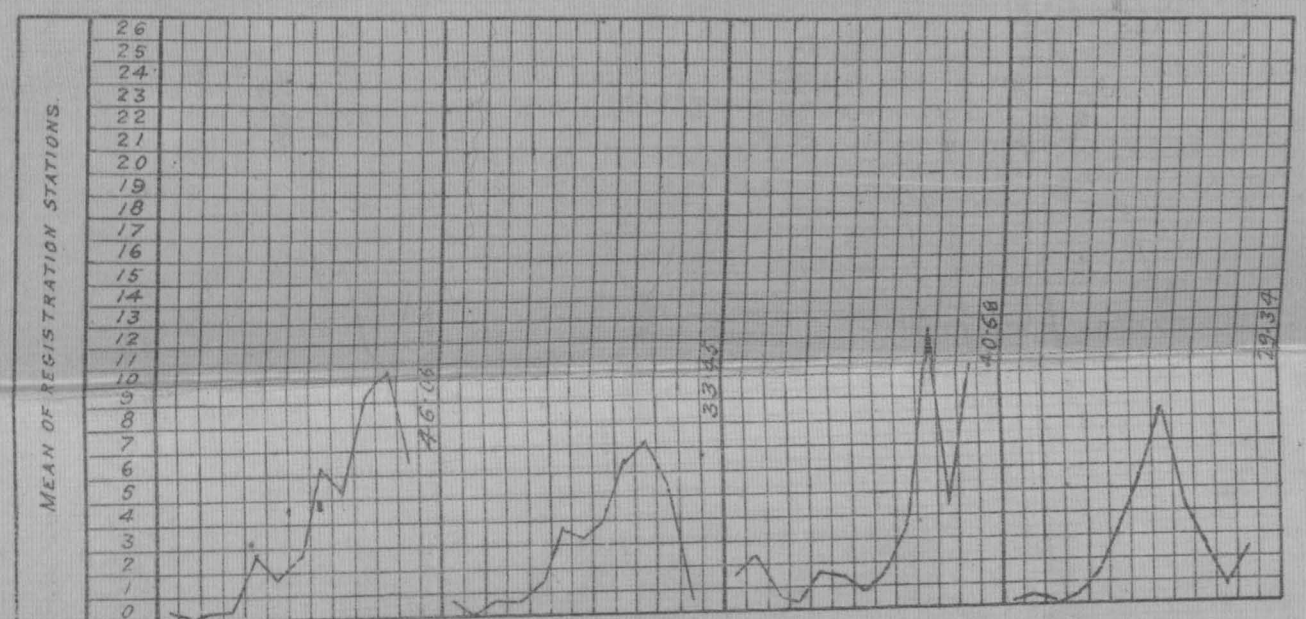


PRICE OF FOOD (RAGI)

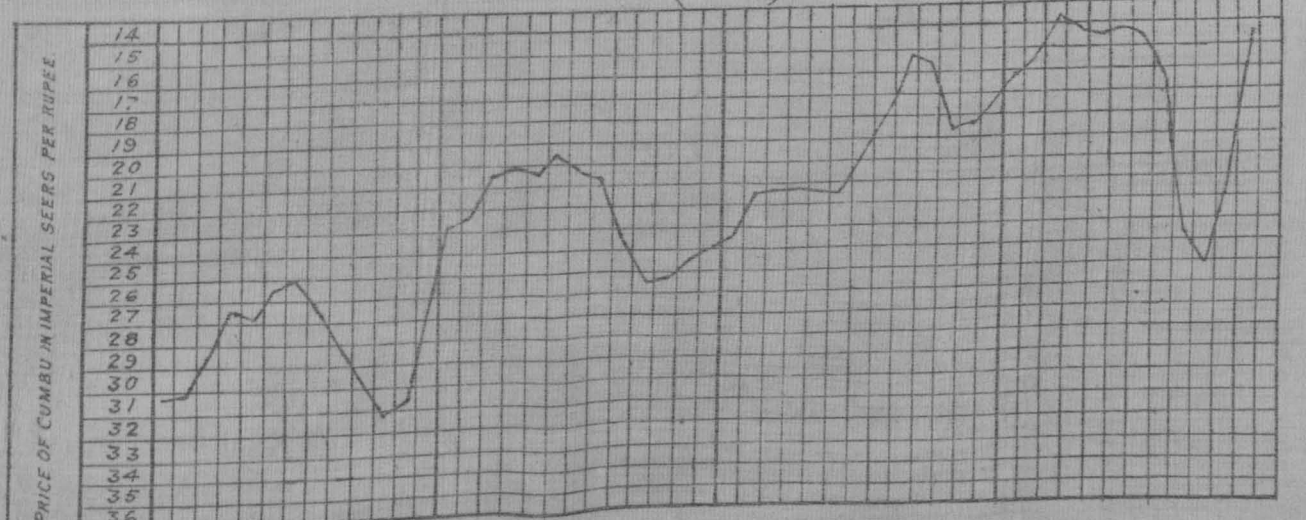


SOUTH ARCOT.

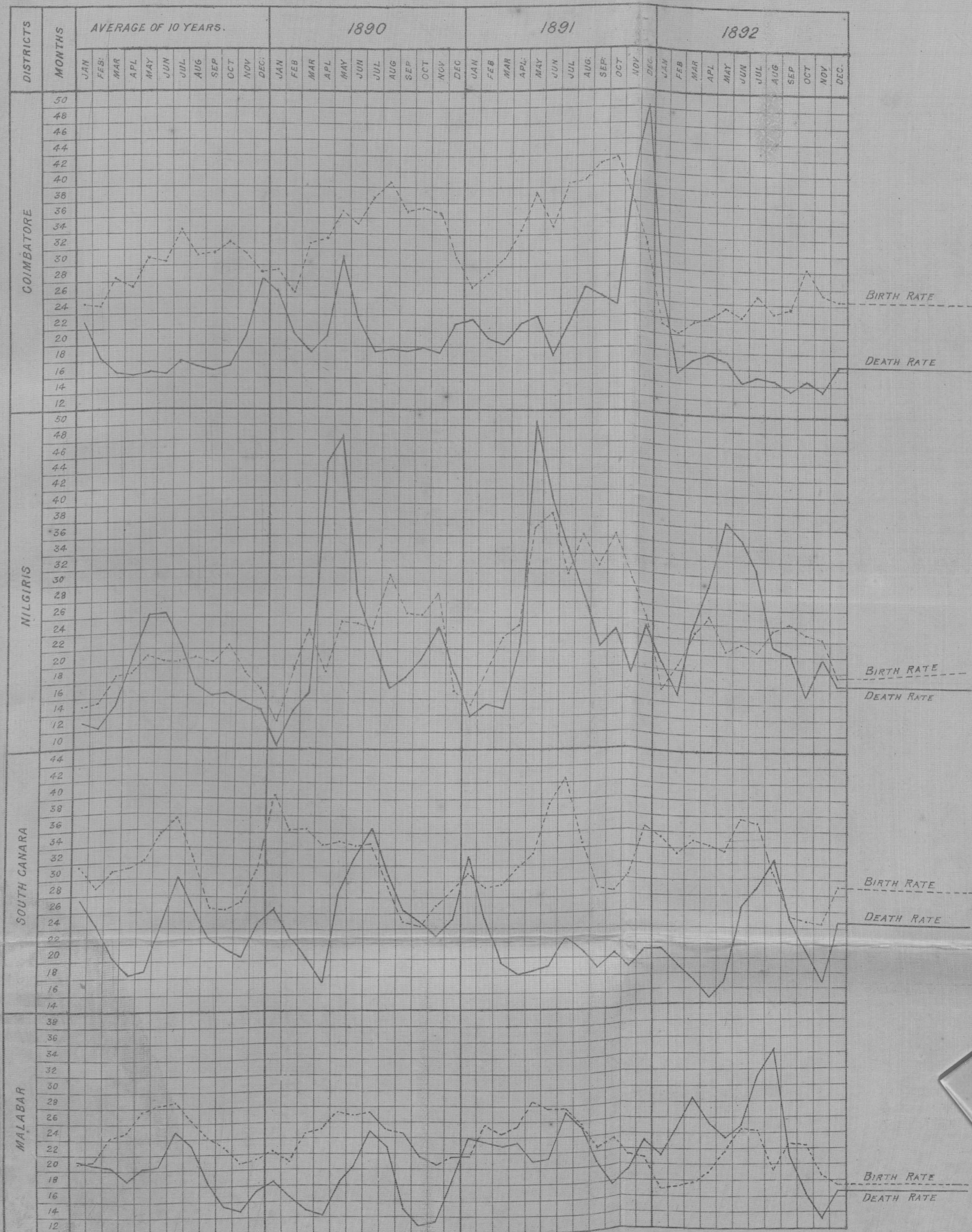
RAINFALL



PRICE OF FOOD (CUMBU)



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 DIAGRAM SHOWING THE BIRTH AND DEATH RATES PER MILLE PER ANNUM IN THE UNDERMENTIONED DISTRICTS
 DURING THE YEAR 1892 COMPARED WITH PREVIOUS YEARS.



As has been the practice in this Presidency since 1879 the Deputy Inspectors of Vaccination while travelling through the districts are required to examine the birth and death registers maintained by village officials. Although the work of registration is still imperfectly carried on in many parts there seems no reason to suppose that it retrograded in 1892; and until it is made compulsory in rural tracts the returns cannot be expected to be accurate.

12. The record of births and deaths for 1892 does not extend to the whole population as ascertained at the census of 1891. There are some tracts of zemindari estates, &c., for which no vital statistical returns are received. The total population for which returns were furnished in 1892 was 33,693,179, being 1,943,977 short of the total population, viz., 35,637,156, excluding the European and Eurasian population.

13. In calculating the birth and death-rates the population of 1891 has been adopted.

BIRTHS.

14. The total births registered during the year 1892 amounted to 845,029 against 924,238 in 1891 showing a decrease of 79,209. Considered with the population they were in the proportion of 25.9 per mille against 27.4 in 1891. As before mentioned these rates have been calculated on the census figures of 1891. The following table shows the births registered during the past 21 years:—

Table showing the births for a series of years and their ratios per 1,000 of population.

Years.	Population for which returns were received.	Births.	Birth-ratio per mille.
1872	30,147,779	543,325	18.02
1873	30,287,842	527,363	17.4
1874	30,360,221	569,631	18.7
1875	30,278,903	625,953	20.6
1876	29,157,056	619,748	21.2
1877	29,209,542	467,543	16.01
1878	29,127,205	341,388	11.7
1879	28,991,267	467,938	16.1
1880	28,778,097	641,769	22.3
1881	28,676,375	716,672	24.9
1882	28,887,111	743,777	25.7
1883	28,503,100	774,754	27.2
1884	28,151,952	810,102	28.8
1885	28,118,173	807,105	28.7
1886	28,043,538	837,077	29.8
1887	27,907,840	849,551	30.4
1888	27,852,474	833,345	29.9
1889	28,050,087	867,523	30.9
1890	28,522,313	893,645	31.3
1891	33,683,178	924,238	* 27.4
1892	33,693,179	845,029	† 25.1

* Calculated on the census population of 1891.

† This is the figure given in the report for 1891 and was calculated on the census of 1891.

The figures given above show that there was a progressive increase in the number of births registered from 1889 up to 1891, but that in the year under report there was a great diminution in the number of children born. This sudden fall cannot, however, be ascribed to less correct registration in 1892, but must be regarded as the natural result of the distress which prevailed in the Presidency during 1891 and 1892. It is an admitted fact that the fecundity of a population is directly dependent on, and largely influenced by, the general prosperity of the people and that high prices of food and their insufficiency in quantity and inferiority in quality even when not carried to the extent of starvation and famine have a decided effect in lowering the birth-rate. In many parts of the Presidency in both 1891 and 1892, distress prevailed owing to scanty rainfall and the prices of food were in consequence high.

15. The subjoined table shows the births in each district of the presidency contrasted with those of 1891 and the mean of ten years:—

No.	Districts.	Ratio of births per mille of population.		Average of births ratio for previous ten years.
		1892.	1891.	
1	Madras	36.8	* 39.9 † 44.7	40.9
2	Bellary	32.5	* 36.8 † 40.0	37.9
3	South Canara	31.9	* 29.3 † 32.2	30.3
4	Kurnool	31.2	* 33.5 † 40.4	38.4
5	Kistna	29.6	* 30.5 † 36.4	33.5
6	Madura	28.8	* 31.8 † 38.5	32.3
7	Anantapur	27.6	* 28.2 † 40.0	37.9
8	Tanjore	27.0	* 29.5 † 30.9	28.7
9	Tinnevely	27.0	* 25.8 † 29.1	30.6
10	Trichinopoly	26.7	* 29.7 † 33.5	30.9
11	Chingleput	26.4	* 33.2 † 38.4	39.5
12	Salem	25.8	* 32.8 † 40.5	34.9
13	Coimbatore	25.5	* 29.3 † 35.5	29.9
14	South Arcot	23.9	* 29.2 † 34.7	29.0
15	Cuddapah	23.6	* 26.5 † 30.0	29.3
16	Nilgiris	23.4	* 25.8 † 28.3	18.8
17	North Arcot	22.6	* 28.8 † 34.5	28.8
18	Gódvári	22.1	* 19.5 † 22.7	23.5
19	Nellore	21.9	* 23.9 † 28.7	25.9
20	Vizagapatam	21.5	* 22.2 † 29.6	22.6
21	Malabar	20.4	* 21.1 † 23.6	34.1
22	Ganjam	17.8	* 18.7 † 25.8	22.1
Total, Madras Presidency ..		25.1	* 27.4 † 32.4	29.8

* These ratios were calculated on the census population of 1891.

† These ratios are those given in the annual report for 1891 and were calculated on the census population of 1891.

‡ This is the rate for Anantapur-Bellary.

From the above table it will be seen that the birth-rates varied in the different districts, ranging from 17.8 per 1,000 of population in Ganjam to 36.8 in Madras. In no district was the birth-rate above 40 per mille, in four it was between 30 and 40, in seventeen it was between 20 and 30, and in one district, viz., Ganjam, it was below 20 per mille. In some districts which return low birth-rates registration is defective. A high birth-rate is not peculiar to any one part of the presidency, but chiefly depends upon the interest taken in this subject by the officials whose duty it is to do so. In all the districts, with the exception of South Canara and Nilgiris, the birth-rates were lower than the average for previous ten years. Comparing the birth-rates of 1892 with those of 1891 it is observed that in only three districts (Gódvári, South Canara and Tinnevely) the birth-rates were higher, while in the remaining nineteen districts they were lower. The decrease was most

The average death-rate of the fifty-five municipal towns was 29·4 per 1,000 of population, or 7·5 higher than the district-rate. The ratios varied in the different municipalities, ranging from 18·2 in Salem to 55·2 in Kurnool. The high mortality in Kurnool was due to the prevalence of cholera and fevers, and in Cochin to many deaths having been registered under small-pox and other causes.

31. The death-rate for each taluk is shown in the diagram on the opposite page according to the suggestions of the Army Sanitary Commission in para. 10 of its Memorandum on the Indian Sanitary Reports for 1889, and in table II in appendix the death-rates according to each registration circle are given. In five circles a high death-rate of above 40 per 1,000 was recorded and in twenty between 30 and 40. In eighty-seven circles the death-rate was between 20 and 30 and in sixty-seven others below 20.

GENERAL.

Comparative Statement showing the Mortuary and Meteorological Statistics of different Districts comprised preceding it, required by the Government of India,

Districts.	Population.	Total deaths.	Deaths from				Temperature in shade.			Mean humidity.	Wind.		Rainfall in inches.
			Cholera.	Small-pox.	Fever.	Dysentery and Diarrhoea.	Maximum.	Minimum.	Mean.		Prevailing direction.	Mean velocity (in miles).	
Anantapur.	1892	708,143	14,427	820	129	2,937	222	...	...	...	...	...	27.87
	1891	708,143	17,560	4,373	254	2,638	244	...	...	...	...	...	29.39
	1890	603,656	15,759	39	789	4,189	266	...	...	...	...	...	20.97
	1889	599,889	14,727	859	1,120	2,185	293	...	...	...	...	...	32.69
	1888	599,889	14,528	826	360	2,212	357	...	...	...	...	...	20.24
	1887	599,889	15,741	585	1,244	2,407	386	...	...	...	...	...	26.23
Bellary.	1892	909,661	24,979	2,455	364	9,522	1,087	108.5	53.2	79.9	58	158	27.35
	1891	909,661	23,400	3,115	267	7,001	656	106.6	51.0	81.3	54	173	10.02
	1890	732,361	19,155	...	554	7,438	567	106.7	47.2	80.3	59	155	24.47
	1889	736,128	23,118	1,757	2,782	5,829	838	108.1	52.0	81.2	55	159	29.89
	1888	736,128	20,957	1,651	1,296	5,444	867	108.6	51.8	81.5	52	159	20.11
	1887	736,128	21,160	1,838	813	6,185	728	106.2	55.3	79.3	53	155	20.30
Chingleput.	1892	1,133,901	26,389	1,957	367	7,099	3,646	...	...	...	...	...	36.06
	1891	1,133,901	32,132	4,985	623	7,453	4,088	...	...	...	...	...	31.31
	1890	978,524	23,565	410	684	6,454	2,809	...	...	...	...	...	29.44
	1889	978,524	26,216	1,544	485	5,938	3,964	...	...	...	...	...	38.90
	1888	978,524	25,981	2,561	284	5,893	4,093	...	...	...	...	...	54.39
	1887	978,524	25,051	360	222	6,198	3,956	...	...	...	...	...	60.21
Coimbatore.	1892	2,003,911	36,515	2,091	2,675	14,676	1,103	100.8	57.0	80.3	86	122	21.25
	1891	2,003,911	43,152	8,394	1,894	13,912	1,445	101.3	58.6	79.8	83	96	21.59
	1890	1,657,144	36,234	2,364	558	15,732	1,136	104.3	58.0	79.6	88	96	25.03
	1889	1,657,144	33,727	2,976	800	12,935	1,541	104.3	58.9	80.5	88	88	26.69
	1888	1,657,144	27,986	1,651	766	11,016	1,161	102.3	...	82.9	...	89	19.85
	1887	1,657,144	31,936	2,278	1,507	12,898	1,359	101.4	55.7	77.0	63	104	27.27
Cuddapah.	1892	1,271,721	30,731	3,338	405	21,362	728	113.3	58.3	84.1	66	...	35.31
	1891	1,271,721	28,538	6,270	644	16,891	601	109.8	57.3	85.8	63	...	14.79
	1890	1,120,714	27,602	2,073	1,307	19,444	770	109.3	58.3	84.1	72	...	21.17
	1889	1,120,714	24,348	496	2,285	16,642	693	113.3	58.8	84.2	69	...	30.53
	1888	1,120,714	26,758	2,213	1,015	18,258	753	111.4	54.8	84.6	54	...	27.23
	1887	1,120,714	28,245	3,361	663	18,906	711	109.4	58.3	83.2	57	...	34.88
Ganjam.	1892	1,896,400	27,153	469	498	20,123	809	97.2	54.5	78.9	82	338	49.65
	1891	1,896,400	18,665	186	198	14,165	329	92.2	52.0	79.5	80	316	35.72
	1890	1,346,545	18,074	60	770	13,876	400	93.2	53.0	80.3	81	314	43.09
	1889	977,341	40,037	13,932	4,290	15,852	563	96.2	57.5	80.9	78	339	59.42
	1888	973,102	17,390	688	2,206	11,414	443	95.7	56.4	79.0	...	311	27.09
	1887	874,404	21,296	204	1,071	16,669	437	95.2	56.0	78.8	...	230	46.56
Gôdvári.	1892	2,077,858	56,341	13,618	6,211	18,446	1,217	116.1	58.9	83.0	75	...	50.53
	1891	2,077,858	39,922	1,496	4,101	17,758	874	114.1	57.9	83.9	73	...	25.34
	1890	1,790,850	34,514	...	1,716	17,536	686	113.6	58.9	82.9	79	...	41.21
	1889	1,790,850	43,694	9,686	197	17,286	1,121	110.1	57.9	83.1	69	...	46.44
	1888	1,790,850	27,270	2,809	42	12,145	695	110.1	57.7	83.2	56	...	31.46
	1887	1,790,850	35,343	3,676	174	17,444	1,070	114.1	57.4	82.5	57	...	37.56
Kistna.	1892	1,855,024	51,080	4,539	6,438	17,514	1,053	114.7	57.7	82.0	85	138	46.22
	1891	1,855,024	47,397	4,353	8,223	14,655	1,234	112.7	59.6	83.5	82	96	21.20
	1890	1,548,355	35,709	9	1,871	15,446	509	113.7	60.2	82.5	83	72	31.84
	1889	1,548,355	38,353	3,757	323	14,780	526	110.7	58.4	81.8	79	110	36.80
	1888	1,548,355	30,226	3,422	63	11,310	432	100.0	57.7	82.3	73	109	25.93
	1887	1,548,355	33,783	2,383	66	14,486	452	114.4	59.1	81.9	73	161	32.43
Kurnool.	1892	817,660	28,701	4,886	421	18,091	428	111.6	51.2	81.2	70	...	38.96
	1891	817,660	22,381	3,286	214	14,315	550	108.6	46.6	82.9	63	...	15.41
	1890	678,464	20,190	127	421	15,560	314	111.6	47.7	81.4	68	...	29.14
	1889	678,464	21,071	339	2,313	13,536	340	107.6	47.1	81.9	68	...	35.76
	1888	678,464	21,111	411	1,609	15,008	331	109.8	46.8	82.7	46	...	20.37
	1887	678,464	21,083	172	634	15,916	416	106.1	50.2	81.3	54	...	31.68
Madras.	1892	436,375	20,287	565	25	6,794	3,893	108.4	62.6	80.8	76	157	38.40
	1891	436,375	23,181	1,806	65	6,635	4,480	107.3	61.7	82.2	75	179	30.43
	1890	389,984	16,547	687	72	4,588	2,620	109.0	61.7	80.9	78	144	27.99
	1889	389,984	16,618	171	42	4,064	2,930	107.0	61.9	81.2	78	148	43.39
	1888	389,984	14,755	521	35	3,306	2,524	104.1	61.1	81.1	77	160	62.47
	1887	389,984	15,868	471	12	3,973	2,850	106.7	60.6	80.8	77	166	70.24
Madura.	1892	1,573,318	30,687	2,538	2,509	8,499	983	105.5	64.7	83.7	68	66	20.47
	1891	1,563,317	37,515	7,731	3,159	8,770	1,186	104.0	64.2	84.1	69	72	36.19
	1890	1,293,829	30,976	4,015	1,246	9,491	1,023	105.5	62.7	83.8	69	72	28.82
	1889	1,293,829	30,093	4,752	877	7,619	1,281	105.0	64.2	84.4	72	72	28.22
	1888	1,293,829	24,851	859	1,880	7,053	884	106.6	62.2	83.6	69	80	29.91
	1887	1,293,829	24,512	23	1,889	7,760	834	104.8	62.9	81.8	58	77	35.48

PRICES OF FOOD.

in the Madras Presidency, together with the prices current of the chief food-grains for 1892 and five years vide G.O., No. 1239L., dated 25th May 1892.

* Average quantity in seers per rupee of the chief food-grains in general use in the districts.				Remarks.
Rice (2nd sort).	Cholum.	Cumbu.	Regi.	
9.5	15.9	13.0	17.1	In 1892, although the rainfall was less than in 1891, yet it was a little above the average. The prices of food were high, higher than in any of the preceding five years. The number of deaths registered was less than in any of the previous five years. The mortality from fevers was above the average, but in the beginning of the year influenza prevailed in parts of the district. The deaths from small-pox, and also from dysentery and diarrhoea, were less than in any of the preceding five years.
11.1	23.3	19.6	25.6	
13.4	29.4	24.5	29.8	
14.3	31.6	26.3	32.6	
15.3	31.4	26.0	32.7	
15.4	32.6	24.9	32.5	The rainfall in 1892 was above the average and greater than in any of the preceding five years except 1889. The prices of food were higher than in any of the preceding five years. Relief works were opened, but were closed in September. The deaths registered in 1892 were greater than in any of the previous five years. Cholera prevailed in 1892 for ten months and caused 2,455 deaths, the mortality being greater than in any of the preceding five years except 1891. There was a marked increase under fevers, dysentery and diarrhoea, and more deaths were returned from them than in any of the previous five years. Many deaths, at least 1,000 according to the District Surgeon, were entered under fevers, but these in reality were due to influenza which was prevalent in the district during the beginning of the year.
9.2	17.3	14.9	18.3	
11.2	25.2	20.8	25.4	
12.8	28.3	23.4	30.0	
13.3	28.9	21.3	33.9	
13.7	32.9	23.5	36.4	The rainfall in 1892, although below the average, was greater than in either 1891 or 1890. The decrease in the rainfall was due to the failure of the north-east monsoon. The prices of food were high, higher than in any of the previous five years. The mortality, although less than that in 1891, was greater than in any of the other years (1887-90). Cholera was prevalent throughout the year and many deaths were registered from fever.
13.7	28.6	27.1	34.2	
9.1	...	...	15.5	
10.8	...	17.2	19.3	
11.5	...	17.2	24.1	
13.7	...	18.8	25.3	With the exception of 1888 the rainfall was less in 1892 than in any of the previous five years. The prices of food were high. The mortality was less in 1892 than in 1891, but greater than in any of the four years (1887-90). There was an increase in deaths registered from small-pox and fevers.
15.9	...	19.1	25.4	
15.4	...	20.3	26.6	
10.0	16.3	17.4	17.0	
11.1	17.9	18.8	20.6	
12.2	20.6	22.2	26.2	The rainfall in 1892 was greater than in any of the previous five years, and was more than double that registered in 1891. The prices of food were higher than in any of the previous five years. The mortality was greater than in any of the preceding five years and the increase occurred mainly under fevers. This increase under fevers was chiefly due to the heavy rainfall in 1892. In August and October there was heavy rain and the deaths from fevers in September, October, November and December were above the average.
13.4	22.0	24.2	26.3	
14.3	22.2	23.8	26.6	
14.5	22.6	24.2	27.3	
9.3	15.2	16.5	17.8	
10.3	20.7	18.0	21.9	The rainfall in 1892 was greater than in any of the previous five years with the exception of 1889. The prices of food were also higher than in any of the preceding five years with the exception of 1889. Excluding 1889, which was an exceptional year in Ganjam, the mortality was higher than in any of the previous five years, the increase mainly occurring under fevers.
12.9	22.5	25.9	29.4	
13.3	22.7	26.7	30.6	
14.3	25.1	31.1	32.9	
15.2	24.8	28.7	28.3	
11.2	14.5	...	17.8	The rainfall in 1892 was greater than in any of the preceding five years and nearly double the amount registered in 1891. The prices of food were much higher than in any of the preceding five years. Many more deaths were registered in 1892 than in any other year, the increase occurring under all heads, but most marked under cholera and small-pox.
14.8	...	...	28.2	
12.7	...	...	24.4	
10.7	...	...	19.1	
15.1	...	...	26.6	
15.6	...	...	29.2	Rainfall in 1892 was much greater and prices of food higher than in any of the previous five years. The mortality was greater than in any other year and there was a large increase under fevers.
10.9	15.9	17.9	17.3	
13.7	22.4	24.5	25.0	
15.1	24.7	26.2	28.9	
15.2	24.8	23.8	25.6	
16.3	24.8	21.6	27.9	The rainfall in 1892 was greater and prices of food higher than in any of the preceding five years. More deaths were registered in 1892 than in any other year and the increase was mainly under cholera and fevers. At the beginning of the year influenza prevailed and increased the deaths under fevers. In August, September and October heavy rain fell and the deaths registered from fevers during the latter part of the year were above the average.
15.5	23.7	23.4	26.9	
11.0	16.0	...	18.3	
12.5	18.0	...	25.8	
13.6	18.7	...	27.2	
13.2	20.4	...	24.1	Although the rainfall in 1892 was greater than in 1890 and 1891, yet it was less than in the three years (1887-89). The prices of food were higher than in any of the previous five years. The deaths registered in 1892 were less than in 1891, but greater than in any of the four years (1887-90). The mortality from fevers in 1892 was greater than in any of the previous five years.
14.9	21.4	...	25.7	
15.6	19.0	...	29.3	
9.7	16.6	14.9	...	
11.5	24.0	19.9	...	
11.2	26.1	23.8	31.0	The rainfall in 1892 was much less and the prices of food higher than in any of the preceding five years. The mortality in 1892 was less than in 1890 and 1891, but greater than in any of the three years (1887-89).
11.6	24.3	21.6	28.4	
13.0	27.6	23.3	...	
13.0	31.0	26.8	...	
9.3	13.9	14.3	15.8	
10.4	17.3	15.8	19.3	The rainfall in 1892 was much less and the prices of food higher than in any of the preceding five years. The mortality in 1892 was less than in 1890 and 1891, but greater than in any of the three years (1887-89).
11.2	18.9	18.1	24.7	
12.8	19.6	20.9	26.6	
13.0	23.0	23.3	27.8	
13.5	23.0	23.2	27.6	
9.9	14.3	14.3	15.7	The rainfall in 1892 was much less and the prices of food higher than in any of the preceding five years. The mortality in 1892 was less than in 1890 and 1891, but greater than in any of the three years (1887-89).
11.2	17.1	16.6	19.4	
10.8	18.9	17.8	22.1	
13.1	24.1	21.7	26.0	
14.1	24.5	23.5	26.5	
14.0	25.0	24.3	28.5	

SECTION VI.

GENERAL HISTORY OF CHIEF DISEASES.

CHOLERA.

32. In 1892 there was a decrease in the mortality from cholera when compared with 1891, the deaths registered in 1892 having been 79,033, or 19,740 less than the number (98,773) recorded in 1891.

33. The following table shows the ratios of cholera deaths for the previous twenty years, and for 1892 the death-rate was 2·3 or 0·6 less than that in 1891:—

Years.	Ratio of cholera deaths per mille of population.	Years.	Ratio of cholera deaths per mille of population.
1872	0·4	1883	1·2
1873	0·02	1884	2·7
1874	0·01	1885	2·06
1875	3·1	1886	0·4
1876	5·08	1887	1·01
1877	12·2	1888	2·1
1878	1·6	1889	2·7
1879	0·4	1890	1·2
1880	0·02	1891	* 2·9
1881	0·3	1891	† 3·5
1882	0·8	1892	2·3

* Calculated on the census population of 1891.

† This is the rate given in the Annual Report for 1891 and was calculated on the census population of 1891.

34. The subjoined table shows the monthly distribution of the deaths from cholera for 1892 and the previous ten years:—

Years.	Deaths from cholera.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
1882	10,794	4,193	1,081	491	590	843	550	780	644	777	799	2,062	23,604
1883	3,671	1,826	1,392	1,007	497	1,168	2,248	1,298	623	1,247	6,143	15,164	36,284
1884	21,268	7,362	2,374	1,550	2,108	3,975	6,267	3,298	2,677	1,645	3,639	19,313	75,476
1885	22,885	8,366	5,385	3,617	3,883	2,703	4,686	3,077	1,439	723	681	664	58,109
1886	1,224	554	582	1,219	1,597	1,314	1,564	774	640	1,111	1,003	935	12,417
1887	945	679	1,111	483	966	1,445	1,184	2,104	1,718	1,840	2,258	13,626	28,359
1888	18,787	9,399	4,421	2,251	1,694	2,565	4,587	3,551	1,805	1,813	1,494	6,810	58,677
1889	10,547	5,064	3,727	5,724	8,036	11,632	13,184	7,548	2,394	1,656	2,218	4,290	76,020
1890	7,448	5,169	2,441	1,988	1,755	2,868	3,344	2,904	1,780	1,062	1,284	3,245	35,288
1891	5,912	2,837	1,971	2,937	2,702	3,462	9,856	16,258	9,672	7,064	12,280	23,822	98,773
1892	18,676	6,874	4,601	3,652	4,417	5,957	16,739	13,003	3,462	876	490	286	79,033
Ratio per mille of population for 1892.	0·55	0·20	0·14	0·11	0·13	0·18	0·49	0·38	0·10	0·03	0·01	0·008	2·3
Number of districts affected during 1892.	21	20	19	20	20	21	21	20	19	20	15	11	22

In no month of the year was cholera absent from the Madras Presidency; but during the last quarter there was a great decrease in the mortality from this cause. The greatest number of deaths (18,676) was registered in January and the fewest (286) in December.

35. The deaths from cholera in the several districts in the Madras Presidency during each month of the year are given in annual form VII in the appendix. In January deaths from cholera were reported from all the districts with the exception of Bellary, and the number of casualties amounted to 18,676. In February, March and April there was a progressive decrease, but in May the disease again began to increase, and in July as many as 16,739 deaths were recorded. From August the disease began to decline, and in December deaths from cholera were reported from only eleven districts and amounted, as already stated, to 286 in that month.

36. In every district in the presidency deaths from cholera were recorded during the year, and in nine districts (Chingleput, Coimbatore, Cuddapah, Gódvári, Kistna, Kurnool, Madras, Malabar and Salem) deaths were registered during every month of the year. In ten districts (Ganjam, Gódvári, Kistna, Kurnool, Malabar, Nellore, South Canara, Tanjore, Tinnevely and Vizagapatam) the deaths reported were greater than in 1891, and in twelve districts the death-rates were higher than the average of previous five years. The epidemic was most severely felt in the Gódvári, Kurnool and Tanjore districts, the death-rates per 1,000 of population being 6·5 for Gódvári, 6·0 for Kurnool, and 4·1 for Tanjore.

37. In the Gódvári district, during the year under report, the number of registered deaths from cholera amounted to 13,618 against 1,496 in the previous year and an average of 3,533 for five previous years. There were some deaths in this district in January, but the disease increased in May, and in July 8,130 deaths were reported. In August there was a decrease, the deaths recorded being 2,296, and in September, October, November and December the deaths were only 257, 118, 7 and 22 respectively. In 1891 the rainfall was very deficient in this district, only 25·34 inches having been registered against 41·21 in 1890 and 34·71, the average of ten years. In 1892 the rainfall was, however, much above the average, 50·53 inches being registered in that year against 35·75 inches, the average of ten years. In June, July, August and September the rainfall was above the average, and in October there was an unusual rain, 20·02 inches being registered for that month against an average of 6·16 inches. The District Surgeon reports as follows: "This disease prevailed for about six months in the year and was exceedingly fatal. Ellore seems to be its starting point here, being imported from the adjacent Kistna District. On account of the free canal communication the epidemic soon spreads. It affects primarily and principally the delta taluks. The chief source of drinking-water in the delta is the Gódvári and its canals; and these canals are frequently polluted by people throwing corpses of those dying from cholera and other diseases, thus materially aiding the spread of the disease."

38. In the Kurnool district during 1892 there were 4,886 deaths recorded from cholera and is the largest total recorded since 1878. The death-rate from this disease was 6·0 per mille. The District Surgeon, in his annual report, states that cholera, "which was continuing in a sporadic form in the town of Cumbum at the end of the preceding year, began to increase in severity in the month of January and lingered on till the month of June, when the disease assumed an epidemic character and spread throughout the taluk. In the months of July and August the disease was at its height. In September it began to subside and disappeared in October. In the month of April cholera appeared in the Markapur taluk, having been introduced from Cumbum by pilgrims. In May it reached its acme. It then began to decrease in severity, and in the month of October it had entirely subsided. In the month of May cholera of a very virulent type appeared in the town of Nandyal, having been imported from the Cumbum taluk by a railway passenger, who was carried out of the train cholera-stricken and sent to the civil dispensary for treatment. It assumed large dimensions in the months of July and August and disappeared by the end of the year. The total number of attacks in the town was 733 with 391 deaths. The disease also appeared in the remaining taluks of the district, but was of a mild type and calls for no remark. Cholera first appeared in the Kurnool town in the early part of July, having been imported by a man from Nandyal, where the disease was prevailing at the time. Several people living in the street where this man resided were next attacked. It then spread throughout the length and breadth of the town, and in the month of August it was

marked in the districts of Salem, Chingleput and North Arcot. The highest birth-rates were obtained by Madras (36.8), Bellary (32.5) and South Canara (31.9), and the lowest by Ganjam (17.8), Malabar (20.4) and Vizagapatam (21.5).

As has been before remarked the decrease in the number of births registered may be put down to the distress which prevailed in 1891 and 1892. Although there was a decrease in all the districts, with the exception of three (Gódvári, South Canara and Tinnevely), in the birth-rates of 1892 when compared with those of 1891, yet those districts in which distress was most severely felt show the greatest diminution in the birth-rate. In 1891 and 1892 it was found necessary to open relief camps or relief works in nine districts, and the following table shows the birth-rates in these districts compared with those of the remaining thirteen :—

Births in the Districts where Relief Camps were opened.

Districts.	Number of births.		Ratio per mille.	
	1891.	1892.	1891.	1892.
Anantapur	19,992	19,536	28.2	27.6
Bellary	33,456	29,588	36.8	32.5
Chingleput	37,644	29,879	33.2	26.4
Coimbatore	58,791	51,029	29.3	25.5
Cuddapah	33,687	30,074	26.5	23.6
Kurnool	27,407	25,575	33.5	31.2
Nellore	34,981	32,070	23.9	21.9
North Arcot	62,878	49,251	28.8	22.6
Salem	64,458	50,663	32.8	25.8
Total	373,294	317,665	30.0	25.5

Births in the Districts where Relief Camps were not opened.

Districts.	Number of births.		Ratio per mille.	
	1891.	1892.	1891.	1892.
Madras	17,445	16,082	39.9	36.8
Ganjam	35,538	33,739	18.7	17.8
Gódvári	40,570	45,896	19.5	22.1
Kistna	56,504	54,933	30.5	29.6
Madura	49,752	45,193	31.8	28.8
Malabar	55,536	53,833	21.1	20.4
Nilgiris	2,502	2,260	25.8	23.4
South Arcot	63,114	51,537	29.2	23.9
South Canara	30,795	33,570	29.3	31.9
Tanjore	65,832	60,151	29.5	27.0
Tinnevely	49,446	51,810	25.8	27.0
Trichinopoly	40,720	36,634	29.7	26.7
Vizagapatam	43,190	41,726	22.2	21.5
Total	550,944	527,364	25.9	24.8

This table shows that in the nine districts in which relief works were opened the birth-rate fell off considerably, being 25.5 per mille in 1892 or 4.5 less than that obtained for 1891, while in the remaining thirteen districts the decrease was very little, the ratio per mille for 1892 being 24.8 or 1.1 less than the ratio for 1891.

16. Of the 845,029 births registered during 1892 there were 430,997 males and 414,032 females, or in a proportion of 104.0 male to every 100 female births. In 1891 the number of males born to every 100 females was 103.9.

17. The following table shows the birth-rates according to the months of the year compared with 1891 and the monthly mean of the previous ten years :—

Years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Mean of 10 years	2.1	1.9	2.1	2.2	2.4	2.5	2.9	2.8	2.8	2.8	2.6	2.5	29.8
1891	*1.8	*1.7	*1.8	*2.0	*2.3	*2.4	*2.7	*2.8	*2.6	*2.6	*2.4	*2.3	*27.4
1892	†2.1	†1.9	†2.1	†2.4	†2.8	†2.9	†3.2	†3.3	†3.1	†3.1	†2.8	†2.7	†32.4
1892	2.0	1.8	1.9	1.8	1.9	2.1	2.4	2.3	2.2	2.4	2.2	2.1	25.1

* These ratios have been calculated on the census population of 1891.

† These ratios are those given in the annual report for 1891 and were calculated on the census population of 1881.

As is generally the case in this presidency, more births were registered in 1892 during the third and fourth quarters of the year than in the first and second. The highest monthly birth-rate was 2.4 and was recorded for the months of July and October, the lowest (1.8) for the months of February and April. In every month the birth-rates were lower than the averages of ten years.

18. As in past years the births exceeded the deaths, but for 1892 the excess was only at the rate of 2.8 per 1,000 of population. In 1890 and 1891 the rates of excess were 8.5 and 5.2 respectively. In 1892 in fifteen districts the births registered were more numerous than the deaths, the excess per 1,000 of population ranging from 1.3 in Tanjore district to 9.6 in South Canara district. In seven districts (Cuddapah, Gódvári, Madras, Malabar, Kurnool, Nilgiris and Vizagapatam) there was an excess of deaths over births registered. The greatest excess in the death-rates over the birth-rates was in Madras and Gódvári.

19. The birth-rate per 1,000 of population among the rural and urban population in each district during 1892 and 1891 is given in the subjoined table:—

No.	Districts.	Ratio of births per 1,000 of population.	
		1892.	1891.
1	Anantapur	Urban .. 19.3	† 29.5 § 34.6
		Rural .. 27.3	† 28.2
2	Bellary	Urban .. 30.2	† 30.4
		Rural .. 32.9	† 37.5 § 40.4
3	Chingleput	Urban .. 28.2	29.1 28.1
		Rural .. 26.3	33.4 39.0
4	Coimbatore	Urban .. 33.3	33.9 40.3
		Rural .. 25.2	29.2 35.3
5	Cuddapah	Urban .. 32.7	21.3 19.3
		Rural .. 23.5	26.6 30.2
6	Ganjam	Urban .. 31.4	32.0 33.6
		Rural .. 17.3	18.3 25.5
7	Gódvári	Urban .. 27.6	18.8 22.8
		Rural .. 21.6	19.6 22.6
8	Kistna	Urban .. 29.0	29.4 36.2
		Rural .. 29.6	30.5 36.5

† Calculated on the census of 1891.

§ These ratios are those given in the annual report for 1891 and were calculated on the census population, 1881.

|| Urban rate for Anantapur-Bellary.

¶ Rural rate for Anantapur-Bellary.

most virulent, when 77 deaths were recorded. By the end of September it had entirely disappeared. In August it broke out in the jail and also appeared amongst the troops (a wing of the 14th M.L. being stationed here at the time). Three attacks with one death were recorded in the former and two attacks with two deaths in the latter." With regard to the rainfall of this district it will be seen on a reference to table at pages 3 to 5 that in 1891 there was a great deficiency of rain, the rainfall for that year being only 15.41 inches against 29.14 for 1890 and 26.44, the average of ten years. In consequence of the deficient rainfall of 1891, there was great scarcity of drinking-water during the beginning of 1892, and many of the supplies were very impure. In 1892 the rainfall was, however, much above the average, 38.96 inches having been registered against an average of 27.64. In June, July, August and September the rainfall was above the average, and in October as many as 10.51 inches were registered against an average of 5.07 inches.

39. The Tanjore district is the next in order of severity, and the number of deaths registered in 1892 was 9,093 against 6,565 in 1891. The disease was very prevalent in January and February, when 4,549 and 1,946 deaths were registered. It then gradually decreased; in June it again increased, but from August it greatly declined, and in December no deaths were recorded as due to cholera. In this district in 1891 the rainfall was about the average, but in 1892 it was very deficient, only 28.68 inches having been registered against an average of 48.43 inches. The rainfall was above the average in June, July and August, but owing to the failure of the north-east monsoon the rainfall in October, November and December was much below the average. The District Surgeon reports: "The health of the district during the early part of the year, viz., from January to August, was not satisfactory in consequence of the prevalence of cholera in an epidemic form continuing from 1891. During August, the disease abated considerably, and more so in September, when only 52 deaths occurred throughout the district. In October

Kumbakonam	...	...	...	3,669
Tanjore	...	...	...	2,281
Nannilam	...	...	...	1,403
Máyavaram	...	...	...	1,248
Negapatam	...	...	...	1,071
Shiyali	...	...	...	1,045

the figure fell to 10, and in November to 2. There were no deaths in December, as the disease had entirely subsided. The names of the taluks that suffered much are given in the margin with the number of deaths in each

taluk. It will be seen from the statement of mortality attached to this report that the epidemic of cholera was severe in the majority of the taluks in the months of January and February 1892; in March there was a sudden fall in the number of deaths, viz., from 4,550 in January and 1,946 in February to 532; in April, May, June and July the mortality ranged between 600 and 400; and in August it fell down to 106. When cholera was epidemic in any taluk the municipality in that taluk did not escape, and the disease showed the same signs of exacerbation and abatement in certain months as already noted above."

40. Out of 44,678 villages in the presidency, 7,840 or 17.5 per cent. were affected by cholera. The highest percentage occurred in the Kurnool district, where, out of 802 villages, 289 or 36.0 per cent. were affected.

41. Annual form VI-B shows the mortality from the different causes in the principal towns of the presidency.

In eighty-two out of ninety-one towns deaths from cholera were registered and in the remaining nine no deaths were reported.

42. The following table shows the death-rates from cholera in each of the fifty-three municipal towns which were affected, as compared with the death-rate of the district in which it is situated:—

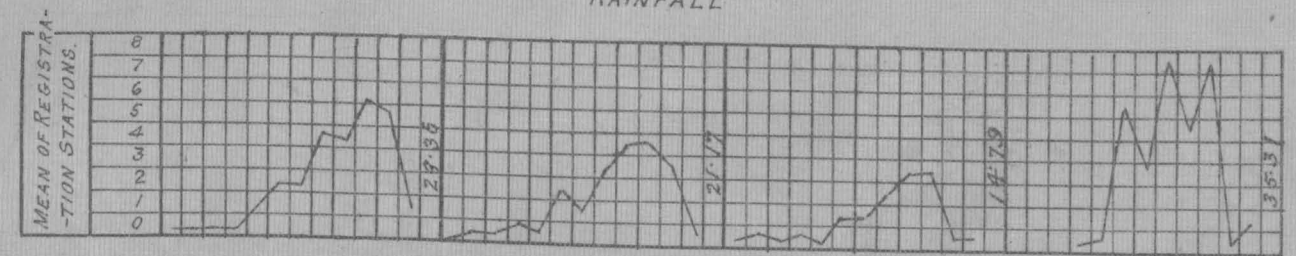
Districts exclusive of Municipal towns.	Ratio of cholera deaths per mille of population.	Municipalities.	Ratio of cholera deaths per mille of population.
Anantapur	1.1	Anantapur	11.5
Bellary	2.4	Bellary	6.2
		Adóni	4.5
Chingleput	1.7	Conjeeveram	0.9
Coimbatore	1.0	Coimbatore	0.7
		Erode	2.4
		Karúr	1.9
Cuddapah	2.6	Cuddapah	4.1
Ganjam	0.2	Chicacole	0.05
		Berhampore	3.0
		Parlákimedi	1.1
Gódvári	6.5	Cocanada	7.6
		Rajahmundry	5.9
		Ellore	4.8
Kistna	2.4	Masulipatam	0.1
		Guntúr	3.5
		Bezwada	8.8
Kurnool	5.9	Kurnool	5.5
Madras	1.3	.....	..
Madura	1.8	Madura	0.2
		Dindigul	0.9
		Periyakulam	14.7
Malabar	3.0	Tellicherry	7.5
		Calicut	6.7
		Palghat	0.5
		Cochin	1.5
		Cannanore	3.2
Nellore	1.2	Nellore	2.3
		Ongole	0.1
Nilgiris	0.3	Coonoor	0.2
North Arcot	1.5	Vellore	1.1
		Walajapet	0.1
		Gudiyáttam	5.8
		Tirupati	1.1
Salem	1.9	Salem	2.3
		Vaniyambádi	8.4
		Tiruppattúr	0.5
South Arcot	1.8	Cuddalore	1.9
		Chidambaram	1.7
South Canara	1.2	Mangalore	1.3
Tanjore	4.2	Tanjore	3.7
		Kumbakonam	2.7
		Máyavaram	3.0
		Negapatam	1.7
		Mannárgudi	6.0
Tinnevelly	2.3	Tinnevelly	2.8
		Palamcottah	7.5
		Tuticorin	1.8

12
 DIAGRAM SHOWING THE RAINFALL & PRICE OF FOOD (CHOLUM) IN THE DISTRICTS OF CUDDAPAH
 & ANANTAPUR FOR 3 YEARS ENDING 1892 COMPARED WITH AVERAGE OF 10 YEARS.

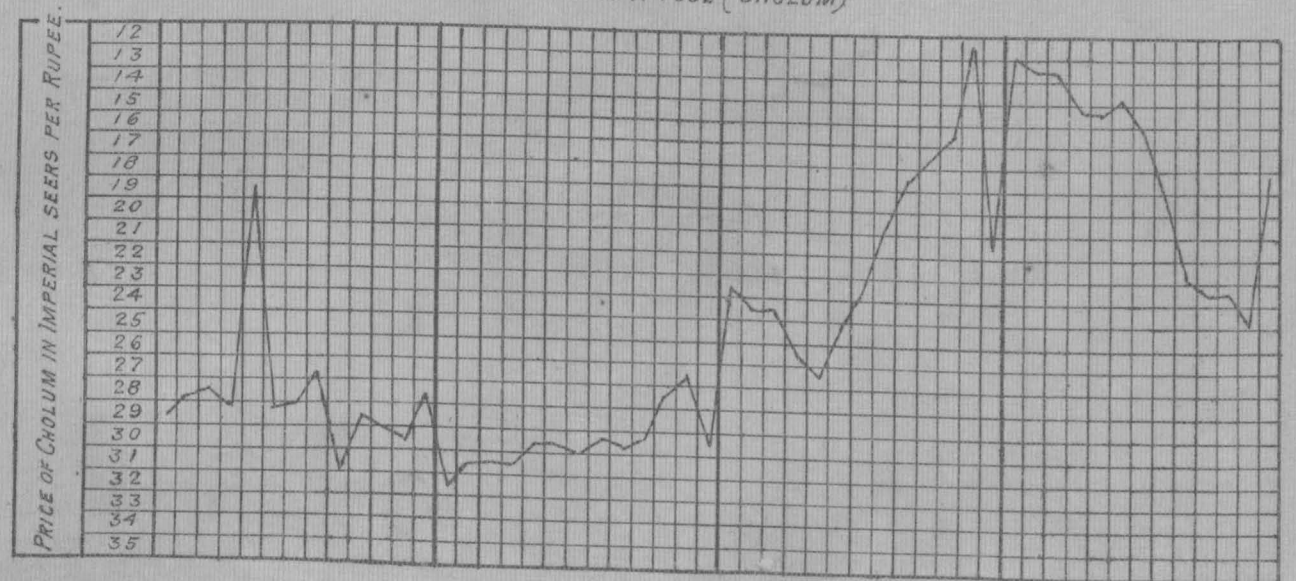
CUDDAPAH.

DISTRICTS	YEARS		AVERAGE OF 10 YEARS												1890												1891												1892																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	MONTHS		JAN.	FEB.	MAR.	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL	JAN.	FEB.	MAR.	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL	JAN.	FEB.	MAR.	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

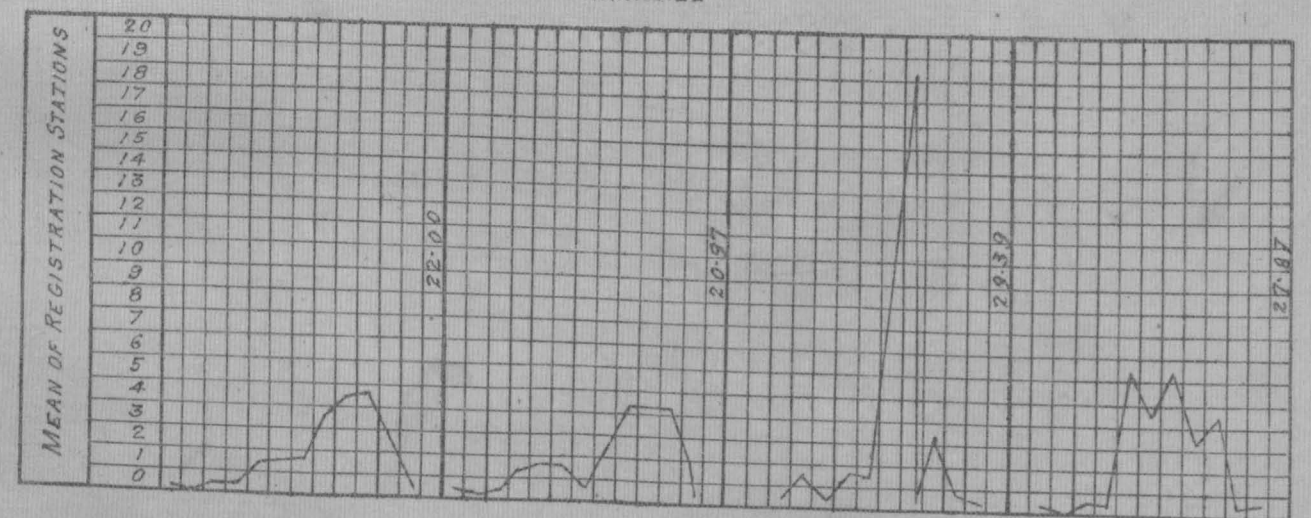
RAINFALL



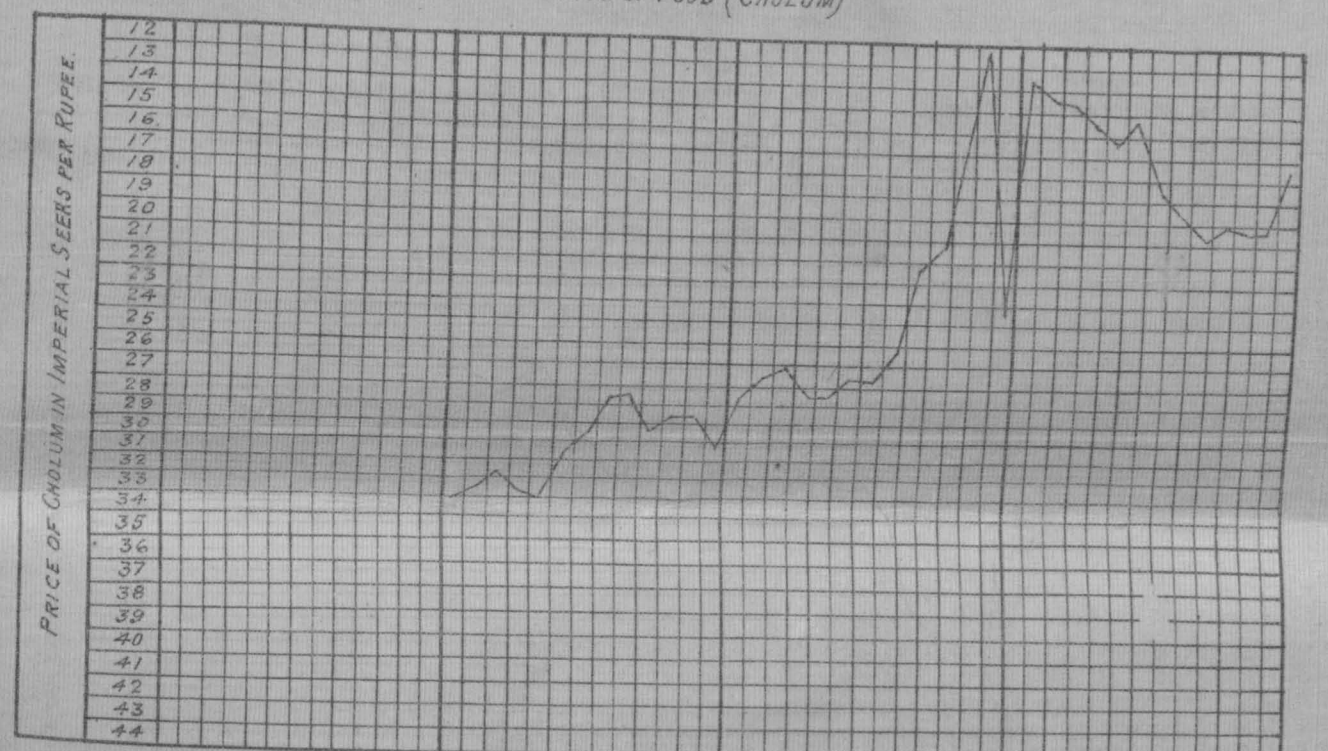
PRICE OF FOOD (CHOLUM)



ANANTAPUR
 RAINFALL



PRICE OF FOOD (CHOLUM)



Districts exclusive of Municipal Towns.			Ratio of cholera deaths per mille of population.			Municipalities.			Ratio of cholera deaths per mille of population.		
Trichinopoly	..	..	1.5	{		Trichinopoly	..	..	3.3		
						Srirangam	..	..	4.0		
Vizagapatam	..	..	1.6	{		Vizagapatam	..	..	2.9		
						Bimlipatam	..	..	1.2		
						Vizianagram	..	..	1.5		
						Anakapalle	..	..	3.9		
Total	..		2.3			Total	..		3.2		

Out of a total of 79,033 deaths from cholera for the Presidency 5,116 occurred in municipal towns. In two Municipalities—Palni and Ootacamund—no deaths were recorded. The disease affected the urban more than the rural circles, the death-rate being for municipal towns 3.2, or 0.9 more than that of the district. The death-rates of 28 municipal towns exceeded those of the districts, and in 25 towns they were less.

Although many deaths were registered from cholera in 1892 still the year has been one of subsided activity with regard to this disease in the presidency. No new light has been thrown upon the etiology of the disease, but there is sufficient evidence to show that insanitary conditions tend to localise cholera, and that the best way of preventing the origin and spread of cholera is to remove all local insanitary conditions and carry out the sanitary measures which are known to be antagonistic to the prevalence of the disease.

43. The following is the statement ordered by the Government of India to be appended to the cholera map, and it shows each district affected by cholera, its population, the dates of first and last cases, the total cholera deaths, their ratios per 10,000 of population, the period of maximum intensity, the number of villages in the district, and the number of those affected and not affected by the disease:—

No.	District.	Ratio of births per 1,000 of population.	
		1892.	1891.
9	Kurnool	Urban ..	26.3
		Rural ..	31.5
10	Madras	Urban ..	36.8
		Rural ..	31.4
11	Madura	Urban ..	31.4
		Rural ..	28.3
12	Malabar	Urban ..	30.8
		Rural ..	19.7
13	Nellore	Urban ..	25.3
		Rural ..	21.8
14	Nilgiris	Urban ..	30.3
		Rural ..	21.6
15	North Arcot	Urban ..	27.0
		Rural ..	22.3
16	Salem	Urban ..	27.8
		Rural ..	25.7
17	South Arcot	Urban ..	25.5
		Rural ..	23.7
18	South Canara	Urban ..	32.4
		Rural ..	31.9
19	Tanjore	Urban ..	25.8
		Rural ..	27.2
20	Tinnevely	Urban ..	29.7
		Rural ..	26.7
21	Trichinopoly	Urban ..	22.3
		Rural ..	27.1
22	Vizagapatam	Urban ..	28.2
		Rural ..	20.9
	Total ..	Urban ..	28.3
		Rural ..	24.9

† Calculated on the census of 1891.

§ These ratios are those given in the annual report for 1891 and were calculated on the census population, 1881.

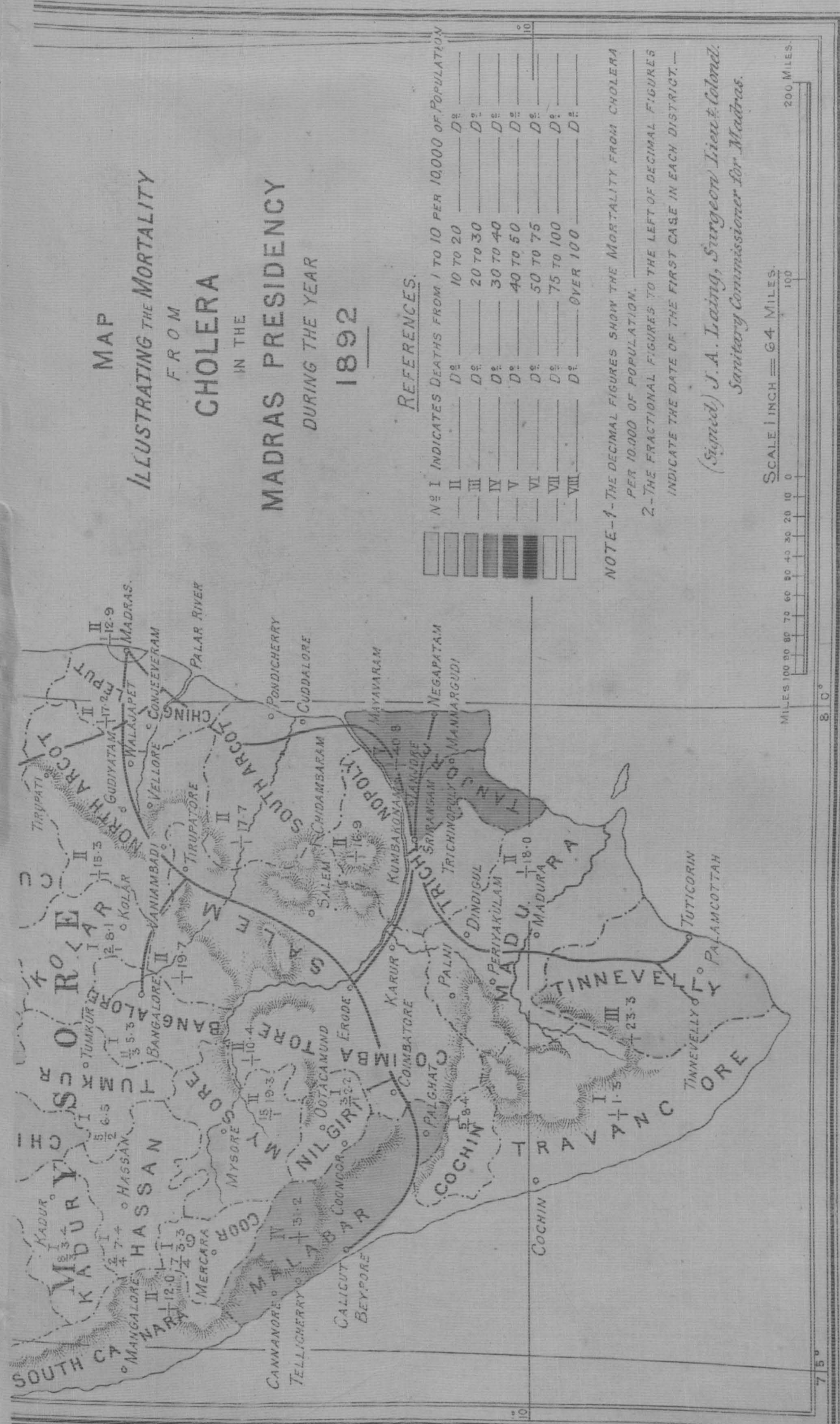
In the year under report the rural birth-rate for the presidency was lower than the urban, the ratios being 24.9 and 28.3 respectively. This may be attributed not only to registration being better carried on in municipal towns, but also to the distress which prevailed in 1891 and 1892 having been more severely felt among the rural than the town population. Nearly three-fifths of the population depend primarily for their subsistence upon the produce of the soil, so that failure of the

monsoons attacks their means of existence and thus distress ensues, causing a decrease in the number of births. In six districts (Anantapur, Bellary, Kistna, Kurnool, Tanjore and Trichinopoly) the rural birth-rates were higher than the urban, but in the remaining fifteen they were lower. In the Ganjam and Malabar districts the difference between rural and urban birth-rates was very marked, the rural birth-rates being 17.3 and 19.7 and the urban 31.4 and 30.8, respectively. These marked differences are due to the defective state of the registration of births in the rural tracts of these districts.

20. The following table shows the births registered in the fifty-five municipal towns and in the districts, exclusive of municipal towns, proportionally considered with the population:—

Table showing the Birth-rates of Districts and Municipalities arranged in order of sequence.

Districts exclusive of Municipal towns.			Municipalities.		
Birth-rate.			Birth-rate.		
No.	Districts.	Ratio per mille.	No.	Municipalities.	Ratio per mille for 1892.
1	Madras	36.8	1	Bellary	26.6
2	Bellary	32.7	2	Adóni	38.4
3	South Canara	31.9	3	Mangalore	32.4
4	Kurnool	31.2	4	Kurnool	35.4
5	Kistna	29.6	5	Masulipatam	28.6
			6	Guntúr	30.2
			7	Bezwada	25.1
6	Madura	28.1	8	Madura	33.5
			9	Periyakulam	34.0
			10	Dindigul	40.8
			11	Palni	34.8
7	Anantapur	27.5	12	Anantapur	33.4
			13	Tanjore	25.4
			14	Kumbakonam	25.6
8	Tanjore	27.1	15	Máyavaram	30.8
			16	Negapatam	24.4
			17	Mannargudi	26.7
9	Trichinopoly	27.1	18	Trichinopoly	20.9
			19	Srirangam	27.7
10	Tinnevely	26.9	20	Tinnevely	35.9
			21	Palamecottah	31.0
			22	Tuticorin	27.5
11	Chingleput	25.9	23	Conjeeveram	35.5
			24	Salem	26.3
12	Salem	25.6	25	Vániyambádi	41.3
			26	Tiruppattúr	31.8
13	Coimbatore	25.2	27	Coimbatore	34.3
			28	Erode	25.5
			29	Karúr	37.4
14	South Arcot	23.6	30	Cuddalore	33.0
			31	Chidambaram	25.2
15	Cuddapah	23.5	32	Cuddapah	32.7
			33	Vellore	33.5
16	North Arcot	22.2	34	Gudiyattam	34.1
			35	Walajapet	33.6
			36	Tirupati	22.4



REFERENCES.		No I INDICATES DEATHS FROM 1 TO 10 PER 10,000 OF POPULATION	
	—	D ⁰	10 TO 20 — D ⁰
	II	D ⁰	20 TO 30 — D ⁰
	III	D ⁰	30 TO 40 — D ⁰
	IV	D ⁰	40 TO 50 — D ⁰
	V	D ⁰	50 TO 75 — D ⁰
	VI	D ⁰	75 TO 100 — D ⁰
	VII	D ⁰	OVER 100 — D ⁰
	VIII	D ⁰	

NOTE-1-THE DECIMAL FIGURES SHOW THE MORTALITY FROM CHOLERA PER 10,000 OF POPULATION.

2-THE FRACTIONAL FIGURES TO THE LEFT OF DECIMAL FIGURES INDICATE THE DATE OF THE FIRST CASE IN EACH DISTRICT.

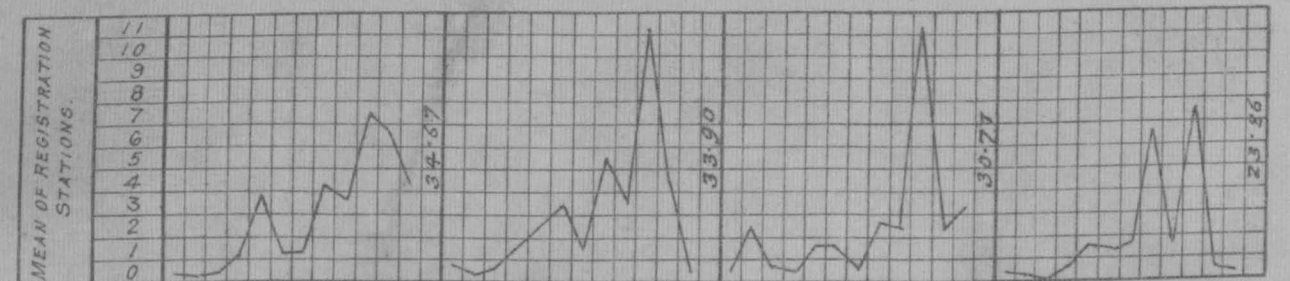
(Signed) J. A. Laing, Surgeon, Lieut. Colnd.
Sanitary Commissioner for Madras.

DIAGRAM SHOWING THE RAINFALL & PRICE OF FOOD (CUMBU) IN THE DISTRICT OF TRICHINOPOLY & (RICE) IN THE DISTRICT OF TANJORE FOR 3 YEARS ENDING 1892 COMPARED AVERAGE OF 10 YEARS.

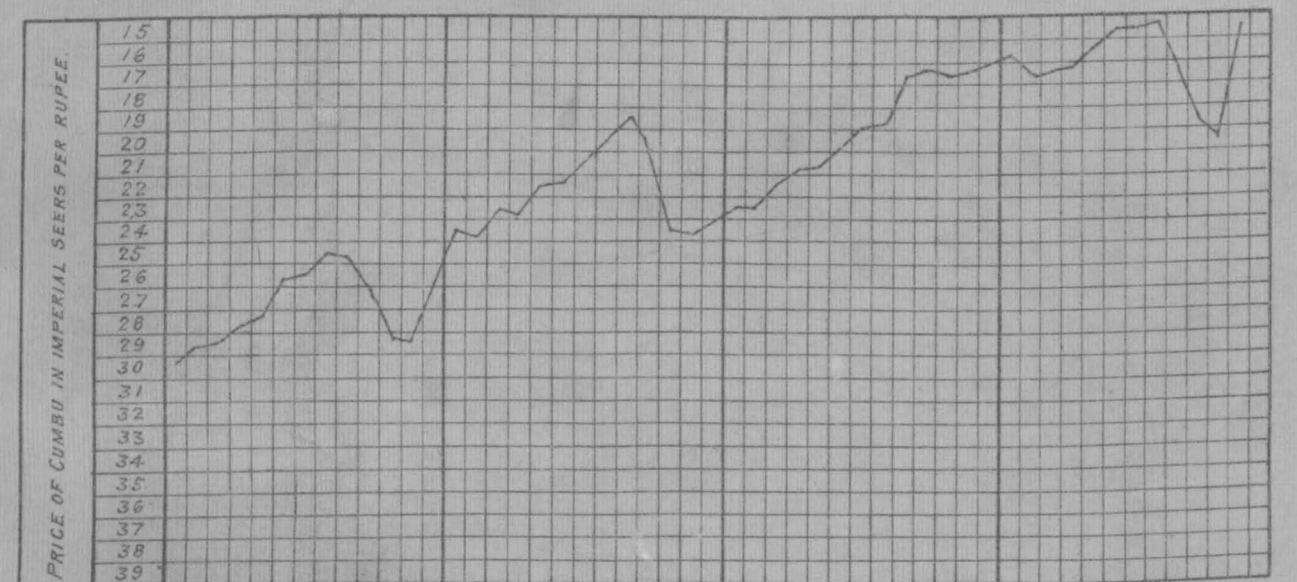
TRICHINOPOLY.

DISTRICTS	YEARS	AVERAGE OF 10 YEARS.												1890.												1891.												1892.											
	MONTH	JAN.	FEB.	MAR.	APR.	MAY.	JUNE.	JULY.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL.	JAN.	FEB.	MAR.	APR.	MAY.	JUNE.	JULY.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL.	JAN.	FEB.	MAR.	APR.	MAY.	JUNE.	JULY.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL.									

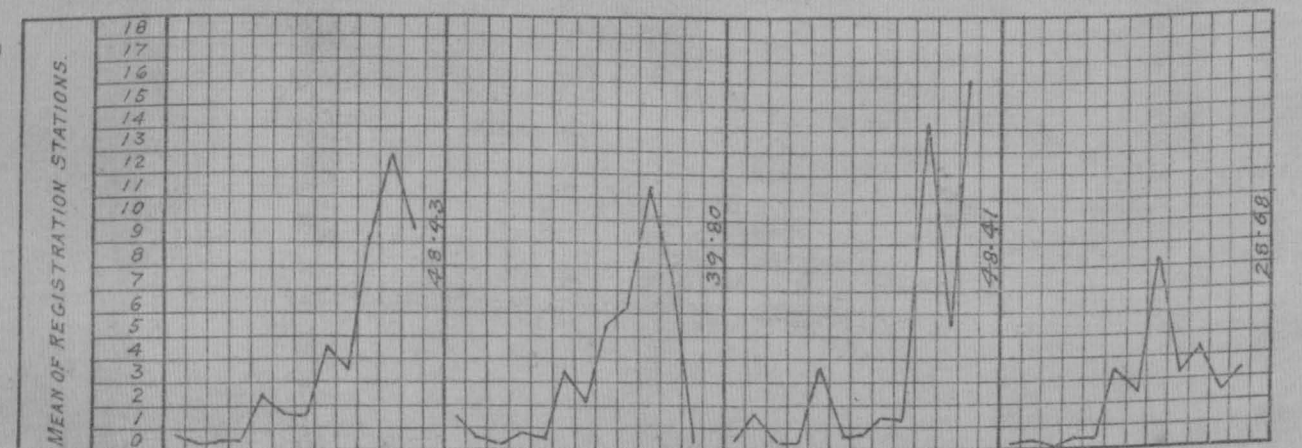
RAINFALL



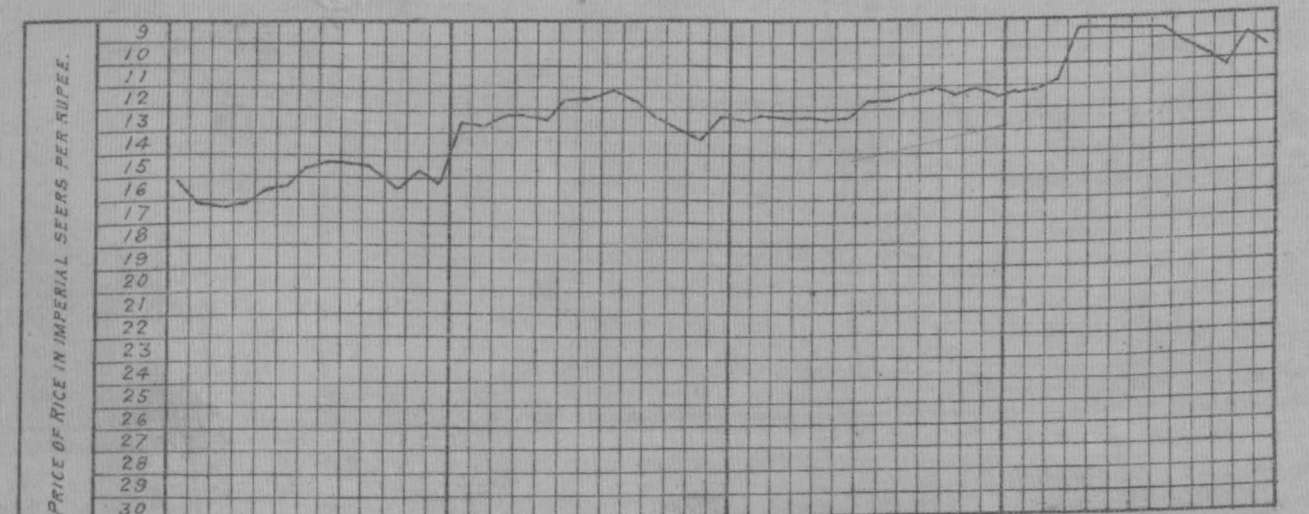
PRICE OF FOOD (CUMBU)



TANJORE RAINFALL



PRICE OF FOOD (RICE)



Statement illustrating the distribution, &c., of Cholera in the Madras Presidency during the year 1892, to accompany the Cholera Map.

1	2	3	4	5	6	7	8	9	10		
Districts.	Number of Circles of Registration.	Name of Circle.	Population for which Returns were received.	Date of First Case of Cholera in the Circle during the Year.	Date of Last Case of Cholera in the Circle during the Year.	Cholera.		Period of Maximum Intensity of the Disease.	Number of Villages in each of the Circles.	Number of those	
						Total Deaths in each of the Circles.	Ratio per 10,000 of Population.			Affected by Cholera.	Not affected by Cholera.
Anantapur.	1	Anantapur ... M.T.C.	6,973	24th July...	4th Sept...	80	114.7	August ...	1	1	...
	2	Tadpatri ... T. C.	10,275	30th Aug...	30th Oct...	21	20.4	October ...	1	1	...
	3	Anantapur ... R. C.	97,296	4th Aug...	9th Oct...	192	19.7	August ...	122	14	108
	4	Gooty ... R. C.	142,577	1st Jan...	23rd Sept...	315	22.1	July ...	153	20	133
	5	Tadpatri ... R. C.	102,373	2nd Sept...	31st Oct...	6	0.5	July ...	95	3	92
	6	Penukonda ... R. C.	80,269	13th July...	28th Aug...	150	18.7	July ...	103	3	100
	7	Dharmavaram ... R. C.	118,714	15th Aug...	2nd Oct...	52	4.4	September...	215	5	210
	8	Hindapur ... R. C.	81,674	...	...	...	...	...	101	...	101
	9	Madakasira ... R. C.	67,992	11th July...	16th Oct...	4	0.6	...	150	2	148
9	Total, District ...	708,143	1st Jan. ...	31st Oct. ...	820	11.6	August ...	941	49	892	
Bellary.	10	Bellary ... M.T.C.	57,780	14th April .	23rd Aug...	360	62.3	July ...	1	1	...
	11	Adóni ... M.T.C.	26,216	5th Aug...	31st Aug...	119	45.4	August ...	1	1	...
	12	Hospet ... T. C.	12,869	— May ...	4th Nov...	58	45.1	June ...	1	1	...
	13	Kampli ... T. C.	10,528	— Mar. ...	— July...	62	58.9	March ...	1	1	...
	14	Ráyadrug ... T. C.	10,378	— Mar. ...	— Oct...	115	110.8	Do. ...	1	1	...
	15	Bellary ... R. C.	120,800	17th June...	2nd Oct...	358	29.6	July ...	129	37	92
	16	Hospet ... R. C.	69,103	19th May...	27th Sept...	106	15.3	June ...	77	20	57
	17	Kúdligi ... R. C.	94,295	9th Mar...	20th June...	17	18.0	...	105	5	100
	18	Hadgalli ... R. C.	104,035	24th Feb...	26th Oct...	266	25.6	April ...	85	18	67
	19	Harpanahalli ... R. C.	82,240	25th Feb...	23rd June...	314	38.2	Do. ...	83	21	62
	20	Alúr ... R. C.	88,076	28th July...	5th Nov...	160	18.2	August ...	91	15	76
	21	Adóni ... R. C.	134,551	23rd June...	12th Oct...	293	21.8	Do. ...	129	40	89
	22	Rayadrug ... R. C.	87,419	— Mar ...	18th Oct...	205	23.4	Do. ...	91	21	70
	23	Zemindari ...	11,371	21st June...	15th Aug...	22	19.3	July ...	24	3	21
14	Total, District ...	909,661	24th Feb...	5th Nov...	2,455	26.9	August ...	819	185	634	
Chingleput.	24	Conjeeveram ... M.T.C.	42,543	16th Jan...	9th July...	37	8.7	...	1	1	...
	25	St. Thomas' Mount ... T. C.	12,140	9th Oct...	21st Oct...	7	5.7	...	1	1	...
	26	Saidápet ... R. C.	209,477	1st Jan...	15th Dec...	417	19.9	August ...	275	87	188
	27	Chingleput ... R. C.	137,176	2nd Jan...	7th Dec...	177	12.9	January ...	300	47	253
	28	Madurantakam ... R. C.	263,130	1st Jan...	7th Oct...	376	14.3	Do. ...	514	84	430
	29	Conjeeveram ... R. C.	176,121	Do. ...	21st Dec...	582	33.0	Do. ...	372	96	276
	30	Tiruvallúr ... R. C.	170,916	Do. ...	13th Sept...	226	13.2	February...	294	55	239
	31	Ponnéri ... R. C.	122,398	Do. ...	7th Dec...	135	11.0	January ...	240	37	203
8	Total, District ...	1,133,901	1st Jan. ...	21st Dec...	1,957	17.2	January ...	1,997	408	1,589	
Coimbatore.	32	Coimbatore ... M.T.C.	46,007	1st Jan...	23rd July...	34	7.4	January ...	1	1	...
	33	Erode ... M.T.C.	12,238	Do. ...	17th July...	30	24.5	May ...	1	1	...
	34	Karúr ... M.T.C.	10,740	— Jan...	12th Nov...	20	18.6	January ...	1	1	...
	35	Coimbatore ... R. C.	260,421	1st Jan...	19th Aug...	527	20.2	Do. ...	268	83	...
	36	Erode ... R. C.	234,677	Do. ...	13th Sept...	195	8.3	May ...	202	27	180
	37	Satyamangalam ... R. C.	184,088	Do. ...	21st Sept...	192	10.4	January ...	191	20	175
	38	Pollachi ... R. C.	183,650	9th Jan...	15th Sept...	7	0.4	...	161	3	171
	39	Palladam ... R. C.	270,384	1st Jan...	22nd Oct...	150	5.5	January ...	195	25	158
	40	Bhaváni ... R. C.	119,867	Do. ...	28th Dec...	314	26.2	April ...	63	30	170
	41	Kollegal ... R. C.	88,524	18th April .	31st Aug...	34	3.8	Do. ...	130	6	83
	42	Udamalpet ... R. C.	143,056	2nd Jan...	13th Mar...	70	4.9	January ...	93	12	124
	43	Karúr ... R. C.	201,043	1st Jan...	18th Aug...	338	16.8	Do. ...	95	47	81
	44	Dhárápura ... R. C.	249,216	Do. ...	25th June...	180	7.2	Do. ...	82	29	48
13	Total, District ...	2,003,911	1st Jan. ...	28th Dec...	2,091	10.4	January ...	1,478	285	1,193	
Cuddapah.	45	Cuddapah ... M.T.C.	17,211	31st Jan...	1st Oct...	70	40.7	August ...	1	1	...
	46	Badvel ... R. C.	93,150	1st Jan...	22nd Oct...	1,300	139.6	July & Aug.	120	64	56
	47	Proddatur ... R. C.	98,417	16th July...	26th Nov...	261	26.5	Aug. & Sept.	91	31	60
	48	Sidhout ... R. C.	66,809	1st Jan...	15th Sept...	236	35.3	August ...	79	30	49
	49	Pullampet ... R. C.	149,093	Do. ...	1st Oct...	406	27.2	January ...	135	40	95
	50	Cuddapah ... R. C.	137,455	17th Jan...	28th Dec...	433	31.5	September...	151	35	116
	51	Jammalamadugu ... R. C.	101,273	28th Mar...	23rd Dec...	129	12.7	Aug. & Nov.	127	30	97
	52	Pulivendla ... R. C.	105,842	12th Dec...	Do. ...	7	0.7	...	106	2	104
	53	Ráyachóti ... R. C.	113,234	1st Jan...	8th Nov...	189	16.7	July & Aug.	94	14	80
	54	Kadiri ... R. C.	134,892	6th Feb...	2nd Oct...	45	3.3	August ...	142	5	137
	55	Vayalpad ... R. C.	127,035	2nd Mar...	15th Sept...	254	20.0	June ...	125	22	103
	56	Madanapalle ... R. C.	127,310	26th Jan...	11th Aug...	8	0.6	...	105	2	103
12	Total, District ...	1,271,721	1st Jan. ...	28th Dec...	3,338	26.2	August ...	1,276	276	1,000	
Ganjam.	57	Chicacole ... M.T.C.	18,204	15th May...	15th May...	1	0.5	...	1	1	...
	58	Berhampore ... M.T.C.	25,493	2nd Aug...	6th Nov...	76	29.8	August ...	1	1	...
	59	Parlakimedi ... M.T.C.	16,379	9th Nov...	21st Nov...	18	11.0	November...	1	1	...
	60	Chicacole ... R. C.	194,330	17th Aug...	17th Aug...	5	0.2	...	305	2	303

Table showing the Birth-rates of Districts and Municipalities arranged in order of sequence—cont.

Districts exclusive of Municipal Towns.			Municipalities.		
Birth-rate.			Birth-rate.		
No.	Districts.	Ratio per mille.	No.	Municipalities.	Ratio per mille for 1892.
17	Nellore	21·8	37	Nellore	24·2
			38	Ongole	28·2
18	Górávari	21·6	39	Cocanada	30·4
			40	Rajahmundry	35·5
			41	Ellore	27·9
19	Nílگیرis	21·6	42	Ootacamund	29·4
			43	Coonoor	32·6
20	Vizagapatam	21·1	44	Vizagapatam	31·1
			45	Bimlipatam	34·3
			46	Vizianagram	20·9
			47	Anakápalle	33·2
21	Malabar	19·7	48	Tellicherry	30·4
			49	Calicut	30·2
			50	Palghat	31·8
			51	Cochin	31·8
			52	Cannanore	30·6
22	Ganjam	17·3	53	Chicacole	27·4
			54	Berhampore	32·3
			55	Parlákimedi	34·6
	Total ..	24·8		Total ..	29·9

The total birth-rate for municipal towns is 29·9 per mille for 1892 against 30·0 for 1891. In only two towns in 1892 was the birth-rate above 40 per mille, in thirty-three it was between 30 and 40, and in twenty it was between 20 and 30. The rates in the various municipalities varied, ranging from 20·9 per mille in Vizianagram and Trichinopoly to 41·3 in Vániyambádi. The average birth-rate of the fifty-five municipal towns was 5·1 higher than the district-rate. In only nine municipalities (Bellary, Bezvada, Masulipatam, Mannárgudi, Kumbakónam, Tanjore, Negapatam, Trichinopoly and Vizianagram) the birth-rates were lower than the district-rate. In some towns registration of births is still carried on in an inefficient manner, but, on the whole, there has been found on personal inspection evidence of improvement.

21. The birth-rate for each taluk is shown in the diagram on the opposite page according to the suggestions of the Army Sanitary Commission in para. 10 of its Memorandum on the Indian Sanitary Reports for 1889, and in table I in appendix the birth-rate according to each registration circle is given. In one circle a birth-rate of over 40 per 1,000 of population was recorded, while thirty-six circles returned rates ranging from 30 to 40. In 115 registration circles the birth-rate was between 20 and 30, and in twenty-seven it was below 20 per mille. The rates varied in each district and in some, such as the Chingleput and Ganjam districts, the rates ranged from 2·2 to 35·5 and 1·8 to 34·6 per 1,000 of population, respectively.

DEATHS.

22. In a population of 33,693,179, for which returns were received, the deaths numbered 750,755, being at the rate of 22·3 per 1,000 of population against 22·2 per mille in 1891 and 19·5, the average of five years. The year under report was an unhealthy one, the death-rate being higher than any rate that has been recorded since 1878, and being chiefly due to the exceptional amount of mortality registered

Statement illustrating the distribution, &c., of Cholera in the Madras Presidency during the year 1892, to accompany the Cholera Map—continued.

1	2	3	4	5	6	7	8	9	10
Districts.	Number of Circles of Registration.	Name of Circle.	Population for which Returns were received.	Date of First Case of Cholera in the Circle during the Year.	Date of Last Case of Cholera in the Circle during the Year.	Cholera.	Period of Maximum Intensity of the Disease.	Number of Villages in each of the Circles.	Number of those affected by Cholera.
						Total Deaths in each of the Circles.	Ratio per 10,000 of Population.		Not affected by Cholera.
Ganjam—cont.									
61	Berhampur R. C.	297,736	1st Jan. ...	17th Dec. ...	204	6.9	November ...	543	48
62	Goomsur R. C.	185,531	28th Sept. ...	25th Dec. ...	39	2.1	Do. ...	710	18
63	Zemindari ...	851,109	5th Mar. ...	9th Dec. ...	126	1.5	Do. ...	2,630	30
64	Agency Tracts ...	307,318	...	...	...	...	...	1,846	1,846
8	Total District ...	1,896,400	1st Jan. ...	25th Dec. ...	469	2.5	November ...	6,037	101
Giddavari.									
65	Cocanada M. T. C.	40,068	2nd June ...	17th Aug. ...	304	75.9	June ...	1	1
66	Rajahmundry M. T. C.	28,279	29th Jan. ...	27th Dec. ...	166	58.7	July ...	1	1
67	Ellore M. T. C.	29,296	30th Jan. ...	30th Dec. ...	140	47.8	Do. ...	1	1
68	Pithapuram T. C.	13,731	13th May ...	25th Aug. ...	19	13.8	...	1	1
69	Peddapuram T. C.	13,652	5th Mar. ...	3rd Aug. ...	22	16.1	...	1	1
70	Samalkot T. C.	13,409	8th July ...	...	84	25.3	July ...	1	1
71	Dowlaiswaram T. C.	10,454	25th Jan. ...	5th Aug. ...	100	95.6	Do. ...	164	130
72	Ramachandrapuram R. C.	261,183	30th Jan. ...	9th Sept. ...	2,465	94.3	Do. ...	139	98
73	Narsapur R. C.	230,315	1st Mar. ...	30th Oct. ...	1,563	67.9	Do. ...	170	128
74	Amalapuram R. C.	256,072	18th Feb. ...	20th Sept. ...	2,294	89.6	Do. ...	176	89
75	Tanuku R. C.	204,040	19th Jan. ...	6th Sept. ...	1,753	85.9	Do. ...	138	18
76	Bhimavaram R. C.	121,990	1st Mar. ...	15th Oct. ...	1,351	110.7	Do. ...	219	22
77	Ellore R. C.	142,585	1st Jan. ...	24th Dec. ...	359	25.2	Do. ...	137	24
78	Yernagudem R. C.	136,204	21st Feb. ...	6th Oct. ...	677	49.7	Do. ...	116	29
79	Rajahmundry R. C.	106,866	20th Mar. ...	20th Sept. ...	531	49.7	Do. ...	123	36
80	Peddapuram R. C.	124,028	3rd Mar. ...	6th Nov. ...	611	49.3	August ...	283	4
81	Bhadrachalam R. C.	42,317	16th April ...	5th July ...	40	9.4	April ...	931	70
82	Zemindari ...	303,369	26th Feb. ...	16th Oct. ...	1,189	39.2	July ...	...	...
18	Total District ...	2,077,858	1st Jan. ...	30th Dec. ...	13,618	65.5	July ...	2,603	717
Kistna.									
83	Masulipatam M. T. C.	38,667	9th Feb. ...	10th Feb. ...	3	0.8	...	1	1
84	Guntur M. T. C.	23,267	1st July ...	6th Sept. ...	82	35.2	August ...	1	1
85	Bezawada M. T. C.	20,611	1st Jan. ...	14th Dec. ...	182	88.3	January ...	1	1
86	Chirala T. C.	10,581	...	...	...	...	...	151	31
87	Répallo R. C.	222,756	12th Jan. ...	22nd Dec. ...	136	6.1	Jan. & Feb. ...	116	29
88	Bápatla R. C.	171,345	2nd Jan. ...	13th Dec. ...	141	8.2	Mar. & Aug. ...	112	26
89	Guntur R. C.	143,367	11th Jan. ...	22nd Aug. ...	123	8.6	August ...	98	61
90	Palnad R. C.	142,005	16th Mar. ...	7th Oct. ...	1,203	86.8	July ...	115	29
91	Narasaraopet R. C.	156,364	7th Jan. ...	8th Dec. ...	324	20.7	August ...	213	44
92	Gudivada R. C.	118,308	18th Jan. ...	31st Dec. ...	421	35.6	April ...	176	39
93	Sattenapalle R. C.	138,611	21st Jan. ...	27th Dec. ...	266	19.2	August ...	188	46
94	Masulipatam R. C.	159,547	7th Jan. ...	4th Sept. ...	287	17.9	July ...	169	12
95	Nandigama R. C.	126,698	13th Jan. ...	18th Nov. ...	329	25.9	April ...	108	15
96	Bezawada R. C.	85,731	9th Jan. ...	27th Dec. ...	94	10.9	August ...	72	51
97	Vinukonda R. C.	82,431	13th Feb. ...	29th Dec. ...	645	78.2	July ...	326	75
98	Zemindari ...	214,735	1st Jan. ...	31st Dec. ...	303	14.1	Do. ...	...	...
16	Total District ...	1,855,024	1st Jan. ...	31st Dec. ...	4,539	24.5	August ...	1,848	431
Kurnool.									
99	Kurnool M. T. C.	24,306	7th July ...	29th Sept. ...	135	55.5	August ...	1	1
100	Nandyal T. C.	10,704	26th May ...	4th Nov. ...	356	360.6	July ...	106	28
101	Ramalakot R. C.	100,590	3rd July ...	11th Nov. ...	290	28.8	August ...	107	15
102	Patikonda R. C.	138,703	8th Aug. ...	14th Dec. ...	199	14.3	Do. ...	113	32
103	Nandikotkur R. C.	88,559	— June ...	1st Dec. ...	62	7.0	...	100	32
104	Nandyal R. C.	85,542	26th June ...	31st Dec. ...	392	45.8	July & Aug. ...	85	35
105	Koilkuntla R. C.	89,543	8th July ...	24th Nov. ...	226	26.1	August ...	87	29
106	Sirvel R. C.	65,164	23rd June ...	5th Dec. ...	138	21.2	September ...	108	66
107	Cumham R. C.	117,578	1st Jan. ...	3rd Oct. ...	1,916	162.9	July & Aug. ...	94	50
108	Markapur R. C.	99,971	6th April ...	4th Oct. ...	1,142	114.2	May, July & August ...	...	...
10	Total District ...	817,660	1st Jan. ...	31st Dec. ...	4,886	59.7	July & Aug. ...	802	289
Madras.									
109	Madras M. T. C.	436,375	1st Jan. ...	30th Dec. ...	565	12.9	May & Aug. ...	1	1
Madura.									
110	Madura M. T. C.	87,121	2nd Jan. ...	8th Jan. ...	20	2.3	...	1	1
111	Dindigul M. T. C.	20,115	3rd Jan. ...	21st Mar. ...	18	8.9	...	1	1
112	Periyakulam M. T. C.	16,363	1st Jan. ...	1st April ...	241	147.3	March ...	1	1
113	Palni M. T. C.	16,940	...	...	...	...	...	1	1
114	Ramnad T. C.	13,589	6th Jan. ...	26th June ...	8	5.9	...	1	1
115	Arappukottai T. C.	12,673	1st Jan. ...	7th Feb. ...	157	123.9	January ...	1	1
116	Kilakarai T. C.	12,396	6th Jan. ...	10th Feb. ...	10	8.1	...	1	1
117	Paramagudi T. C.	10,001	...	...	...	...	...	1	1
118	Madura R. C.	173,755	2nd Jan. ...	31st July ...	351	20.2	January ...	280	60

* Includes Agency Tracts.

Statement illustrating the distribution, &c., of Cholera in the Madras Presidency during the year 1892, to accompany the Cholera Map—continued.

1	2	3	4	5	6	7		8	9	10	
Districts.	Number of Circles of Registration.	Name of Circle.	Population for which Returns were received.	Date of First Case of Cholera in the Circle during the Year.	Date of Last Case of Cholera in the Circle during the Year.	Cholera.		Period of Maximum Intensity of the Disease.	Number of Villages in each of the Circles.	Number of those	
						Total Deaths in each of the Circles.	Ratio per 10,000 of Population.			Affected by Cholera.	Not affected by Cholera.
Madura—cont.	119	Mélur ... R.C.	148,650	1st Jan. ...	31st Mar. ...	242	16.3	March ...	100	14	86
	120	Tirumangalam ... R.C.	264,620	Do. ...	31st Oct. ...	105	4.0	January ...	273	24	249
	121	Periyakulam ... R.C.	246,845	4th Jan. ...	7th July ...	426	17.2	March ...	85	40	45
	122	Dindigul ... R.C.	370,857	1st Jan. ...	31st Mar. ...	831	22.4	January ...	213	76	137
	123	Palni ... R.C.	178,110	Do. ...	28th Mar. ...	429	24.1	Do. ...	115	34	81
124	Sattenandal Villages, &c.	1,283	...	...	...	...	...	4	...	4	...
15	Total, District ...	1,573,318	1st Jan. ...	31st Oct. ...	2,838	18.0	January ...	1,078	254	824	...
Malabar.	125	Tellicherry ... M.T.C.	26,631	25th Apr. ...	17th Sept. ...	199	74.7	June ...	1	1	...
	126	Calicut ... M.T.C.	64,798	6th Feb. ...	21st Oct. ...	435	67.1	April ...	1	1	...
	127	Palghat ... M.T.C.	39,367	2nd Jan. ...	19th June ...	20	5.1	...	1	1	...
	128	Cochin ... M.T.C.	16,147	5th Jan. ...	16th July ...	25	15.5	...	1	1	...
	129	Cannanore ... M.T.C.	26,653	15th Jan. ...	17th Oct. ...	86	32.3	August ...	1	1	...
	130	Chirakkal ... R.C.	283,471	1st Jan. ...	Do. ...	2,817	99.4	Do. ...	232	39	243
	131	Kottayam ... R.C.	168,260	Do. ...	31st Aug. ...	537	31.9	July ...	220	26	194
	132	Kurumbanad ... R.C.	304,011	15th May ...	19th Oct. ...	1,284	42.2	August ...	340	48	292
	133	Calicut ... R.C.	171,582	2nd Jan. ...	8th Nov. ...	754	43.9	Do. ...	191	32	159
	134	Ernad ... R.C.	339,187	3rd Jan. ...	31st Dec. ...	1,080	31.8	April ...	233	38	195
	135	Ponná ... R.C.	449,253	1st Jan. ...	20th Nov. ...	519	11.5	March ...	460	41	419
	136	Walavind ... R.C.	332,334	Do. ...	8th Nov. ...	424	12.7	April ...	317	22	295
	137	Palghat ... R.C.	332,627	3rd Jan. ...	23rd Nov. ...	22	0.6	...	136	19	117
138	Wynad ... R.C.	76,365	22nd May ...	30th June ...	22	2.9	...	58	6	52	
139	Cochin ... R.C.	5,988	31st Dec. ...	31st Dec. ...	1	1.7	...	3	1	2	
15	Total, District ...	2,636,674	1st Jan. ...	31st Dec. ...	8,225	31.2	August ...	2,245	277	1,968	...
Nellore.	140	Nellore ... M.T.C.	29,128	3rd Jan. ...	14th June ...	66	22.7	February ...	1	1	...
	141	Ongole ... M.T.C.	10,832	12th Sept. ...	12th Sept. ...	1	0.9	...	1	1	...
	142	Gudur ... R.C.	135,985	3rd Jan. ...	11th Aug. ...	48	3.5	...	148	9	139
	143	Rápur ... R.C.	61,205	30th Jan. ...	25th Sept. ...	81	13.2	July ...	113	11	102
	144	Nellore ... R.C.	168,548	12th Jan. ...	19th Sept. ...	62	3.7	April ...	160	15	135
	145	Atmakur ... R.C.	101,148	Do. ...	30th Sept. ...	209	20.9	August ...	113	27	86
	146	Kávali ... R.C.	83,102	10th Jan. ...	16th Sept. ...	65	7.8	Do. ...	79	12	67
	147	Udayagiri ... R.C.	100,219	1st Jan. ...	26th Sept. ...	220	21.9	Do. ...	134	20	114
	148	Kandukur ... R.C.	143,463	6th Jan. ...	17th Sept. ...	120	8.1	Do. ...	167	26	141
	149	Kanigiri ... R.C.	131,221	15th Jan. ...	14th Nov. ...	152	11.6	Do. ...	160	25	165
	150	Ongole ... R.C.	214,361	10th Jan. ...	27th Sept. ...	117	5.5	Do. ...	167	23	144
	151	Zemindaries ...	279,045	1st Jan. ...	4th Nov. ...	677	24.3	Do. ...	530	68	462
	12	Total, District ...	1,463,357	1st Jan. ...	14th Nov. ...	1,818	12.4	August ...	1,793	238	1,555
Nilgiris.	152	Ootacamund ... M.T.C.	13,991	...	...	...	...	...	1	...	1
	153	Coonoor ... M.T.C.	5,586	3rd Jan. ...	3rd Jan. ...	1	1.8	...	1	1	...
	154	Nilgiris ... R.C.	52,168	...	...	...	...	...	38	...	38
	155	South-East Wynad R.C.	25,020	3rd Jan. ...	3rd Feb. ...	20	8.0	...	12	6	6
4	Total, District ...	96,765	3rd Jan. ...	3rd Feb. ...	21	2.2	...	52	7	45	...
North Arcot.	156	Vellore ... M.T.C.	44,724	1st Jan. ...	8th Sept. ...	49	10.9	January ...	1	1	...
	157	Wárajápet ... M.T.C.	10,435	13th Feb. ...	13th Feb. ...	1	0.9	...	1	1	...
	158	Gudiyáttam ... M.T.C.	18,745	3rd Feb. ...	27th June ...	109	58.1	June ...	1	1	...
	159	Tirupati ... M.T.C.	14,238	25th Feb. ...	20th June ...	16	11.2	...	1	1	...
	160	Kálahasti ... T.C.	11,715	15th Feb. ...	17th May ...	21	20.5	...	1	1	...
	161	Arcoet ... T.C.	10,928	1st Jan. ...	27th Feb. ...	20	18.3	...	1	1	...
	162	Ámbúr ... T.C.	10,583	2nd May ...	2nd May ...	1	0.9	...	1	1	...
	163	Chittoor ... R.C.	200,186	1st Jan. ...	4th Aug. ...	391	19.5	January ...	337	78	259
	164	Chendragiri ... R.C.	100,030	2nd Jan. ...	6th Aug. ...	121	12.1	May ...	231	63	168
	165	Palmanér ... R.C.	48,131	21st Jan. ...	31st Aug. ...	73	15.2	June ...	93	15	78
	166	Gudiyáttam ... R.C.	157,863	1st Jan. ...	5th Sept. ...	336	21.3	January ...	183	89	94
	167	Vellore ... R.C.	137,367	Do. ...	18th Sept. ...	253	18.4	Do. ...	149	95	54
	168	Polur ... R.C.	131,368	Do. ...	31st July ...	111	8.4	Do. ...	158	54	104
169	Wandiwash ... R.C.	177,719	Do. ...	15th July ...	107	6.0	Do. ...	285	45	240	
170	Arcoet ... R.C.	165,948	Do. ...	21st Aug. ...	150	9.0	Do. ...	258	63	195	
171	Wárajápet ... R.C.	228,630	Do. ...	25th Sept. ...	437	19.1	Do. ...	250	102	148	
172	Zemindaries ...	710,925	Do. ...	14th Oct. ...	1,128	15.9	Jan. & June.	2,514	161	2,353	...
17	Total, District ...	2,179,585	1st Jan. ...	14th Oct. ...	3,327	15.3	January ...	1,465	772	3,693	...
Salem.	173	Salem ... M.T.C.	67,610	1st Jan. ...	10th May ...	155	22.9	January ...	1	1	...
	174	Vániyambádi ... M.T.C.	15,838	3rd Jan. ...	5th Aug. ...	133	83.9	February ...	1	1	...
	175	Tirupattár ... M.T.C.	16,463	2nd Jan. ...	29th Apr. ...	8	4.8	...	1	1	...
	176	Sendamangalam T.C.	13,354	1st Jan. ...	4th Feb. ...	20	15.0	January ...	1	1	...
	177	Rásipur ... T.C.	10,539	18th Jan. ...	Do. ...	2	1.9	...	1	1	...
	178	Salem ... R.C.	338,759	1st Jan. ...	1st Oct. ...	439	12.9	January ...	499	88	411
	179	Atr ... R.C.	183,202	Do. ...	22nd Mar. ...	277	15.1	Do. ...	176	65	111
	180	Námakkal ... R.C.	286,686	Do. ...	4th Aug. ...	612	21.3	Do. ...	347	39	308



THE
TWENTY-NINTH ANNUAL REPORT
OF THE
SANITARY COMMISSIONER
AND THE
THIRD REPORT
OF THE
SANITARY ENGINEER TO GOVERNMENT,
MADRAS,
1892.
WITH APPENDICES.

MADRAS:
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS.
1893.

44. The following statement gives daily records of Meteorological observations and reported deaths from cholera at Madras, Calicut, Bellary and Trichinopoly during the prevalence of the disease in 1892:—

Daily Record of Meteorological Observations and of Cholera Deaths at MADRAS during the prevalence of the Disease in the year 1892.

Month and date.	Rainfall in inches.	Temperature of air in the shade.			Moisture of air per cent., 100 being saturation.		Mean wind.			Deaths from cholera recorded on each day.
		Highest maximum.	Lowest minimum.	Range.	10 A.M.	4 P.M.	Direction.		Velocity, miles per diem.	
							Midnight to Noon.	Noon to Midnight.		
JANUARY.										
1	...	82.3	66.3	16.0	59	61	N.N.E.	N.N.E.	169	21
2	...	82.3	65.7	16.6	68	60	N. by E.	N.N.E.	199	
3	...	85.3	70.2	15.1	62	62	N.E. by E.	N.E. by N.	176	
4	...	84.1	74.6	9.5	69	72	N.E.	N.E.	305	
5	...	83.9	71.1	12.8	83	68	N.N.E.	N.N.E.	181	
6	...	84.2	68.5	15.7	68	67	N.N.E.	N.N.E.	176	
7	...	82.5	67.8	14.7	66	67	N.N.E.	N.E. by N.	153	
8	...	82.6	66.0	16.6	76	66	N. by E.	N.N.E.	156	
9	...	84.9	66.1	18.8	73	63	N. by E.	N.N.E.	136	
10	...	85.4	66.4	19.0	75	68	N. by E.	N.E. by N.	116	
11	...	84.1	64.9	19.2	70	63	N. by E.	N.E.	126	
12	...	85.1	65.1	20.0	63	67	N.E.	N.E.	145	
13	...	85.5	64.3	21.2	50	54	N.E. by N.	N.E. by N.	146	
14	...	84.0	68.1	15.9	66	56	N. by E.	N.E. by N.	144	
15	...	85.4	64.0	20.5	64	66	N.N.E.	N.E. by N.	145	
16	...	85.5	66.9	18.6	65	69	N.E. by N.	N.E.	146	
17	...	85.8	67.4	18.4	61	64	N.E. by E.	E.N.E.	130	
18	0.01	85.4	66.9	18.5	70	71	N.E. by E.	N.E. by E.	168	
19	...	85.0	67.8	17.2	63	61	N.E.	N.E. by N.	219	
20	...	85.2	70.6	14.6	68	71	N.E.	N.E.	232	
21	...	85.7	67.3	18.4	67	68	N.E. by E.	E.N.E.	135	
22	...	85.3	66.4	18.9	62	61	E.N.E.	E.N.E.	157	
23	0.12	86.6	66.1	20.5	67	74	N.E. by N.	N.E. by E.	115	
24	...	86.1	73.8	12.3	76	64	E.N.E.	E.N.E.	247	
25	...	86.4	73.0	13.4	71	61	E.N.E.	N.E.	152	
26	...	86.7	68.3	18.4	68	58	N.E.	N.E.	141	
27	...	84.3	72.8	12.0	64	67	N.E.	N.E. by E.	147	
28	...	85.3	66.3	19.0	62	67	N.N.E.	N.E. by N.	175	
29	...	85.6	67.0	18.6	62	67	N.N.E.	N.E.	165	
30	...	86.2	65.6	20.6	67	64	N.N.E.	N.E.	141	
31	...	85.4	66.8	18.6	66	65	N.E. by N.	N.E. by N.	187	
FEBRUARY.										
1	...	84.6	66.8	17.8	63	61	N.N.E.	N.E. by N.	182	27
2	...	85.8	65.8	20.0	63	60	N.E. by N.	N.E. by N.	136	
3	...	86.4	63.7	22.7	61	58	N.N.E.	N.E.	98	
4	...	89.0	63.5	25.5	73	38	S. by W.	E. by N.	84	
5	...	87.3	64.2	23.1	67	75	S. by E.	E. by S.	119	
6	...	84.9	65.7	19.2	69	63	S.	E. by S.	112	
7	...	85.1	65.7	19.4	68	63	S. E. by E.	E. by S.	95	
8	...	86.0	64.7	21.3	60	55	S.S.W.	E. by N.	100	
9	...	85.7	64.4	21.3	65	57	S.W.	E.N.E.	93	
10	...	86.3	63.8	22.5	59	58	S. by E.	E.	98	
11	...	87.0	67.0	20.0	64	67	S. by E.	E. by N.	135	
12	...	87.5	71.1	16.4	61	67	E.N.E.	E.N.E.	162	
13	...	88.0	70.1	17.9	58	61	E.N.E.	E.N.E.	176	
14	...	87.6	70.2	17.4	70	75	N.E. by N.	E.S.E.	145	
15	...	87.7	73.9	13.8	72	71	E.S.E.	E.S.E.	157	
16	...	90.7	73.9	16.8	65	61	E. by N.	N.E.	207	
17	...	89.3	76.6	12.7	60	62	E.N.E.	E.N.E.	254	
18	...	87.8	74.0	13.8	55	54	N.E. by N.	N.E.	227	
19	...	87.8	65.8	22.0	59	61	N.N.E.	N.E. by N.	148	
20	...	87.5	65.7	21.8	61	56	N. by E.	N.E. by E.	119	
21	...	86.9	64.5	22.4	57	58	N.E. by N.	E.	80	
22	...	86.8	62.6	24.2	71	66	E.	E.S.E.	102	
23	...	88.3	67.8	20.5	61	63	S.E. by S.	S.E. by E.	137	
24	...	88.8	70.3	18.5	62	71	S.E.	E.S.E.	139	
25	...	90.0	69.6	20.4	65	64	E.S.E.	E.	131	
26	...	88.9	73.7	15.2	67	75	E.	E. by S.	129	
27	...	90.6	73.6	17.0	74	73	E.	E. by S.	138	
28	...	89.0	72.7	16.3	72	70	E.S.E.	S.E. by E.	128	
29	...	92.3	72.8	19.5	66	66	S. by E.	S.E. by E.	182	

NOTE.—The deaths from cholera recorded for each day are not available for the Town of Madras for 1892. They are, therefore, shown for the month as a whole.

Daily Record of Meteorological Observations and of Cholera Deaths at MADRAS during the prevalence of the Disease in the year 1892—continued.

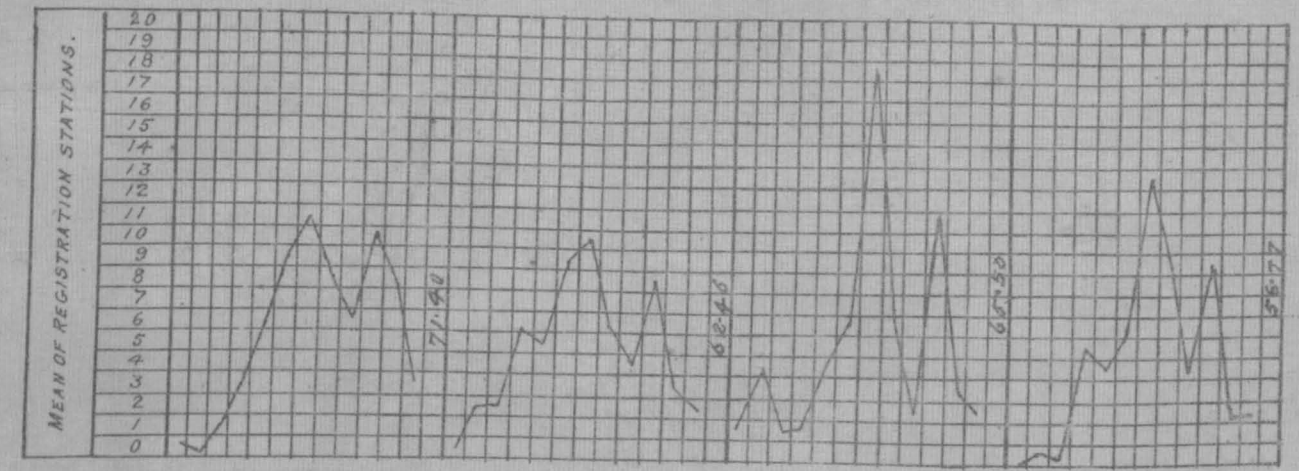
Month and date.	Rainfall in inches.	Temperature of air in the shade.			Moisture of air per cent., 100 being saturation.		Mean wind.		Deaths from cholera recorded on each day.	
		Highest maxi- mum.	Lowest mini- mum.	Range.	10 A.M.	4 P.M.	Direction.			Velocity, miles per diem.
							Midnight to Noon.	Noon to Midnight.		
MARCH.										
1	...	88.3	72.7	15.6	63	63	S.E.	S.E. by E.	150	
2	...	88.2	71.9	16.3	65	71	S.E.	S.E.	170	
3	...	92.5	71.7	20.8	56	64	S.	S.E. by S.	195	
4	...	89.5	72.6	16.9	72	72	S.	S.E.	210	
5	...	89.3	71.6	17.7	87	64	S.S.E.	S.E. by E.	126	
6	...	90.6	71.0	19.6	68	66	E.S.E.	E.S.E.	127	
7	...	89.2	71.6	17.6	70	59	S.E.	E.	110	
8	...	89.5	69.5	20.0	56	64	E. by S.	E. by S.	91	
9	...	88.9	66.5	22.4	58	54	E.	E.N.E.	111	
10	...	89.0	67.0	22.0	58	52	N.E.	N.E. by E.	119	
11	...	89.4	67.8	21.6	56	59	N.N.E.	N.E. by N.	101	
12	...	90.3	67.8	22.5	62	61	N.	E.	99	
13	...	90.4	68.1	22.3	68	66	E.	E. by S.	81	
14	...	88.9	68.4	20.5	64	61	S.E.	E.S.E.	106	
15	...	89.9	68.8	21.1	68	59	S. by E.	S.E. by E.	128	
16	...	89.0	71.3	17.5	64	71	S.S.E.	E.S.E.	139	
17	...	90.2	71.7	18.5	65	65	S.E. by S.	E. by S.	121	
18	...	94.1	68.1	26.0	58	45	S.E. by E.	E. by S.	132	
19	...	93.1	71.8	21.3	61	58	S.E.	S.E. by E.	117	
20	...	90.4	70.7	19.7	49	59	S.E. by S.	S.E. by E.	152	
21	...	88.8	73.0	15.8	67	62	S.E.	S.E.	179	
22	...	90.2	71.1	19.1	74	66	S.E. by S.	S.E.	189	
23	...	90.4	73.8	16.6	69	70	S.S.E.	S.E. by E.	171	
24	...	102.0	76.4	25.6	60	69	S.S.W.	S.S.E.	208	
25	...	100.3	72.1	28.2	45	65	S. by W.	S.E. by S.	189	
26	...	94.3	78.1	16.2	60	78	S.	S.E. by S.	270	
27	...	92.6	79.2	13.6	54	72	S.	S.E. by S.	272	
28	...	98.7	75.9	22.8	53	67	S.	S.E. by S.	216	
29	...	101.4	80.9	20.5	47	60	S.S.W.	S.E.	208	
30	...	92.2	82.7	9.5	69	79	S. by E.	S.E. by S.	284	
31	...	92.0	81.0	11.0	70	78	S. by E.	S.E.	262	
APRIL.										
1	...	90.2	76.9	13.3	66	75	S.E.	S.E.	204	
2	...	91.4	75.8	15.6	69	70	S.E. by S.	S.E.	176	
3	...	92.3	75.8	16.5	59	74	S. by E.	S.E.	185	
4	...	93.9	80.0	13.9	55	62	S. by E.	S.E.	211	
5	...	91.4	76.8	14.6	72	73	S.S.E.	S.E. by S.	210	
6	...	91.7	76.7	15.0	66	63	S. by E.	S.E. by S.	208	
7	...	93.6	74.8	18.8	53	65	S. by E.	S.E. by S.	205	
8	...	91.9	78.0	13.9	60	73	S.S.E.	S.E. by S.	221	
9	...	92.1	80.7	11.4	69	74	S.S.E.	S.E. by E.	234	
10	...	91.9	79.6	12.3	68	74	S.E.	S.E. by E.	196	
11	...	90.7	77.7	12.0	66	73	S.E.	S.E.	186	
12	...	91.3	75.6	15.7	63	67	S.E.	S.E. by E.	159	
13	...	90.6	74.2	16.4	59	63	S.E. by S.	S.E. by E.	134	
14	...	92.4	76.0	16.4	62	74	E.S.E.	E.S.E.	126	
15	...	92.3	78.4	13.9	67	69	S.E. by E.	E.S.E.	149	
16	...	93.5	79.5	14.0	65	74	S.E. by E.	S.E.	174	
17	...	93.7	78.6	15.1	62	68	S.S.E.	S.E. by S.	169	
18	...	93.5	77.9	15.6	60	71	S.S.E.	S.E. by S.	201	
19	...	94.5	78.8	15.7	68	69	S.	S.E.	175	
20	...	95.4	79.8	15.6	73	76	S.S.E.	S.E.	177	
21	...	94.2	80.1	14.1	61	78	S. by E.	S.E. by E.	148	
22	...	95.7	80.7	15.0	61	74	S. by E.	S.E. by E.	165	
23	...	94.2	79.9	14.3	66	66	S.E. by S.	E.S.E.	109	
24	0.69	89.6	78.4	11.2	86	76	S.E. by E.	S.E.	108	
25	...	92.4	76.7	15.7	64	70	S.S.E.	S.S.E.	222	
26	...	98.7	79.5	19.2	51	63	S. by W.	S.E. by S.	269	
27	...	101.1	79.7	21.4	51	58	S.	S.E.	192	
28	...	95.2	83.7	11.5	59	58	S.	S.E. by S.	208	
29	...	104.2	82.7	21.5	47	64	S.S.W.	S.E. by S.	277	
30	...	103.1	82.7	20.4	51	63	S. by W.	S.S.E.	231	

DIAGRAM SHOWING THE RAINFALL & PRICE OF FOOD (RICE) IN THE DISTRICT OF NILGIRIS & (CUMBU) IN THE DISTRICT OF COIMBATORE FOR 3 YEARS ENDING 1892. COMPARED WITH AVERAGE OF 10 YEARS.

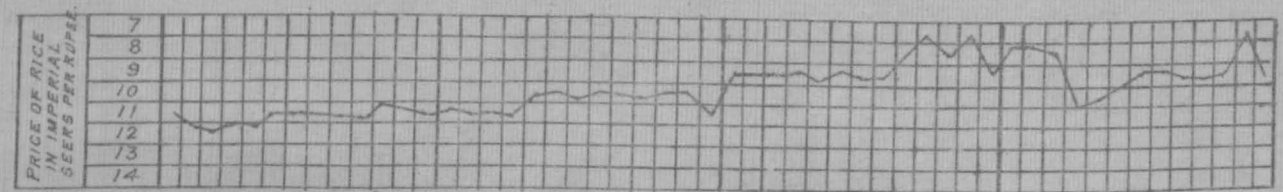
NILGIRIS.

DISTRICTS	YEARS	AVERAGE OF 10 YEARS.												1890												1891												1892											
	MONTHS	JAN.	FEB.	MAR.	APR.	MAY.	JUNE.	JULY.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL	JAN.	FEB.	MAR.	APR.	MAY.	JUNE.	JULY.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL	JAN.	FEB.	MAR.	APR.	MAY.	JUNE.	JULY.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL									

RAINFALL

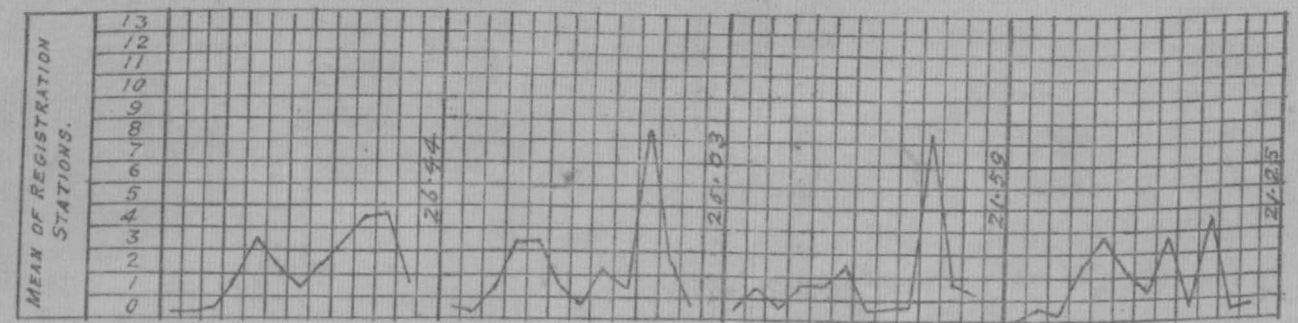


PRICE OF FOOD (RICE)

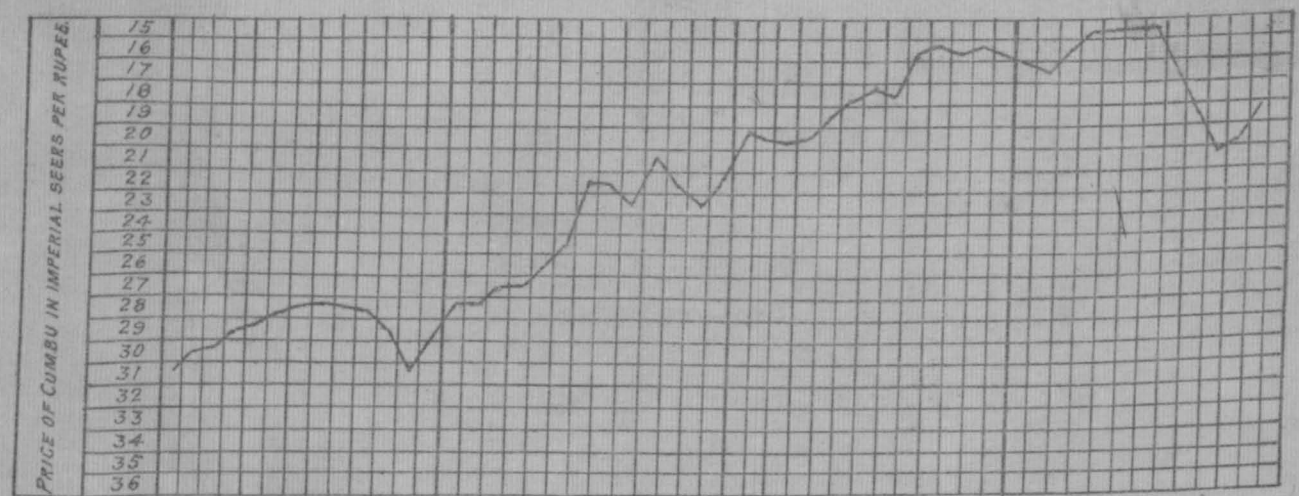


COIMBATORE.

RAINFALL.



PRICE OF FOOD (CUMBU).

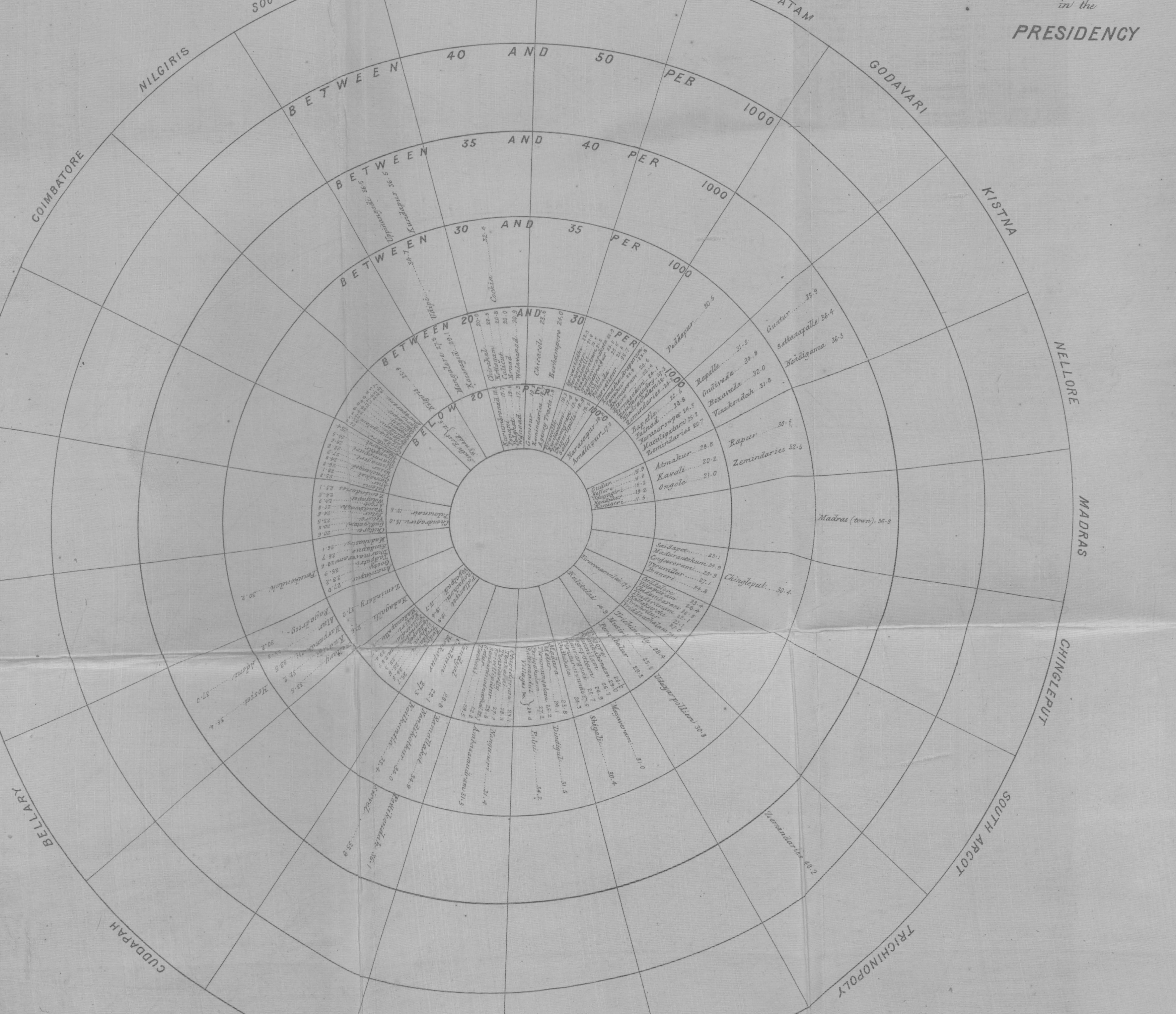


Daily Record of Meteorological Observations and of Cholera Deaths at MADRAS during the prevalence of the Disease in the year 1892—continued.

Month and date.	Rainfall in inches.	Temperature of air in the shade.			Moisture of air per cent., 100 being saturation.		Mean wind.		Deaths from cholera recorded on each day.	
		Highest maxi- mum.	Lowest mini- mum.	Range.	10 A.M.	4 P.M.	Direction.			Velocity, miles per diem.
							Midnight to Noon.	Noon to Midnight.		
MAY.										
1	...	99.6	83.7	15.9	38	62	S.S.W.	E.S.E.	180	
2	...	100.1	81.4	18.7	38	56	W.S.W.	S.E. by E.	179	
3	...	93.3	79.6	13.7	62	68	S.	S.E. by S.	202	
4	...	92.2	79.1	13.1	67	69	S.S.E.	S.E.	197	
5	...	93.0	80.0	13.0	68	67	S.E.	S.E.	197	
6	...	91.6	79.8	11.8	60	64	S.E.	S.E.	224	
7	...	92.8	81.3	11.5	53	67	S. by E.	S.E. by S.	306	
8	...	92.7	80.9	11.8	63	67	S. by E.	S.E. by S.	297	
9	...	92.8	81.8	11.0	62	72	S. by E.	S.E. by S.	269	
10	...	102.0	81.7	20.3	51	55	S.	S.E. by S.	231	
11	...	105.7	82.3	23.4	39	57	S. by W.	S.S.E.	252	
12	...	99.6	81.9	17.7	39	53	S.S.W.	S.E. by S.	251	
13	...	106.2	82.4	23.8	33	58	S.S.W.	S.S.E.	232	
14	...	106.6	82.7	23.9	39	47	S.W. by S.	S.E. by S.	220	
15	...	105.3	82.7	22.6	33	59	S. by W.	S.E. by S.	225	
16	...	107.5	82.2	25.3	34	58	S.W.	S.E. by S.	218	
17	...	97.1	82.7	14.4	61	75	S.S.W.	S.E. by S.	199	
18	...	95.0	82.7	12.3	60	63	S. by E.	S.E. by S.	253	
19	...	99.2	81.7	17.5	54	60	S.	S.E. by S.	217	
20	...	101.0	81.8	19.2	45	67	S.S.W.	S.E.	183	
21	...	105.8	83.5	22.3	40	53	S.W. by S.	S.E. by S.	230	
22	...	108.4	84.0	24.4	32	49	S.W.	S.E. by S.	240	
23	...	106.7	84.1	22.6	31	53	S.W. by W.	S.E.	261	
24	...	103.8	84.0	19.8	38	64	S.W.	S.E. by E.	207	
25	...	103.5	82.4	21.1	39	56	S. by W.	S.E. by S.	170	
26	...	107.0	84.0	23.0	38	50	S.W. by W.	S. by E.	226	
27	...	100.9	85.8	15.1	38	51	W. by S.	S.E.	225	
28	...	108.2	83.5	24.7	41	51	S.W. by S.	S.S.E.	231	
29	...	101.9	85.1	16.8	34	57	W. by S.	S.S.E.	250	
30	...	103.6	85.0	18.6	37	48	W.S.W.	S.	275	
31	...	98.8	82.8	16.0	40	55	S.W.	S.E. by S.	186	
JUNE.										
1	...	97.0	83.2	13.8	39	62	S.W. by W.	S.E. by S.	236	
2	...	0.01	101.2	83.8	47	60	S.W.	S.E. by S.	205	
3	...	0.04	87.4	76.2	59	70	S.W.	S.E. by E.	131	
4	...	1.10	96.1	79.0	58	96	S.W.	S.E. by E.	135	
5	...	...	97.2	76.6	20.6	61	S.W. by S.	S.S.E.	143	
6	...	...	101.2	80.2	21.0	47	S.W. by W.	S. by E.	214	
7	...	0.21	100.1	83.3	16.8	47	S.W. by W.	W.	241	
8	...	...	101.2	79.2	22.0	48	W.S.W.	W.S.W.	263	
9	...	...	95.8	83.3	12.5	43	W.S.W.	W.S.W.	224	
10	...	...	100.5	83.4	17.1	46	W.S.W.	S.W. by W.	228	
11	...	...	101.7	83.8	17.9	42	S.W.	S.	241	
12	...	...	103.9	81.8	22.1	42	S.W.	S. by E.	218	
13	...	...	101.4	83.5	17.9	42	W.S.W.	S.E.	208	
14	...	0.01	103.0	81.9	21.1	53	S. by W.	S.S.E.	203	
15	...	0.23	95.7	76.7	19.0	78	S.W. by S.	S.S.E.	175	
16	...	0.11	93.9	77.0	16.9	71	S.S.W.	S. by W.	189	
17	...	1.60	98.2	77.7	20.5	67	S.W.	S. by W.	131	
18	...	0.21	93.8	72.7	21.1	80	S.W. by W.	S.S.W.	141	
19	...	...	95.0	77.1	17.9	69	W.S.W.	S.S.E.	174	
20	...	...	98.7	75.5	23.2	56	S.W.	S.S.E.	195	
21	...	...	93.4	80.7	12.7	68	S.	E. by S.	120	
22	...	0.31	91.0	72.7	18.3	88	S.S.E.	S. by E.	156	
23	...	...	92.1	78.9	13.2	73	S.W. by W.	E. by N.	109	
24	...	0.13	91.7	75.6	16.1	74	S.S.W.	S.E. by S.	144	
25	...	...	92.8	78.9	13.9	66	S.	S.E.	202	
26	...	...	90.4	78.5	11.9	66	S.S.E.	S.E. by S.	190	
27	...	...	93.0	78.0	15.0	56	S.	E.S.E.	131	
28	...	0.06	91.3	80.3	11.0	63	S.E. by S.	S.E. by E.	141	
29	...	...	96.2	78.6	17.6	62	S.W. by S.	S.E.	116	
30	...	...	93.4	79.9	13.5	66	S.E. by E.	S.E.	125	

Daily Record of Meteorological Observations and of Cholera Deaths at MADRAS during the prevalence of the Disease in the year 1892—continued.

Month and date.	Rainfall in inches.	Temperature of air in the shade.			Moisture of air per cent., 100 being saturation.		Mean wind.			Deaths from cholera recorded on each day.
		Highest maxi- mum.	Lowest mini- mum.	Range.	10 A.M.	4 P.M.	Direction.		Velocity, miles per diem.	
							Midnight to Noon.	Noon to Midnight.		
JULY.										
1	...	98.8	77.5	21.3	49	57	S.W.	E. by S.	110	28
2	0.51	94.7	74.4	20.3	83	63	S.	S.S.E.	102	
3	...	93.9	79.5	14.4	68	70	N.E.	E.N.E.	98	
4	1.50	92.6	74.2	18.4	73	83	W. by S.	E. by N.	92	
5	2.36	84.1	74.8	9.3	93	80	W.S.W.	S.W.	125	
6	0.31	86.5	78.4	8.1	73	74	W.S.W.	S.S.W.	116	
7	0.06	83.3	76.3	12.0	76	68	S.W. by W.	S.W.	130	
8	0.03	86.1	77.7	8.4	75	75	S.W. by S.	S.W.	159	
9	0.03	86.6	77.5	9.1	71	71	S.W.	S.W. by S.	172	
10	...	90.8	78.1	12.7	63	55	S.W. by S.	S.W. by S.	166	
11	0.09	92.6	78.3	14.3	64	52	S.W.	W.S.W.	173	
12	...	92.5	77.8	14.7	61	48	S.W. by W.	S.W. by W.	259	
13	0.02	94.6	79.3	15.3	60	56	S.W. by W.	S.S.W.	140	
14	0.11	96.9	79.4	17.5	56	47	S.W.	S.W. by S.	132	
15	0.01	97.2	78.4	18.8	68	67	S.W.	S. by E.	150	
16	0.04	98.2	80.9	17.3	57	70	S.W.	S. by W.	179	
17	...	98.8	78.5	20.3	52	61	S.W.	S.W. by S.	182	
18	...	96.4	83.0	13.4	57	50	W. by S.	S.W. by W.	206	
19	...	96.7	80.3	16.2	50	44	S.W. by W.	S.W. by S.	176	
20	...	95.6	82.5	12.5	55	44	W.S.W.	W.S.W.	234	
21	...	94.0	80.9	13.1	63	47	S.W. by W.	S.W.	218	
22	1.33	98.4	81.2	17.2	51	91	S.W. by W.	S.W.	219	
23	0.06	96.4	71.0	25.4	61	49	S.W. by W.	S.W. by S.	106	
24	0.59	94.8	78.0	16.8	61	50	S.W. by W.	S.W.	146	
25	0.27	97.0	75.2	20.8	62	46	S. by W.	S.W. by S.	126	
26	0.11	94.1	75.1	19.0	71	52	S.W.	S.W. by S.	145	
27	0.02	89.4	75.9	13.5	65	64	S.W.	W. by S.	132	
28	0.02	92.0	78.9	13.1	66	90	W.S.W.	S.W. by W.	165	
29	0.01	91.5	76.3	15.2	61	55	S.W. by W.	W.S.W.	149	
30	0.01	92.3	78.7	15.6	60	69	S.W.	S.S.W.	126	
31	0.30	92.1	78.6	13.5	64	62	S.W.	S. by W.	158	
AUGUST.										
1	0.02	90.8	77.8	13.0	76	60	S. by W.	S. by W.	118	150
2	...	94.6	76.6	18.0	64	48	S.W. by W.	S.W. by W.	153	
3	0.04	97.2	78.1	19.1	56	64	S.W.	S. by W.	172	
4	...	93.3	77.2	16.1	57	79	S.W. by S.	S.S.E.	128	
5	...	92.5	77.2	15.3	64	66	S.W. by S.	S.S.E.	130	
6	0.80	90.1	75.3	14.8	67	77	S.W. by S.	S.E. by S.	77	
7	...	88.2	75.2	13.0	85	88	S. by W.	S. by W.	109	
8	0.58	89.7	73.3	16.4	80	74	S.W. by S.	S. by W.	119	
9	0.17	89.2	72.1	17.1	79	79	S.W. by S.	S. by E.	105	
10	0.02	89.6	74.5	15.1	74	66	S.W. by W.	S. by W.	159	
11	0.02	92.1	76.2	15.9	79	72	S. by W.	S.S.E.	115	
12	...	93.1	76.7	16.4	65	79	S.W. by S.	S.E. by E.	114	
13	...	93.2	75.1	18.1	69	63	S.W.	S.E.	137	
14	0.61	90.0	78.4	11.6	68	91	S. by W.	S.S.E.	53	
15	1.45	90.8	76.2	14.6	74	89	S.W.	S.E. by S.	87	
16	0.30	86.4	70.9	15.5	78	68	W.	W.S.W.	97	
17	...	90.5	76.0	14.5	74	59	S.W. by W.	W.S.W.	89	
18	...	92.4	77.0	15.4	61	64	W.S.W.	E. by S.	109	
19	...	93.5	78.9	14.6	68	68	S.S.W.	S.E.	112	
20	0.03	95.3	79.2	16.1	80	79	S.	S. by E.	95	
21	0.03	91.7	77.2	14.5	72	56	W. by S.	W.	97	
22	0.21	92.6	79.2	13.4	68	70	S.W. by W.	S. by E.	80	
23	1.33	88.9	76.5	10.4	80	74	W. by S.	W.S.W.	70	
24	0.21	80.6	75.5	11.1	95	77	S.W. by W.	S.W.	67	
25	2.25	92.0	75.3	16.7	70	73	S.W. by S.	S.W. by W.	129	
26	1.56	90.7	73.4	17.3	71	64	S.W.	S.	117	
27	0.20	83.2	75.3	7.9	79	83	S.S.W.	S.W. by S.	97	
28	0.13	81.5	76.3	5.2	88	72	S.W.	S.W. by W.	110	
29	0.01	87.6	74.0	13.6	75	78	S.W.	S.W. by W.	122	
30	0.09	90.7	76.3	14.4	73	59	S.W.	S.W. by W.	145	
31	...	89.5	76.8	12.7	65	68	S.W. by S.	S.W.	112	



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Month and date.	Rainfall in inches.	Temperature of air in the shade.			Moisture of air per cent., 100 being saturation.		Mean wind.		Deaths from cholera recorded on each day.	
		Highest maxi- mum.	Lowest mini- mum.	Range.	10 A.M.	4 P.M.	Direction.			Velocity, miles per diem.
							Midnight to Noon.	Noon to Midnight.		
SEPTEMBER.										
1		92.5	76.6	15.9	58	53	S.W.	S.W.	126	
2		92.1	77.4	14.7	62	50	S.W. by W.	S.S.W.	156	
3		92.9	77.0	15.9	55	54	S. by W.	S. by W.	181	
4		91.8	77.0	14.8	61	61	S.S.W.	S. by W.	152	
5		89.8	76.8	13.0	58	72	S.W. by S.	S.	132	
6	0.03	89.7	75.4	14.3	70	59	W.S.W.	S.W. by W.	87	
7		93.3	73.7	19.6	62	48	S.W. by S.	S.W.	155	
8		92.0	76.7	15.3	63	54	S.W. by W.	W.	159	
9	0.18	91.7	78.0	13.7	60	48	W.S.W.	S.W. by W.	147	
10	0.09	92.5	77.3	15.2	66	52	S.W. by W.	S.W. by W.	148	
11		93.3	75.5	17.8	56	45	S.W. by W.	S. by W.	187	
12		95.5	75.7	19.8	55	46	S.W.	S.S.W.	144	
13		93.9	77.1	16.8	54	61	S.W.	E.S.E.	110	
14		95.2	76.8	18.4	53	54	S.W. by S.	E. by N.	75	
15		95.9	76.5	19.4	50	64	S.W. by S.	E.N.E.	81	
16		90.9	78.5	12.4	63	59	S. by W.	N.W. by N.	68	
17	0.47	91.0	75.7	15.3	66	80	S.E. by S.	S. by W.	77	
18		88.9	74.9	14.0	73	65	S.W.	S.W. by W.	83	
19	0.26	84.2	73.5	10.7	73	82	W. by N.	W.	162	
20	0.48	76.2	73.5	2.7	95	95	W. by S.	W. by N.	166	
21		89.0	74.7	14.3	76	60	W. by S.	W.S.W.	96	
22		91.5	75.5	16.0	67	73	S.S.W.	S.E. by E.	75	
23	0.03	88.8	77.1	11.7	76	74	S.E. by S.	S. by E.	56	
24		92.1	74.4	17.7	68	69	S.W.	S.E. by S.	83	
25		89.9	73.6	16.3	74	79	W.S.W.	S.S.W.	82	
26	0.74	89.9	76.1	13.8	72	87	S.S.W.	N.W. by W.	62	
27	2.25	90.4	73.0	17.4	81	81	S.W. by W.	S. by W.	112	
28	1.51	89.9	74.1	15.8	82	89	S.W. by W.	S.S.W.	154	
29	0.11	91.5	72.5	19.0	82	79	S.S.W.	W.	113	
30	0.14	89.3	75.0	14.3	83	70	S. by W.	S.S.W.	89	
OCTOBER.										
1		91.8	76.3	15.5	73	76	S. W. by S.	S.S.E.	92	
2		91.2	76.5	14.7	76	69	S.	S.E.	82	
3		91.3	77.1	14.2	66	70	S. by W.	E.S.E.	62	
4		90.2	76.0	14.2	67	68	S. by E.	S.E. by E.	70	
5		90.1	75.3	14.8	66	63	E.S.E.	E. by N.	71	
6		90.9	74.4	16.5	65	62	E.N.E.	N.E. by N.	93	
7		91.0	73.2	17.8	62	54	N.N.E.	N.N.E.	113	
8		91.0	70.0	21.0	58	67	N.	E.N.E.	91	
9		93.2	66.6	26.6	56	45	N.N.W.	N.E. by E.	80	
10		92.3	70.4	21.9	54	56	N. by W.	N.N.E.	109	
11	0.16	87.0	74.6	12.4	75	66	N.N.W.	N. by W.	133	
12		88.9	75.0	13.9	84	69	N.N.W.	N.N.E.	131	
13	2.30	82.3	73.2	9.1	99	80	N. by W.	N. by W.	100	
14	0.01	86.2	72.6	13.6	79	83	N.N.W.	N.N.E.	88	
15		88.4	73.3	15.1	76	68	N. by E.	N.N.E.	126	
16	0.17	82.8	74.1	8.7	69	84	N.N.W.	N.W. by N.	196	
17	0.01	86.0	73.4	12.6	76	59	S.S.W.	S.E.	220	
18	0.71	88.1	74.1	14.0	77	77	S.E.	E.	101	
19		88.5	75.6	12.9	72	76	N.N.E.	N.E.	50	
20		90.8	78.3	12.5	60	65	S. by E.	S.W.	154	
21		90.0	74.6	15.4	67	79	S.	S.S.E.	172	
22		90.4	77.1	13.3	67	74	S.	S.E. by S.	177	
23		88.0	76.1	11.9	85	76	N.W.	N. by W.	59	
24	1.00	87.8	73.3	14.5	76	82	S.W. by W.	E. by N.	86	
25	0.09	91.6	76.3	15.3	73	87	S.S.W.	N. by E.	75	
26	0.50	89.8	73.1	16.7	77	79	W. by N.	N.N.E.	78	
27	0.65	85.9	71.3	14.6	80	77	N.N.E.	N.N.W.	172	
28	0.63	80.7	73.2	7.5	87	86	N.W.	N.W.	167	
29		89.0	74.5	14.5	72	80	S. W. by S.	S.E. by S.	207	
30	0.21	89.9	74.5	15.4	69	73	S. W. by S.	S.E. by S.	96	
31		89.8	75.4	14.4	61	71	S. by W.	S. by E.	138	

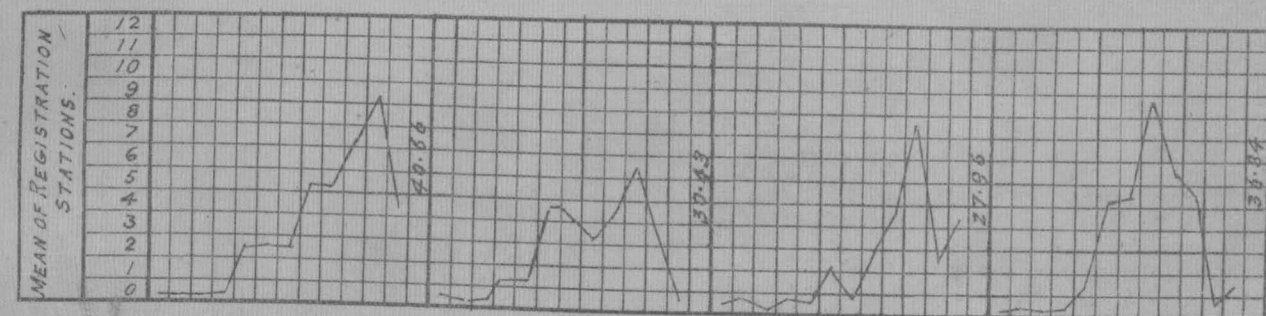
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Month and date.	Rainfall in inches.	Temperature of air in the shade.			Moisture of air per cent., 100 being saturation.		Mean wind.		Deaths from cholera recorded on each day.	
		Highest maxi- mum.	Lowest mini- mum.	Range.	10 A.M.	4 P.M.	Direction.			Velocity, miles per diem.
							Midnight to Noon.	Noon to Midnight.		
NOVEMBER.										
1	...	0-16	90.1	77.1	13.0	80	72	S.W.	W.N.W.	118
2	...	...	91.0	75.3	15.7	73	72	W. by S.	N.E.	76
3	...	...	91.2	76.7	14.5	68	81	S.E. by S.	N.E.	62
4	...	...	90.4	75.7	14.7	70	72	N.E. by E.	N.E. by N.	98
5	...	...	89.4	74.1	15.3	68	63	N.E. by N.	N.N.E.	93
6	...	...	89.4	73.7	15.7	64	61	N. by E.	N.N.E.	183
7	...	...	88.7	72.0	16.7	71	58	N.	N. by E.	134
8	...	...	84.4	74.8	9.6	82	60	N. by W.	N. by W.	164
9	...	...	85.2	74.1	11.1	71	66	N. by W.	N.	179
10	...	...	85.1	71.7	13.4	65	62	N. by E.	N. by E.	204
11	...	...	87.6	66.9	20.7	59	62	N.	N. by E.	203
12	...	...	87.6	71.4	16.2	91	62	N.N.W.	N.	183
13	...	...	83.1	68.4	14.7	65	65	N. by W.	N.	191
14	...	...	86.1	69.2	16.9	65	91	N. by W.	N.	235
15	...	0-29	83.2	73.5	9.7	66	77	N. by W.	N. by W.	252
16	...	0-67	82.2	71.2	11.0	76	64	N.	N. by E.	185
17	...	...	83.5	68.4	15.1	69	67	N. by W.	N.	203
18	...	...	85.1	67.7	17.4	69	58	N. by W.	N. by E.	163
19	...	...	85.2	68.3	16.9	64	63	N. by W.	N.	195
20	...	...	84.7	72.0	12.7	73	70	N. by W.	N.	209
21	...	...	84.5	71.9	12.6	79	59	N. by W.	N.	202
22	...	...	85.1	68.1	17.0	67	66	N.	N.N.E.	148
23	...	...	86.0	66.1	19.9	67	56	N.N.E.	N.E. by N.	115
24	...	...	85.9	66.8	19.1	60	54	N. by E.	N.N.E.	134
25	...	...	87.1	67.1	20.0	61	57	N.	N.N.E.	135
26	...	...	86.9	66.3	20.6	58	56	N.	N. by E.	157
27	...	...	86.1	67.8	18.3	56	59	N.	N. by E.	202
28	...	...	85.9	66.3	19.6	65	67	N.	N. by E.	164
29	...	...	85.2	70.1	15.1	64	56	N.	N. by E.	209
30	...	...	85.6	66.0	19.6	56	53	N.	N. by E.	163

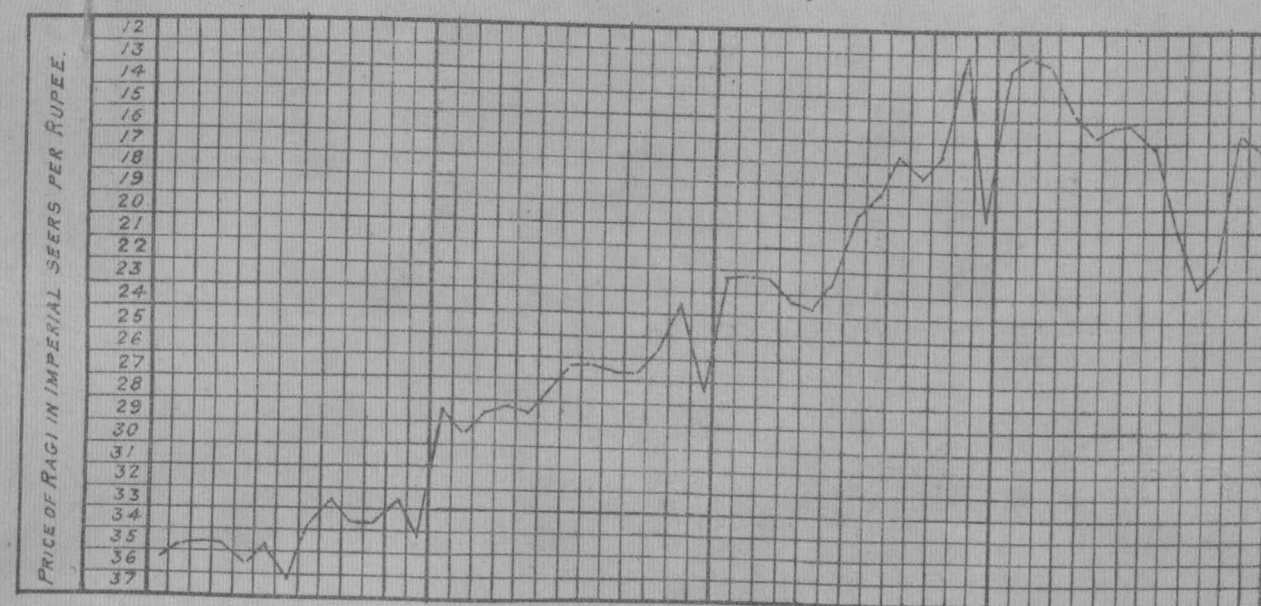
DIAGRAM SHOWING THE RAINFALL & PRICE OF FOOD (RAGI) IN THE DISTRICTS OF NORTH ARCOT,
 & NELLORE FOR 3 YEARS ENDING 1892 COMPARED WITH AVERAGE OF 10 YEARS.
 NORTH ARCOT. 13

DISTRICTS	YEARS	AVERAGE OF 10 YEARS												1890												1891												1892											
	MONTHS	JAN.	FEB.	MAR.	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL	JAN.	FEB.	MAR.	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL	JAN.	FEB.	MAR.	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL									

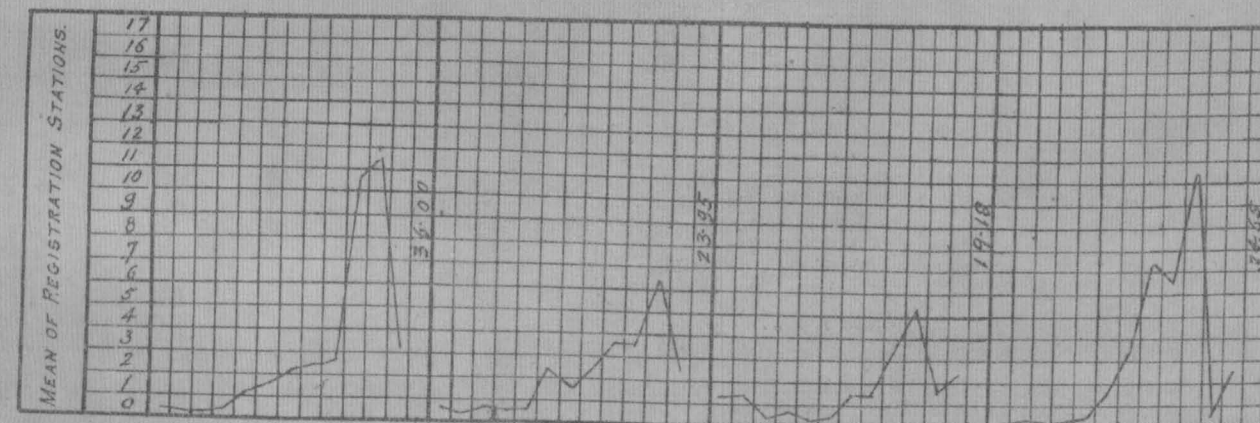
RAINFALL



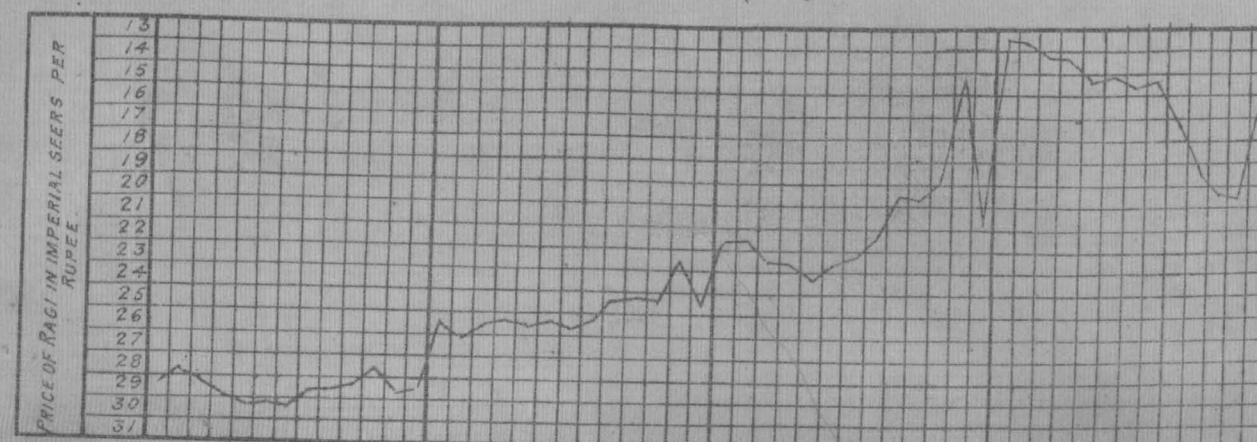
PRICE OF FOOD (RAGI)



NELLORE
 RAINFALL



PRICE OF FOOD (RAGI)



Daily Record of Meteorological Observations and of Cholera Deaths at CALICUT during the prevalence of the Disease in the year 1892.

Month and date.	Rainfall in inches.	Temperature of air in the shade.			Moisture of air per cent., 100 being saturation.	Wind.		Deaths from cholera recorded on each day.	
		Highest maxi- mum.	Lowest mini- mum.	Range.		8 A.M.	Direction.		Velocity, miles per diem.
FEBRUARY.									
1	...	...	89.8	70.6	19.2	70	E.N.E.	192	...
2	...	...	88.8	70.1	18.7	65	E.S.E.	192	...
3	...	...	89.3	69.1	20.2	71	E.N.E.	192	...
4	...	...	88.8	69.6	19.2	76	E.N.E.	192	...
5	...	...	88.3	70.1	18.2	76	E.N.E.	192	1
6	...	...	88.3	70.6	17.7	76	E.N.E.	216	1
7	...	...	88.3	73.0	15.3	83	N.E.	216	...
8	...	...	88.8	73.0	15.8	77	E.S.E.	264	1
9	...	...	89.3	73.0	16.3	75	E.S.E.	288	...
10	...	...	88.3	72.6	15.7	81	Calm.	264	...
11	...	...	89.3	73.0	16.3	81	E.	216	...
12	...	...	88.8	73.0	15.8	76	E.N.E.	216	...
13	...	...	88.8	72.6	16.2	75	Calm.	288	...
14	...	...	89.3	73.0	16.3	72	Calm.	264	...
15	...	...	88.3	73.0	15.3	67	N.	336	...
16	...	...	88.3	76.5	11.8	68	N.	288	...
17	...	...	89.8	74.5	15.3	74	E.S.E.	312	...
18	...	...	89.3	73.0	16.3	64	S.E.	216	...
19	...	...	89.3	72.6	16.7	75	N.E.	192	...
20	...	...	89.8	71.6	18.2	71	N.N.E.	216	1
21	...	...	89.3	70.1	19.2	74	E.	216	1
22	...	...	88.8	71.6	17.2	75	E.	240	...
23	...	...	88.8	72.6	16.2	80	E.	192	...
24	...	...	88.8	73.5	15.3	81	E.N.E.	192	1
25	...	...	89.3	75.0	14.3	77	E.	192	...
26	...	...	89.3	74.5	14.8	77	N.N.E.	192	...
27	...	...	89.3	76.0	13.3	77	N.N.E.	192	1
28	...	...	89.8	77.5	12.3	73	N.E.	240	2
29	...	...	89.8	76.5	13.3	71	N.N.E.	192	...
MARCH.									
1	...	...	92.3	77.0	15.3	78	Calm.	192	...
2	...	...	91.8	75.0	16.8	85	N.E.	192	...
3	...	...	89.3	73.5	15.8	72	N.N.W.	312	...
4	...	...	88.8	71.1	17.7	73	N.N.E.	408	...
5	...	...	87.8	74.0	13.8	74	E.N.E.	288	...
6	...	...	89.3	74.5	14.8	75	N.N.E.	192	...
7	...	...	89.3	76.0	13.3	73	E.N.E.	192	...
8	...	...	90.3	76.0	13.7	71	N.N.E.	216	...
9	...	...	90.3	75.5	14.8	73	E.N.E.	216	...
10	...	...	90.8	75.0	15.8	71	E.	168	...
11	...	...	90.8	74.0	16.8	71	E.S.E.	240	...
12	...	...	90.8	76.0	14.8	75	N.	192	...
13	...	...	89.3	75.0	14.3	76	E.N.E.	288	...
14	...	...	88.8	75.0	13.8	76	N.E.	264	1
15	...	...	89.8	74.5	15.3	76	E.N.E.	216	1
16	...	...	89.3	75.0	14.3	73	N.E.	192	...
17	...	...	89.8	75.5	14.3	74	N.N.E.	288	...
18	...	...	90.3	75.5	14.8	76	N.E.	312	1
19	...	...	90.8	75.0	15.8	76	E.S.E.	216	1
20	...	...	89.8	78.0	11.8	73	N.N.W.	192	2
21	...	...	90.3	76.5	13.8	71	N.	312	1
22	...	...	90.3	78.0	12.3	75	N.N.W.	264	...
23	...	...	90.3	79.5	10.8	75	Calm.	216	1
24	...	...	90.3	79.0	11.3	75	N.N.W.	264	...
25	...	...	89.8	78.5	11.3	73	N.N.E.	288	...
26	...	...	91.3	83.0	8.3	76	N.N.W.	264	1
27	...	...	92.3	83.5	8.8	71	S.W.	216	1
28	...	...	93.4	80.0	13.4	85	Calm.	456	2
29	...	...	89.3	80.5	8.8	81	N.	288	2
30	...	...	91.3	80.0	11.3	74	N.N.W.	312	2
31	...	...	90.3	81.5	8.8	75	N.N.W.	...	...

Daily Record of Meteorological Observations and of Cholera Deaths at CALICUT during the prevalence of the Disease in the year 1892—continued.

Month and date.	Rainfall in inches.	Temperature of air in the shade.			Moisture of air per cent., 100 being saturation.	Wind.		Deaths from cholera recorded on each day.	
		Highest maxi- mum.	Lowest mini- mum.	Range.		Direction.	Velocity, miles per diem.		
									8 A.M.
APRIL.									
1	...	...	91.3	82.0	9.3	73	N.N.W.	264	...
2	...	0.05	90.3	76.5	13.8	79	N.N.E.	216	1
3	...	...	91.8	78.0	13.8	77	N.	192	2
4	...	...	90.3	80.5	9.8	72	N.N.W.	264	1
5	...	...	90.3	80.0	10.3	75	N.	264	1
6	...	...	89.8	79.0	10.8	79	N.	240	3
7	...	...	90.8	79.5	11.3	74	N.	216	6
8	...	...	90.8	77.0	13.8	68	N.N.E.	264	2
9	...	0.22	91.8	76.0	15.8	82	N.N.E.	288	...
10	...	...	89.8	75.5	14.3	77	N.W.	264	1
11	...	...	90.8	80.0	10.8	83	E.	264	...
12	...	0.23	91.3	78.0	13.3	81	E.	168	3
13	...	0.09	90.3	79.5	10.8	83	N.E.	264	6
14	...	0.03	90.3	78.0	12.3	75	N.	288	6
15	...	0.10	89.3	78.5	12.8	79	N.E.	240	1
16	...	0.12	91.3	80.0	11.3	85	Calm.	192	5
17	...	0.07	90.8	76.5	14.3	83	E.N.E.	216	3
18	...	0.16	89.3	74.5	14.8	85	E.N.E.	192	4
19	...	0.03	90.3	77.0	12.7	77	S.E.	240	3
20	...	0.01	91.8	79.0	12.8	81	N.E.	168	11
21	...	0.31	91.3	79.0	12.3	83	N.E.	240	5
22	...	0.61	90.8	74.5	16.3	79	N.N.E.	264	17
23	...	0.77	90.8	73.0	17.8	81	Calm.	336	3
24	...	0.03	90.3	78.5	11.8	87	N.	192	2
25	...	0.44	89.3	75.0	14.3	69	S.E.	192	3
26	...	0.04	87.8	77.0	10.8	78	E.S.E.	312	1
27	...	...	88.8	77.0	11.8	79	E.	192	5
28	...	0.01	91.8	77.0	14.8	83	W.	240	2
29	...	0.36	89.8	78.5	16.3	79	N.	312	4
30	...	0.22	91.3	73.5	17.8	73	W.N.W.	456	6
MAY.									
1	...	...	89.3	77.0	12.3	73	Calm.	384	4
2	...	0.04	90.3	78.5	11.8	79	N.	336	2
3	...	...	91.8	79.5	12.3	81	Calm.	288	3
4	...	...	91.8	78.0	13.8	79	S.S.E.	192	3
5	...	0.01	92.3	77.5	14.8	79	N.	168	2
6	...	1.18	93.4	74.5	18.9	79	E.N.E.	192	4
7	...	0.56	89.3	77.0	12.3	83	Calm.	240	3
8	...	0.32	87.8	78.0	9.3	83	Calm.	144	2
9	...	0.01	89.3	78.5	10.8	81	E.S.E.	144	2
10	...	2.19	91.3	74.0	17.3	83	E.	240	4
11	...	2.50	88.8	75.5	13.3	73	N.E.	144	2
12	...	...	90.8	73.5	17.3	93	N.	240	8
13	...	...	88.8	74.0	14.8	75	N.N.W.	336	2
14	...	...	91.3	76.5	14.8	82	N.	384	4
15	...	...	90.3	79.5	10.8	85	Calm.	240	2
16	...	1.07	91.8	72.6	19.2	86	N.N.W.	360	4
17	...	...	87.8	76.5	11.3	83	Calm.	264	2
18	...	...	90.3	78.0	12.3	70	N.N.E.	360	3
19	...	...	89.8	80.0	9.8	77	N.N.W.	240	4
20	...	0.59	91.3	75.0	16.3	79	N.N.W.	312	1
21	...	...	89.3	79.0	10.3	78	N.N.W.	192	2
22	...	0.07	89.3	78.0	11.3	83	N.N.W.	168	3
23	...	0.05	90.3	78.5	11.8	83	Calm.	168	1
24	...	1.28	87.3	74.5	12.8	88	N.W.	192	2
25	...	0.03	84.8	76.0	9.8	82	E.S.E.	168	...
26	...	0.95	86.8	73.5	13.3	94	S.E.	192	2
27	...	2.78	79.2	72.6	6.6	89	N.	288	2
28	...	0.17	87.3	73.5	13.8	83	N.N.W.	216	...
29	...	0.15	85.3	75.0	10.3	86	E.N.E.	216	2
30	...	2.27	85.3	73.0	12.3	97	N.N.W.	144	2
31	...	3.55	78.2	72.6	5.6	98	S.E.	192	2

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			Highest maxi- mum.	Lowest mini- mum.	Range.		8 A.M.	Direction.		Velocity, miles per diem.
JUNE.										
1	...	0.93	81.3	73.5	7.8	93	S.E.	144	1	
2	...	0.63	80.8	75.5	5.3	95	N.E.	144	...	
3	...	1.03	78.2	73.5	4.7	95	S.	144	1	
4	...	0.43	82.8	74.0	8.8	93	N.E.	288	2	
5	...	0.01	84.3	75.0	9.3	87	E.N.E.	168	1	
6	...	0.03	87.8	76.0	11.8	84	E.S.E.	168	2	
7	...	0.41	82.3	74.5	7.8	91	E.N.E.	120	2	
8	...	0.22	86.8	78.5	8.3	87	W.	216	...	
9	...	0.01	87.8	81.0	6.8	83	S.W.	264	...	
10	...	2.46	87.3	74.0	13.3	95	N.E.	264	...	
11	...	1.34	82.8	73.5	9.3	89	S.S.E.	168	1	
12	...	0.14	82.8	75.0	7.8	93	S.E.	192	1	
13	...	0.05	80.8	75.5	5.3	87	Calm.	96	...	
14	...	0.27	86.3	77.0	9.3	93	Calm.	144	1	
15	...	0.12	87.3	77.5	9.8	85	Calm.	192	...	
16	...	0.14	88.3	78.0	10.3	83	Calm.	168	...	
17	...	0.15	87.8	77.0	10.8	93	E.N.E.	168	...	
18	...	0.50	85.8	75.0	10.8	90	W.N.W.	168	...	
19	...	0.35	84.3	74.0	10.3	94	E.N.E.	192	...	
20	...	0.68	84.3	74.5	9.8	92	S.S.W.	192	...	
21	...	0.27	83.8	73.0	10.8	85	E.N.E.	216	...	
22	...	...	87.3	76.0	11.3	85	E.S.E.	144	...	
23	...	0.01	87.8	75.0	12.8	88	E.	120	...	
24	...	...	88.8	76.0	12.8	81	Calm.	144	1	
25	...	0.02	88.3	77.5	10.8	83	Calm.	216	1	
26	...	0.06	89.8	77.5	12.3	86	N.N.E.	192	2	
27	...	1.29	89.3	75.0	14.3	82	Calm.	216	2	
28	...	0.52	86.8	76.5	10.3	89	E.N.E.	168	...	
29	...	0.50	86.8	75.0	11.8	90	W.N.W.	192	...	
30	...	0.03	87.3	75.5	11.8	87	W.N.W.	264	...	
JULY.										
1	...	3.00	87.8	74.0	13.8	87	N.N.W.	336	5	
2	...	1.40	85.8	75.0	10.8	94	S.W.	336	2	
3	...	1.41	80.8	74.5	6.3	94	Calm.	168	2	
4	...	0.98	80.3	74.0	6.3	94	S.S.E.	120	1	
5	...	4.05	78.7	73.5	5.2	97	S.E.	216	2	
6	...	2.11	77.2	72.6	4.6	94	E.N.E.	192	...	
7	...	4.30	77.2	73.0	4.2	97	N.N.W.	216	1	
8	...	2.28	81.3	72.6	8.7	94	N.N.W.	240	3	
9	...	4.07	77.2	73.0	4.2	97	E.N.E.	168	...	
10	...	0.78	79.7	73.5	6.2	91	N.W.	168	1	
11	...	1.12	81.8	72.1	9.7	92	N.N.E.	168	1	
12	...	0.45	80.8	75.5	5.3	92	W.S.W.	144	3	
13	...	0.93	85.3	72.6	12.7	92	Calm.	144	2	
14	...	2.57	81.3	73.5	7.8	94	E.N.E.	144	6	
15	...	0.27	85.8	75.0	10.8	88	W.N.W.	120	2	
16	...	0.50	84.8	73.0	11.8	92	N.E.	168	2	
17	...	0.25	85.3	74.5	10.8	90	N.E.	216	1	
18	...	0.95	85.8	71.5	14.2	92	N.E.	192	...	
19	...	0.19	85.3	76.0	9.3	87	S.S.W.	288	3	
20	...	5.09	78.2	73.0	5.2	94	S.S.W.	312	2	
21	...	2.13	78.2	72.6	5.6	94	S.S.E.	216	2	
22	...	0.89	78.7	74.0	4.7	94	S.S.E.	144	5	
23	...	0.71	81.3	72.1	9.2	97	Calm.	144	4	
24	...	1.08	79.2	72.1	7.1	94	W.N.W.	168	5	
25	...	2.35	78.2	72.1	6.1	94	W.	216	4	
26	...	3.39	78.2	71.1	7.1	94	N.E.	120	3	
27	...	5.51	77.2	71.6	5.6	94	S.E.	168	3	
28	...	1.51	76.2	71.6	4.6	97	N.N.E.	168	3	
29	...	0.88	79.2	71.1	8.2	94	N.N.W.	120	3	
30	...	0.75	79.2	73.0	6.2	92	Calm.	168	5	
31	...	0.30	83.8	73.0	10.8	92	N.N.E.	168	...	

Daily Record of Meteorological Observations and of Cholera Deaths at CALICUT during the prevalence of the Disease in the year 1892—continued.

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					Highest maxi- mum.	Lowest mini- mum.	Range.		Direction.	Velocity, miles per diem.	
AUGUST.											
				1.20	82.8	73.5	9.3	94	Calm.	168	6
1				0.48	83.3	73.0	10.3	92	E.	120	6
2				0.04	84.8	72.6	12.2	87	E.N.E.	96	2
3				1.04	83.8	72.1	11.7	92	N.N.E.	240	2
4				0.76	81.3	73.0	8.3	93	Calm.	192	6
5				0.73	82.8	73.5	9.3	92	Calm.	168	1
6				2.98	82.3	73.5	8.8	94	N.E.	144	5
7				0.59	81.3	72.6	8.7	94	Calm.	96	6
8				0.28	76.7	73.0	3.7	94	N.E.	96	4
9				0.02	83.3	74.5	8.8	87	N.N.W.	240	4
10				0.02	81.8	75.0	6.8	91	S.W.	240	6
11				1.27	82.8	72.6	10.2	97	N.	264	1
12				0.05	80.8	73.5	7.3	94	N.W.	168	1
13				0.19	80.3	73.5	6.8	90	N.N.W.	192	4
14				0.08	83.3	74.0	9.3	92	N.W.	192	2
15				2.03	80.8	72.1	8.7	87	N.N.E.	144	...
16				0.61	81.3	72.6	8.7	92	W.S.W.	168	3
17				0.13	79.7	73.0	6.7	92	N.N.W.	192	4
18				0.80	83.8	74.5	9.3	94	E.S.E.	168	3
19				0.12	82.8	74.5	8.3	94	W.N.W.	312	4
20				0.13	79.2	73.0	6.2	92	N.W.	288	4
21				1.09	78.7	72.1	6.6	94	N.E.	288	5
22				2.60	75.2	71.6	3.6	94	N.N.W.	240	3
23				1.28	80.8	72.6	8.2	97	W.	216	2
24				1.90	75.2	72.6	2.6	94	W.N.W.	144	3
25				1.54	81.3	71.6	9.7	95	N.N.W.	192	5
26				0.68	79.2	72.6	6.6	94	Calm.	192	6
27				1.66	76.7	71.6	5.1	97	N.N.W.	288	6
28				0.62	78.7	73.0	5.7	95	Calm.	96	4
29				0.53	81.3	73.0	8.3	94	Calm.	120	1
30				0.54	83.3	74.5	8.8	94	Calm.	120	...
31											
SEPTEMBER.											
1				...	81.8	75.5	6.3	94	Calm.	144	1
2				0.01	82.3	77.0	5.3	90	N.W.	216	1
3				...	84.3	77.0	7.3	88	W.N.W.	192	2
4				0.11	83.8	76.5	7.3	87	W.	216	1
5				0.04	85.8	75.0	10.8	88	Calm.	192	...
6				1.30	85.8	73.0	12.8	92	N.W.	168	1
7				0.15	84.3	74.5	9.8	88	N.W.	144	...
8				...	84.3	74.0	10.3	85	N.N.W.	192	1
9				...	82.3	73.5	8.8	90	N.N.W.	144	...
10				0.48	83.3	72.6	10.7	94	N.W.	144	...
11				0.23	79.2	72.6	6.6	87	N.W.	96	...
12				0.11	83.3	73.0	10.3	83	W.N.W.	96	1
13				0.46	85.3	73.5	11.8	94	N.N.W.	144	...
14				0.02	83.8	72.6	11.2	87	N.N.W.	144	2
15				...	84.3	74.5	9.8	83	N.W.	168	...
16				...	84.3	74.0	10.3	83	N.N.W.	144	1
17				0.04	83.8	73.5	10.3	87	N.N.W.	144	...
18				0.19	85.8	73.0	12.3	88	Calm.	96	...
19				...	83.3	72.6	10.7	83	N.N.W.	120	1
20				0.09	83.8	72.1	11.7	90	N.N.W.	216	...
21				0.05	82.8	75.0	7.8	94	N.W.	144	1
22				0.05	81.3	74.0	7.3	88	Calm.	96	...
23				...	84.3	73.5	10.8	83	Calm.	120	...
24				...	86.3	73.5	12.8	82	Calm.	168	...
25				0.34	86.3	73.5	12.8	90	N.W.	168	...
26				0.25	83.8	74.0	9.8	92	Calm.	168	...
27				0.36	81.8	74.0	7.8	92	W.N.W.	168	1
28				0.08	83.8	74.0	9.8	90	E.	120	...
29				...	84.3	73.5	10.8	85	Calm.	120	...
30				...	85.3	72.6	12.7	87	E.N.E.	144	...

2/

PART I.

GENERAL SANITATION.



R
D8.2117 M95
M95

செப்பனிருபவர் பெயர் R. சந்திரன்
செப்பனிருவதற்காக எடுத்த
செல்லி எடுப்பட்டு நாள் 16.12.95
14.12.95
செப்பனிருக்கும்
மு. பா. எ. ச.
கையொப்பம் உதவியாளர்
கையொப்பம் கையொப்பம்

Daily Record of Meteorological Observations and of Cholera Deaths at CALICUT during the prevalence of the Disease in the year 1892—continued.

Month and date.	Rainfall in inches.	Temperature of air in the shade.			Moisture of air per cent., 100 being saturation.	Wind.		Deaths from cholera recorded on each day.	
		Highest maxi- mum.	Lowest mini- mum.	Range.		Direction.	Velocity, miles per diem.		
									8 A.M.
OCTOBER.									
1	...	83.8	72.1	11.7	81	Calm.	120	...	
2	...	86.3	71.6	14.7	81	N.E.	192	...	
3	...	86.8	75.0	11.8	74	N.N.W.	216	...	
4	...	87.3	76.0	11.3	80	N.W.	264	...	
5	...	86.3	75.0	11.3	85	Calm.	192	...	
6	...	86.8	76.5	11.3	85	N.N.E.	168	...	
7	0.23	86.8	75.0	11.8	88	S.S.E.	168	...	
8	...	84.3	74.5	9.8	85	E.N.E.	168	...	
9	...	87.3	72.9	14.4	78	E.N.E.	144	...	
10	...	87.8	73.0	14.8	81	E.	168	...	
11	...	87.8	73.0	14.8	81	E.N.E.	168	...	
12	...	88.3	75.0	13.3	81	E.N.E.	144	...	
13	...	86.8	72.6	14.2	95	Calm.	216	...	
14	0.95	85.3	75.0	10.3	85	E.	192	...	
15	...	86.3	71.6	14.7	81	E.	192	...	
16	0.21	85.3	73.5	11.8	88	S.E.	216	1	
17	1.44	84.8	74.5	10.3	87	Calm.	168	3	
18	1.17	82.3	73.5	8.8	90	S.E.	312	...	
19	0.92	82.8	72.6	10.2	79	E.S.E.	240	...	
20	0.02	82.8	74.0	8.8	91	N.N.E.	192	...	
21	3.20	84.8	73.5	11.3	92	S.S.W.	312	1	
22	3.77	79.2	72.6	6.6	94	E.	216	...	
23	0.09	80.2	72.8	7.6	94	E.N.E.	144	...	
24	0.37	82.3	73.0	9.3	90	E.	144	...	
25	1.71	82.8	71.6	11.2	94	E.N.E.	144	...	
26	2.14	77.7	72.6	5.1	94	E.	192	...	
27	0.54	82.8	73.5	9.3	90	E.	144	...	
28	...	84.8	74.0	10.8	90	E.N.E.	240	...	
29	0.11	85.8	75.5	10.3	86	N.	288	...	
30	0.66	84.8	72.6	12.2	87	E.N.E.	168	...	
31	0.63	84.8	72.6	12.2	87	E.N.E.	168	...	

Daily Record of Meteorological Observations and of Cholera Deaths at BELLARY during the prevalence of the Disease in the year 1892.

Month and date.	Rainfall in inches.	Temperature of air in the shade.			Moisture of air per cent., 100 being saturation.		Wind.		Deaths from cholera recorded on each day.	
		Highest maxi- mum.	Lowest mini- mum.	Range.	10 A.M.	4 P.M.	Direction.			
							10 A.M.	4 P.M.		Velocity, miles per diem.
APRIL.										
1	...	106.3	75.3	31.0	29	19	N.	C.	74	...
2	...	105.5	78.9	26.6	40	22	C.	C.	37	...
3	...	106.2	79.4	26.8	36	19	C.	C.	85	...
4	...	105.8	81.1	24.7	37	18	C.	C.	90	...
5	...	105.7	78.1	27.6	36	15	C.	E.	75	...
6	...	105.7	76.5	29.2	27	15	C.	N.	76	...
7	...	105.5	80.9	24.6	36	20	C.	E.	100	...
8	...	104.5	79.3	25.2	42	36	C.	W.	113	...
9	...	102.3	74.4	27.9	30	26	C.	W.	174	...
10	...	105.1	78.5	26.6	47	25	C.	S.W.	126	...
11	...	104.5	77.4	27.1	39	45	C.	N.E.	53	...
12	...	104.9	76.9	28.0	45	20	C.	C.	109	...
13	...	104.7	78.9	25.8	38	16	C.	E.	86	...
14	...	104.3	78.3	26.0	36	22	C.	O.	95	1
15	...	102.3	75.9	26.4	39	21	C.	E.	110	...
16	...	105.0	78.9	26.1	37	19	S.W.	E.	87	...
17	...	104.7	78.2	26.5	39	23	C.	E.	80	...
18	...	105.3	78.9	26.4	45	18	E.	E.	66	...
19	...	105.7	80.9	24.8	42	21	N.W.	C.	123	...
20	...	104.3	70.0	34.3	43	20	N.W.	C.	254	...
21	...	102.3	80.1	22.2	36	28	N.W.	C.	162	...
22	...	106.8	80.9	25.9	37	18	N.W.	N.W.	191	...
23	...	107.1	82.9	24.2	36	29	N.W.	S.	118	...
24	...	103.7	79.1	24.6	33	25	E.	E.	153	...
25	...	102.5	78.6	23.9	43	23	S.	S.E.	248	...
26	...	105.5	80.9	24.6	35	30	S.W.	N.	184	...
27	...	102.3	76.9	25.9	49	25	N.W.	W.	299	...
28	...	103.2	78.1	25.1	39	21	N.W.	C.	312	...
29	...	104.5	74.1	30.4	38	23	N.W.	C.	317	...
30	...	103.5	75.9	27.6	53	37	N.W.	N.W.	234	...
JUNE.										
1	...	95.4	72.9	22.5	48	41	W.N.W.	S.W.	284	...
2	...	98.7	75.9	22.8	53	34	W.	W.N.W.	184	...
3	...	95.4	77.9	17.5	57	45	W.	C.	191	...
4	...	91.6	74.3	16.8	62	44	N.W.	S.W.	154	...
5	...	93.4	75.1	18.3	56	43	W.	W.N.W.	245	1
6	...	95.4	74.9	20.5	48	82	W.	C.	258	...
7	...	92.2	74.9	17.3	53	69	W.	W.S.W.	289	...
8	...	92.2	74.9	17.3	53	69	W.	W.	280	...
9	...	83.4	74.5	8.9	70	78	S.W.	S.W.	215	...
10	...	86.0	73.4	12.6	71	76	S.W.	S.W.	215	...
11	...	90.8	74.9	15.9	59	59	S.W.	W.S.W.	850	...
12	...	95.7	73.9	21.8	58	38	W.	W.	261	...
13	...	97.2	73.1	24.1	52	35	W.	W.S.W.	215	...
14	...	98.5	75.7	22.8	53	32	W.	W.	202	1
15	...	98.5	75.9	21.9	50	38	W.	W.	241	...
16	...	97.8	76.9	21.6	52	34	N.W.	W.	279	...
17	...	98.5	76.9	21.6	52	34	W.	W.N.W.	162	...
18	...	98.2	76.1	22.1	55	33	W.	W.	281	...
19	...	98.5	77.7	20.8	58	50	C.	W.	269	...
20	...	97.6	76.8	20.8	53	58	N.W.	S.W.	244	...
21	...	96.4	75.8	20.6	56	33	N.W.	C.	172	1
22	...	96.4	76.1	20.3	54	52	W.	C.	110	...
23	...	96.4	76.1	20.3	54	52	W.	C.	110	...
24	...	90.4	74.1	16.3	71	51	N.W.	C.	141	...
25	...	91.4	71.9	19.5	59	59	C.	C.	97	...
26	...	88.6	71.9	16.7	59	56	W.	C.	102	2
27	...	96.2	72.3	23.9	62	35	C.	C.	73	1
28	...	96.2	72.3	23.9	62	35	C.	C.	73	1
29	...	96.0	74.3	21.7	67	56	C.	C.	90	1
30	...	94.8	74.9	19.9	59	43	N.W.	C.	141	...
31	...	94.8	74.9	19.9	59	43	N.W.	C.	141	...
32	...	92.9	71.9	21.0	69	61	C.	N.W.	83	2
33	...	95.4	73.9	21.6	68	67	C.	C.	76	3
34	...	87.7	73.9	13.8	77	63	N.	C.	76	3
35	...	87.7	73.9	13.8	77	63	N.	C.	76	3
36	...	94.4	72.9	21.5	60	56	C.	N.W.	80	...

under "Fevers." The following abstract shows the chief causes of death during 1892 compared with the results of the previous twenty years :—

Years.	Total deaths.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	Other causes.	Years.
1872 ...	501,482	13,247	39,074	214,148	39,387	15,150	180,476	1872
1873 ...	506,894	840	51,784	222,843	36,392	14,251	180,784	1873
1874 ...	516,848	313	48,343	226,220	37,993	13,065	190,914	1874
1875 ...	641,260	94,546	24,775	252,042	37,484	12,421	219,992	1875
1876 ...	680,384	148,193	23,469	230,092	38,176	11,175	229,279	1876
1877 ...	1,556,312	357,430	88,321	469,211	133,366	16,460	491,494	1877
1878 ...	810,921	47,167	56,360	374,443	48,083	15,007	269,861	1878
1879 ...	549,390	13,296	17,840	285,477	23,218	12,619	196,940	1879
1880 ...	454,101	613	14,529	299,940	19,622	10,845	198,552	1880
1881 ...	465,682	9,446	15,776	203,542	18,961	11,527	206,430	1881
1882 ...	470,700	23,604	20,159	188,561	19,958	11,611	206,807	1882
1883 ...	541,930	36,284	37,975	203,786	22,098	11,509	230,278	1883
1884 ...	650,335	75,476	61,247	215,977	28,775	11,502	257,358	1884
1885 ...	615,449	58,109	34,726	218,786	31,209	11,659	260,960	1885
1886 ...	553,927	12,417	17,129	221,679	27,379	13,103	262,220	1886
1887 ...	604,775	28,359	21,472	240,860	26,679	11,328	276,077	1887
1888 ...	597,015	58,677	21,858	204,561	27,721	11,401	272,797	1888
1889 ...	661,178	76,020	29,138	230,172	29,122	11,506	285,220	1889
1890 ...	650,394	35,288	28,092	262,855	26,608	10,402	287,149	1890
1891 ...	747,553	98,773	41,322	247,029	* 34,223	10,542	315,664	1891
1892 ...	750,755	79,033	43,757	280,627	* 32,293	11,312	303,733	1892

* Dysentery and diarrhoea only.

There was an increase in 1892, as compared with the previous year, in the number of deaths registered from fevers, small-pox and injuries, but a decrease in the deaths recorded under cholera, dysentery and diarrhoea and other causes.

23. Of the 750,755 deaths registered, 385,162 occurred among males and 365,593 among females, the annual death-rates per 1,000 of population being 23·1 for males and 21·5 for females. In only four districts the female death-rate was greater than the male death-rate. For every 100 females who died, 105·3 deaths of males were registered, and the proportion varies considerably in some districts.

The subjoined table shows the total deaths in 1892 under different ages :—

No.	Ages.	Deaths.	Percentage on total deaths.
1	Under 1 year ...	146,948	19·6
2	1 year and under 5 years ...	113,430	15·1
3	5 years and under 10 years ...	48,189	6·4
4	10 years and under 15 years ...	27,084	3·6
5	15 years and under 20 years ...	33,629	4·5
6	20 years and under 30 years ...	72,683	9·7
7	30 years and under 40 years ...	70,423	9·4
8	40 years and under 50 years ...	63,330	8·4
9	50 years and under 60 years ...	63,536	8·5
10	60 years and upwards ...	111,503	14·8
Total ...		750,755	100·0

24. The mortality amongst infants under one year of age is, as a rule, high. Out of a total death roll of 750,755, there were 146,948 or 19·6 per cent. of the deaths amongst children under one year of age, and if, as is the rule in England, the death-rate is calculated on the number of children born during the year, it will be found that the death-rate of infants was 173·9 per mille. The deaths in children under five years of age formed 34·7 per cent. of the total deaths against 37·3 in 1891. Fewer deaths were registered, in 1892, in children under one year than in 1891, and this was doubtless due to a less number of children having been born in 1892. Although a high death-rate among infants is in a great measure due to defective sanitary arrangements, yet there are also several other causes which are to blame for the high mortality, such as, the habits and mode of living of the people themselves and their management of children, unsuitable and insufficient food, early marriages and feeble mothers, &c.

25. With regard to the influence of sex on mortality (*vide* Form IV in the appendix), it appears that from infancy up to fifteen years of age the death-rate was greater among males than females, but that between fifteen and twenty years the

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		Highest maximum.	Lowest minimum.	Range.	10 A.M.	4 P.M.	Direction.			Velocity, miles per diem.	
							10 A.M.	4 P.M.			
JULY.											
1	...	0.09	95.9	75.4	20.5	65	46	W.	C.	104	3
2	...	...	95.4	73.9	21.5	62	43	O.	S.W.	123	2
3	...	0.43	92.4	74.7	17.7	76	54	C.	S.	99	3
4	...	0.09	93.2	74.3	18.9	76	45	C.	C.	69	9
5	...	...	93.4	75.7	17.7	72	64	C.	C.	80	5
6	...	...	93.6	74.4	19.2	68	66	C.	S.W.	170	11
7	...	0.22	87.8	72.9	14.9	68	66	W.S.W.	S.W.	275	5
8	...	...	85.4	75.1	10.3	68	61	W.	W.	232	11
9	...	0.03	86.4	73.8	12.6	75	61	W.S.W.	W.	288	8
10	...	...	85.0	75.1	9.9	70	59	W.	W.	332	12
11	...	...	86.2	74.7	11.5	71	71	W.	W.N.W.	372	16
12	...	...	88.1	75.5	12.6	59	54	W.	W.S.W.	374	17
13	...	...	88.7	75.1	13.6	59	58	W.	W.	314	10
14	...	...	91.6	75.9	15.7	60	53	W.	W.	264	12
15	...	...	93.4	75.5	17.9	60	41	W.	W.S.W.	256	22
16	...	...	91.7	72.9	18.8	55	55	W.	W.	270	7
17	...	...	92.6	73.7	18.9	63	52	W.	W.	301	17
18	...	...	88.4	75.3	13.1	73	63	W.	W.	346	27
19	...	...	86.0	76.9	10.0	64	63	W.	W.	351	20
20	...	...	89.6	74.2	15.4	64	53	W.	W.	304	15
21	...	...	88.8	74.9	13.9	61	49	W.	S.W.	535	7
22	...	...	89.3	76.5	12.8	59	50	W.	W.	481	14
23	...	...	87.7	76.5	11.2	59	49	W.	W.	456	10
24	...	...	89.7	74.4	15.3	63	49	W.	W.	340	14
25	...	...	91.4	73.9	17.5	59	47	W.	W.	308	6
26	...	...	91.8	71.9	19.9	62	46	W.	W.	278	7
27	...	...	92.2	74.1	18.1	55	61	W.N.W.	W.	326	10
28	...	0.11	88.4	73.9	14.5	65	86	W.	W.	252	11
29	...	0.16	86.2	71.9	14.3	69	61	S.W.	W.	242	11
30	...	...	90.9	73.9	17.0	68	50	W.	W.	318	10
31	...	...	89.6	75.1	14.5	63	53	W.	W.	307	1
AUGUST.											
1	...	...	86.7	74.7	12.0	67	52	W.	W.S.W.	274	...
2	...	...	88.8	74.8	14.0	62	54	S.W.	S.W.	255	3
3	...	...	89.7	73.3	16.4	63	48	W.	W.	234	2
4	...	...	91.2	73.4	17.8	65	49	S.W.	W.	295	...
5	...	...	93.0	73.9	19.1	55	38	W.	W.	305	1
6	...	...	90.3	74.9	15.4	60	52	W.S.W.	W.N.W.	260	4
7	...	...	87.3	70.8	16.5	66	49	W.N.W.	W.	214	...
8	...	...	93.6	74.1	19.5	52	45	W.	N.W.	253	2
9	...	...	92.2	73.9	18.3	54	44	W.S.W.	W.	258	2
10	...	...	91.6	72.9	18.7	57	42	W.N.W.	W.	284	...
11	...	0.01	89.5	73.8	15.7	53	52	N.W.	C.	292	1
12	...	1.31	88.2	71.9	16.3	77	63	N.W.	C.	194	1
13	...	0.19	86.2	71.8	14.4	71	58	S.W.	W.	174	1
14	...	...	85.6	73.7	11.9	65	58	N.W.	W.N.W.	265	...
15	...	0.36	86.4	73.1	13.3	72	58	N.W.	N.W.	165	4
16	...	...	84.9	72.7	12.2	73	67	C.	N.W.	235	...
17	...	0.18	87.2	72.1	15.1	67	62	N.W.	W.	212	...
18	...	...	88.9	70.0	18.9	63	49	W.	S.W.	226	...
19	...	...	91.9	74.9	17.0	61	44	W.	W.	237	...
20	...	1.20	90.4	68.8	21.6	73	57	C.	C.	167	1
21	...	...	86.2	72.9	13.3	68	53	N.W.	C.	289	...
22	...	...	85.1	72.7	12.4	69	56	C.	C.	202	4
23	...	...	85.0	72.3	12.7	68	58	N.W.	C.	162	...
24	...	...	84.4	72.4	12.0	66	73	N.	C.	138	...
25	...	0.60	80.2	71.9	17.3	62	54	C.	C.	102	...
26	...	...	89.0	72.9	16.1	64	56	C.	W.	166	...
27	...	...	87.6	74.7	12.9	70	61	W.	W.	302	...
28	...	0.91	83.4	71.2	12.2	82	90	W.	C.	303	...
29	...	0.72	79.6	70.2	8.8	86	75	S.W.	W.	200	...
30	...	0.98	81.3	70.0	11.3	75	74	C.	W.	223	...
31	...	0.62	80.0	71.8	8.2	80	78	W.	W.	261	...

Daily Record of Meteorological Observations and of Cholera Deaths at BELLARY during the prevalence of the Disease in the year 1892—continued.

Month and date.	Rainfall in inches.	Temperature of air in the shade.			Moisture of air per cent., 100 being saturation.		Wind.		Deaths from cholera recorded on each day.	
		Highest maxi- mum.	Lowest mini- mum.	Range.	10 A.M.	4 P.M.	Direction.			Velocity, miles per diem.
							10 A.M.	4 P.M.		
SEPTEMBER.										
1	0.12	88.7	71.8	11.9	71	71	W.	W.	277	...
2	...	85.4	73.5	11.9	67	60	W.	W.	330	...
3	...	86.6	73.9	12.7	66	66	W.	W.	304	...
4	...	88.3	73.4	14.9	62	61	W.	W.	334	...
5	0.02	84.8	71.9	12.9	60	88	W.	W.	231	...
6	...	86.2	71.0	15.2	71	68	W.	N.W.	205	...
7	0.24	88.2	71.9	16.3	70	49	W.	W.S.W.	307	...
8	...	88.2	72.4	14.8	70	59	W.	W.N.W.	333	...
9	...	87.2	72.4	14.8	71	59	W.N.W.	W.	306	...
10	0.05	84.4	71.9	12.5	77	67	W.	W.	299	...
11	...	82.6	71.0	11.6	42	77	W.	W.	312	...
12	...	87.9	69.9	18.0	60	42	W.	W.	312	...
13	...	86.9	67.4	19.5	63	58	W.	W.S.W.	234	...
14	...	90.1	67.2	22.9	60	42	W.N.W.	W.	224	1
15	...	90.4	67.3	23.1	56	38	N.W.	C.	203	...
16	...	90.4	71.9	18.5	76	58	N.W.	W.N.W.	242	...
17	0.07	84.9	69.0	15.9	95	83	N.W.	N.W.	290	...
18	0.88	84.2	71.4	12.8	78	68	W.N.W.	W.	214	...
19	0.05	85.8	71.9	13.9	71	63	N.W.	N.W.	246	...
20	...	84.3	71.2	13.1	72	67	N.W.	W.	328	...
21	0.15	84.3	71.0	13.4	74	79	N.W.	C.	268	...
22	0.01	84.4	70.7	10.1	81	75	W.	W.N.W.	204	...
23	0.10	88.3	72.6	15.7	70	60	W.	W.	175	...
24	...	88.7	70.3	18.4	68	57	C.	W.S.W.	96	...
25	0.38	87.7	71.0	16.7	82	58	C.	C.	89	...
26	0.12	88.9	70.5	18.4	73	56	C.	C.	119	...
27	...	88.0	70.5	17.5	68	55	N.W.	C.	128	...
28	0.16	88.3	71.8	16.5	66	58	N.W.	C.	216	...
29	0.75	86.9	71.0	15.9	77	50	W.	C.	201	...
30	0.32	87.2	71.9	15.3	65	61	C.	N.W.	100	...
	0.07	88.0	71.1	16.9	67	59	C.	S.W. by W.	118	...

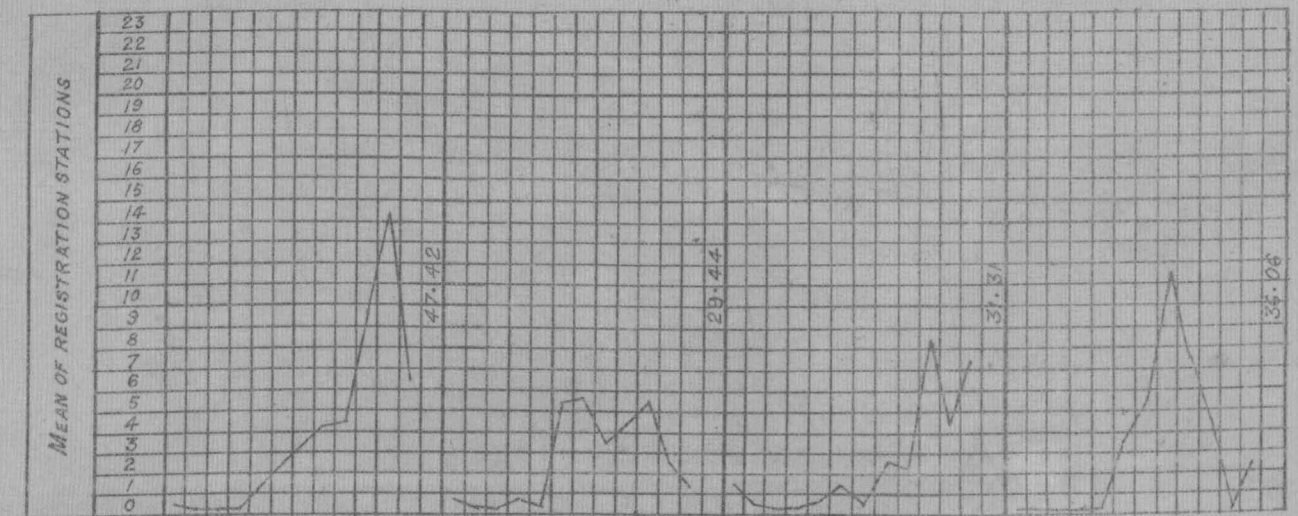
14

DIAGRAM SHOWING THE RAINFALL & PRICE OF FOOD (RICE) IN THE DISTRICTS OF CHINGLEPUT & MADRAS
FOR 3 YEARS ENDING 1892 COMPARED WITH AVERAGE OF 10 YEARS

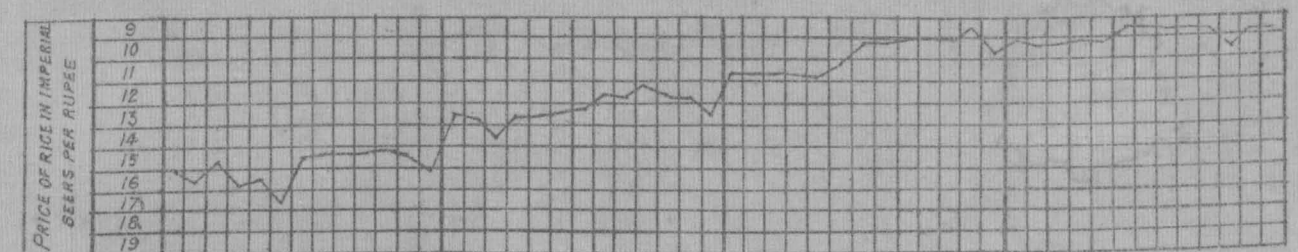
CHINGLEPUT

DISTRICTS	YEARS		AVERAGE OF 10 YEARS												1890												1891												1892											
	MONTHS		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL									

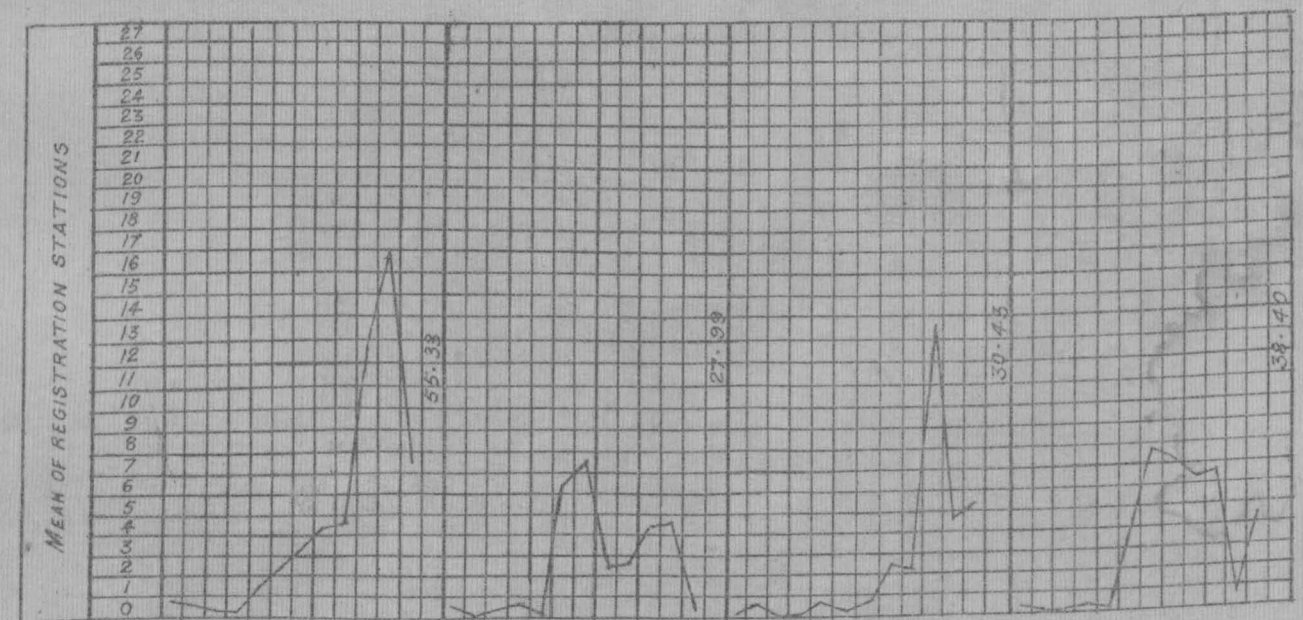
RAINFALL



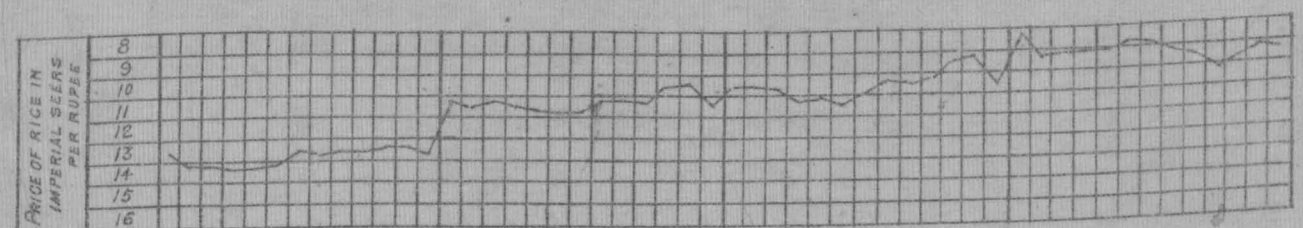
PRICE OF FOOD (RICE)



MADRAS RAINFALL



PRICE OF FOOD (RICE)



Daily Record of Meteorological Observations and of Cholera Deaths at TRICHINOPOLY during the prevalence of the Disease in the year 1892.

Month and date.	Rainfall in inches.	Temperature of air in the shade.			Moisture of air per cent., 100 being saturation.		Wind.		Deaths from cholera recorded on each day.	
		Highest maxi- mum.	Lowest mini- mum.	Range.	10 A.M.	4 P.M.	Direction.			Velocity, miles per diem.
							10 A.M.	4 P.M.		
JANUARY.										
1	...	84.3	69.9	14.4	70	61	N.N.E.	N.N.E.	188	5
2	...	86.0	68.6	17.4	64	52	N.E.	N.E.	196	3
3	...	85.4	64.9	20.5	65	49	N.N.E.	N.E.	149	4
4	...	85.1	70.9	14.2	72	67	N.E.	N.E.	179	4
5	...	85.9	71.5	14.4	70	59	N.E.	E.N.E.	199	4
6	...	86.2	69.9	16.3	65	54	N.N.E.	N.E.	166	4
7	...	86.6	67.9	18.7	61	53	N.E.	E.N.E.	164	4
8	...	85.1	65.2	19.9	68	57	N.E.	N.E.	147	4
9	...	86.3	67.0	19.3	72	54	N.E.	N.E.	176	4
10	...	86.0	70.2	15.8	67	55	N.E.	E.N.E.	186	6
11	...	87.2	67.7	19.5	59	50	N.E.	C.	130	3
12	...	87.0	62.9	24.1	54	47	C.	N.E.	81	4
13	...	86.6	63.7	22.9	51	47	N.W.	N.N.E.	119	8
14	...	86.3	62.8	23.5	53	44	N.	N.	148	6
15	...	87.6	68.6	19.0	56	48	N.E.	N.E.	149	7
16	...	87.3	70.0	17.3	54	46	N.E.	N.E.	165	9
17	...	88.1	68.9	19.2	59	54	N.	E.N.E.	159	7
18	...	87.6	69.6	18.0	52	50	N.E.	N.E.	164	10
19	...	88.2	68.3	19.9	47	47	N.N.E.	N.E.	172	8
20	...	86.4	70.7	15.7	54	54	N.E.	N.E.	192	7
21	...	87.2	70.6	16.6	54	58	N.E.	E.N.E.	171	11
22	...	86.8	70.8	16.0	55	54	E.N.E.	E.	145	10
23	...	87.9	65.7	22.2	51	47	N.N.E.	E.N.E.	137	7
24	0.03	87.7	71.1	16.6	73	69	N.E.	E.N.E.	116	10
25	...	87.7	69.0	18.7	62	51	N.N.E.	E.N.E.	102	9
26	...	88.3	67.0	21.3	58	47	N.N.E.	N.N.E.	104	6
27	...	88.2	66.9	21.3	59	45	E.N.E.	E.S.E.	93	8
28	...	88.7	69.3	19.4	54	50	E.N.E.	E.N.E.	99	11
29	...	88.8	71.2	17.6	55	49	E.N.E.	E.N.E.	110	12
30	...	88.5	69.5	19.0	47	47	N.E.	E.	102	10
31	...	89.7	68.2	21.5	47	47	N.E.	E.S.E.	115	...
FEBRUARY.										
1	...	88.9	67.2	21.7	50	51	N.E.	N.E.	137	1
2	...	89.0	66.9	22.1	43	43	N.	N.E.	133	8
3	...	90.8	63.2	24.6	37	37	N.E.	N.E.	134	6
4	...	91.6	63.7	27.9	29	34	S.S.W.	S.S.W.	108	5
5	...	90.1	64.5	25.6	44	40	E.S.E.	E.N.E.	91	3
6	...	89.5	65.1	24.4	49	42	N.E.	E.	119	3
7	...	90.0	66.2	23.8	46	45	E.S.E.	E.	111	3
8	...	90.6	66.9	23.7	49	43	N.N.E.	E.N.E.	106	2
9	...	90.6	66.2	24.4	58	44	E.N.E.	E.N.E.	89	4
10	...	90.2	65.9	24.3	56	44	E.N.E.	E.N.E.	101	6
11	...	91.6	71.2	20.4	55	42	N.N.E.	N.E.	106	1
12	...	93.6	74.1	19.5	58	43	N.E.	N.E.	110	1
13	...	93.3	72.6	20.7	54	43	N.E.	N.E.	116	2
14	...	93.5	73.2	20.3	54	38	E.N.E.	N.E.	118	...
15	...	96.3	73.4	21.9	57	43	E.S.E.	S.E.	112	1
16	...	95.0	74.9	20.1	65	50	E.S.E.	S.E.	113	2
17	...	91.6	74.2	17.4	62	48	E.N.E.	N.E.	169	3
18	...	90.0	71.2	18.8	57	51	N.E.	N.E.	166	4
19	...	92.0	69.1	22.9	58	38	E.N.E.	E.N.E.	152	3
20	...	94.4	69.9	24.5	49	38	N.	E.N.E.	159	...
21	...	93.1	67.2	25.9	53	35	N.E.	N.E.	134	...
22	...	93.3	65.2	28.1	55	38	N.E.	N.E.	141	...
23	...	94.3	72.6	21.7	53	39	E.N.E.	E.	116	2
24	...	96.4	74.6	21.8	57	36	S.S.W.	N.N.E.	129	3
25	...	95.2	73.6	21.6	57	37	E.N.E.	S.S.E.	113	1
26	...	96.5	74.0	22.5	59	37	E.N.E.	E.S.E.	97	...
27	0.26	94.8	77.1	17.7	61	36	E.N.E.	E.	139	...
28	...	95.3	75.3	20.0	68	44	N.E.	S.E.	133	...
29	...	97.7	74.2	23.5	62	37	S.W.	E.S.E.	105	...

Daily Record of Meteorological Observations and of Cholera Deaths at TRICHINOPOLY during the prevalence of the Disease in the year 1892—continued.

Month and date.		Rainfall in inches.	Temperature of air in the shade.			Moisture of air per cent., 100 being saturation.		Wind.		Deaths from cholera recorded on each day.	
			Highest maxi- mum.	Lowest mini- mum.	Range.	10 A.M.	4 P.M.	Direction.			Velocity, miles per diem.
								10 A.M.	4 P.M.		
MARCH.											
1	...	...	96.4	74.6	21.8	64	36	S.S.W.	S.E.	70	...
2	...	...	96.2	70.4	25.8	60	31	N.E.	E.S.E.	83	...
3	...	...	98.9	69.6	29.3	48	31	S.E.	E.	75	2
4	...	...	100.3	69.9	30.4	40	25	S.S.W.	E.S.E.	62	1
5	...	...	98.1	74.5	23.6	49	34	S.E.	N.E.	83	...
6	...	...	98.3	72.9	25.4	52	31	S.S.E.	C.	80	1
7	...	...	97.1	72.6	24.5	55	32	S.	E.N.E.	98	1
8	...	...	96.2	70.8	25.4	48	31	N.N.E.	S.E.	107	...
9	...	...	96.2	69.9	26.3	43	30	E.	E.S.E.	102	1
10	...	...	94.4	67.9	26.5	45	26	W.S.W.	N.E.	112	4
11	...	...	95.6	69.9	25.7	52	30	E.S.E.	N.E.	101	...
12	...	...	96.8	68.9	27.9	49	29	C.	N.E.	79	2
13	...	...	97.7	69.4	28.3	54	28	C.	N.N.E.	79	1
14	...	...	97.4	67.7	27.7	51	26	C.	E.	86	1
15	...	...	97.3	70.7	26.6	55	36	N.N.W.	N.E.	98	...
16	...	...	99.1	72.6	26.5	62	30	C.	E.S.E.	120	2
17	...	...	98.3	72.9	25.4	59	30	W.S.W.	N.E.	118	...
18	...	...	97.3	69.1	28.2	51	31	N.N.E.	N.E.	116	...
19	...	...	98.3	73.1	25.2	45	28	N.W.	E.N.E.	99	...
20	...	...	101.4	74.9	26.5	43	28	N.N.E.	E.S.E.	93	1
21	...	...	100.5	76.4	24.1	44	28	S.	S.E.	97	...
22	...	...	100.7	74.5	26.2	51	26	E.S.E.	C.	68	...
23	...	...	102.9	75.2	27.7	42	27	W.N.W.	E.N.E.	104	...
24	...	...	105.8	77.1	28.7	42	23	W.N.W.	E.	113	...
25	...	...	108.3	79.4	28.9	36	24	N.W.	W.	103	...
26	...	...	104.4	77.2	27.2	46	29	W.	S.E.	96	...
27	...	...	103.9	77.4	26.5	45	24	E.S.E.	E.S.E.	123	...
28	...	...	107.8	78.8	29.0	39	24	N.W.	W.N.W.	147	...
29	...	...	107.0	81.0	26.0	41	26	W.N.W.	W.S.W.	145	...
30	...	...	106.5	81.8	24.7	38	24	W.N.W.	W.N.W.	155	...
31	...	...	104.2	81.5	22.7	42	33	S.	S.S.E.	150	...
APRIL.											
1	...	...	102.8	81.6	21.2	49	31	S.S.W.	S.E.	139	...
2	...	...	102.3	81.1	21.2	49	30	S.S.W.	S.E.	116	...
3	...	...	103.4	78.5	24.9	48	30	S.S.W.	E.S.E.	114	...
4	...	...	103.2	79.5	23.7	49	31	S.S.W.	S.S.W.	123	...
5	...	...	102.7	80.6	22.1	48	30	E.S.E.	E.S.E.	96	...
6	...	...	102.9	75.5	27.4	48	29	S.E.	S.E.	116	...
7	...	...	105.2	76.5	28.7	46	26	S.S.E.	S.	107	...
8	...	...	105.5	78.1	27.4	39	23	W.S.W.	E.S.E.	75	...
9	...	...	105.4	80.0	25.4	40	25	W.N.W.	N.N.E.	101	...
10	...	...	103.5	81.8	21.7	42	32	W.	N.E.	127	...
11	...	...	102.5	82.0	20.5	46	28	E.S.E.	E.S.E.	130	...
12	...	...	101.1	80.2	20.9	47	32	N.E.	E.S.E.	125	...
13	...	...	101.7	79.8	21.9	49	31	S.E.	N.E.	118	...
14	...	...	100.1	75.9	24.2	52	31	N.N.E.	E.S.E.	110	...
15	...	...	101.7	79.6	21.3	57	48	S.E.	E.S.E.	132	...
16	...	...	96.3	79.4	16.9	50	40	E.N.E.	E.S.E.	120	...
17	...	...	99.5	79.8	19.7	49	36	C.	S.E.	111	...
18	...	...	101.3	78.8	22.5	45	36	S.E.	S.S.E.	119	...
19	...	...	105.4	79.5	25.9	45	28	W.N.W.	W.S.W.	139	...
20	...	...	107.2	81.2	26.0	45	27	N.W.	S.	157	...
21	...	...	108.8	83.5	25.3	47	26	W.N.W.	E.N.E.	179	...
22	...	...	106.4	79.2	27.2	48	25	W.N.W.	S.S.W.	142	...
23	...	...	105.5	82.1	23.4	44	32	E.	S.B.	117	...
24	...	0.67	90.2	76.8	13.4	71	65	E.	E.S.E.	108	3
25	...	...	96.1	76.8	19.3	60	41	S.S.W.	S.S.E.	155	1
26	...	...	102.1	77.1	25.0	58	29	W.S.W.	W.S.W.	174	...
27	...	...	106.8	81.1	25.7	43	26	W.S.W.	W.S.W.	178	...
28	...	...	104.4	77.8	26.6	42	29	W.	W.	159	...
29	...	...	105.4	79.2	26.2	43	25	W.S.W.	W.	165	...
30	...	...	105.3	79.0	26.3	35	27	W.N.W.	W.S.W.	169	...

death-rate among males was less. From thirty years and upwards females had again the advantage as regards expectation of life.

26. The deaths according to classes are given in Form V in the appendix. The death-rate among Muhammadans was 22·8 per mille, amongst Hindus 22·4, amongst Native Christians 16·8, and amongst Other Classes 11·4. The highest rates of Hindu and Muhammadan mortality appear against Madras. In thirteen districts (Chingleput, Coimbatore, Cuddapah, Gódvári, Kurnool, Madura, Nellore, Nilgiris, Salem, Tanjore, Tinnevely, Trichinopoly and Vizagapatam) no deaths were recorded among Other Classes.

27. In table III of appendix the number of deaths which occurred in each month of the year is given, and in the subjoined table the death-rates during each month in 1892 are contrasted with those of 1891 and the mean of ten years :—

Years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Mean of 10 years ..	2·2	1·6	1·6	1·5	1·6	1·6	1·8	1·8	1·7	1·7	1·9	2·4	21·5
1891	{ * 1·8 † 2·2	{ * 1·5 † 1·8	{ * 1·4 † 1·6	{ * 1·4 † 1·7	{ * 1·5 † 1·7	{ * 1·6 † 1·9	{ * 1·9 † 2·2	{ * 2·2 † 2·6	{ * 1·9 † 2·2	{ * 1·9 † 2·2	{ * 2·2 † 2·7	{ * 2·9 † 3·4	{ * 22·2 † 26·2
1892	2·6	1·8	1·9	1·7	1·7	1·6	2·2	2·2	1·7	1·6	1·6	1·7	22·3

* These rates have been calculated on the census population of 1891.

† These rates are those given in the annual report for 1891 and were calculated on the census population of 1881.

The minimum death period in this presidency is usually the hottest and driest period of the year (March, April and May), and the greatest mortality generally occurs in the cold weather, viz., in the months of December and January. The year 1892 was, however, an exceptional one, the highest death-rates occurring in January, July and August and the lowest in June, October and November. The unusual high mortality in the months of July and August was due to the prevalence of cholera in certain districts during these months, especially in the Gódvári, Kistna, Kurnool, Malabar and Cuddapah districts.

28. The death-rate for each district in 1892 is given in the subjoined table :—

No.	Districts.	Ratio of death per mille of population.		Average of death-rates for previous ten years.
		1892.	1891.	
1	Madras	46·5	{ * 53·1 † 59·4 }	41·7
2	Kurnool	35·1	{ * 27·3 † 32·9 }	25·7
3	Bellary	27·5	{ * 25·7 † 30·6† }	23·0
4	Kistna	27·5	{ * 25·5 † 30·6 }	22·9
5	Gódvári	27·1	{ * 19·2 † 22·3 }	20·8
6	Tanjore	25·7	{ * 26·2 † 27·4 }	24·9

* These ratios were calculated on the census population of 1891.

† These ratios are those given in the annual report for 1891 and were calculated on the census population of 1881.

† This is the rate for Anantapur-Bellary.

No.	Districts.	Ratio of death per mille of population.		Average of death-rates for previous ten years.
		1892.	1891.	
7	Nilgiris	25·5	{ * 23·2 † 25·4 }	17·9
8	Cuddapah	24·2	{ * 22·4 † 25·4 }	20·7
9	Malabar	23·4	{ * 19·1 † 21·4 }	19·4
10	Chingleput	23·3	{ * 28·3 † 32·8 }	25·7
11	South Canara	22·3	{ * 18·7 † 20·6 }	22·6
12	Tinnevely	22·1	{ * 23·5 † 26·5 }	23·4
13	Vizagapatam	21·7	{ * 12·9 † 17·3 }	16·9
14	Anantapur	20·4	{ * 24·8 † 30·6 }	23·0
15	Trichinopoly	20·0	{ * 25·7 † 29·0 }	23·4
16	Nellore	20·0	{ * 17·1 † 20·5 }	15·7
17	Madura	19·5	{ * 21·0 † 29·0 }	21·4
18	South Arcot	18·8	{ * 29·6 † 35·3 }	22·8
19	North Arcot	18·5	{ * 22·0 † 26·3 }	20·2
20	Salem	18·5	{ * 20·6 † 25·4 }	20·5
21	Coimbatore	18·2	{ * 21·5 † 26·0 }	18·8
22	Ganjam	14·3	{ * 9·8 † 13·5 }	19·2
Total ..		22·3	{ * 22·2 † 26·2 }	21·5

* These ratios were calculated on the census population of 1891.

† These ratios are those given in the annual report for 1891 and were calculated on the census population of 1881.

† This is the rate for Anantapur-Bellary.

The highest death-rate (46·5) occurred in Madras and was due to the high death-rate from other causes, fevers, dysentery and diarrhoea when compared with the ratios of other districts. The death-rate varied greatly in the different districts and, excluding Madras, it ranged from 14·3 per mille in the Ganjam district to 35·1 in the Kurnool district. The low rate returned for Ganjam is due to imperfect registration in parts of this district. The death-rates were lower than the ratios for the previous ten years in eleven districts (Anantapur, Chingleput, Coimbatore, Ganjam, Madura, North Arcot, Salem, South Arcot, South Canara, Tinnevely and Trichinopoly), and in the remaining eleven they were higher. In eleven districts the death-rates in 1892 were also higher than in 1891 and in eleven lower. The largest

Daily Record of Meteorological Observations and of Cholera Deaths at TRICHINOPOLY during the prevalence of the Disease in the year 1892—continued.

Month and date.	Rainfall in inches.	Temperature of air in the shade.			Moisture of air per cent., 100 being saturation.		Wind.		Velocity, miles per diem.	Deaths from cholera recorded on each day.
		Highest maximum.	Lowest minimum.	Range.	10 A.M.	4 P.M.	Direction.			
							10 A.M.	4 P.M.		
MAY.										
1	...	105.2	80.8	24.4	45	27	W.	W.S.W.	192	...
2	...	105.4	79.5	25.9	45	29	W.N.W.	N.W.	143	1
3	0.05	102.9	79.8	23.1	41	29	W.	S.S.W.	97	1
4	...	105.6	80.4	25.2	44	30	C.	E.	92	2
5	...	103.2	81.7	21.5	51	51	C.	S.E.	100	...
6	...	101.7	80.4	21.3	50	36	S.S.W.	S.S.E.	127	...
7	...	102.7	79.8	22.9	48	31	E.S.E.	S.E.	158	...
8	...	105.2	80.8	24.4	42	27	W.S.W.	S.W.	131	...
9	...	106.8	82.0	24.8	48	32	W.N.W.	S.W.	118	1
10	...	106.2	78.5	27.7	45	28	W.	W.N.W.	141	...
11	...	106.7	81.6	25.1	47	29	W.	N.W.	165	...
12	...	104.9	77.1	27.8	43	32	W.N.W.	N.W.	207	...
13	...	107.2	81.0	26.2	48	30	N.W.	W.S.W.	252	...
14	0.04	105.2	76.6	28.6	43	31	N.W.	N.W.	214	...
15	0.05	108.7	80.8	27.9	47	30	W.	W.N.W.	239	...
16	0.77	106.7	73.9	32.8	57	38	W.	W.	208	...
17	...	105.3	80.5	24.8	52	32	W.	N.W.	180	...
18	...	105.5	77.8	27.7	40	28	W.	W.	187	...
19	...	103.3	81.7	21.6	48	40	W.	N.W.	206	...
20	...	103.8	76.8	27.0	47	36	W.	N.	201	...
21	...	104.4	81.4	23.0	44	33	W.N.W.	W.N.W.	227	...
22	...	103.8	82.3	21.5	45	32	W.	N.W.	291	...
23	...	102.2	82.0	20.2	46	33	W.	N.W.	301	...
24	...	102.3	81.6	20.7	43	33	W.N.W.	W.N.W.	255	...
25	...	104.1	80.9	23.2	39	30	W.	N.W.	220	...
26	0.75	103.1	77.4	25.7	57	36	W.N.W.	W.	248	...
27	...	100.4	79.0	21.4	50	35	W.S.W.	W.N.W.	277	...
28	...	101.8	81.2	20.6	46	32	W.N.W.	W.	307	...
29	...	100.9	81.6	19.3	46	35	W.	W.N.W.	330	...
30	...	103.2	81.5	21.7	43	38	W.	W.	315	...
31	...	97.3	79.3	18.0	40	42	W.S.W.	W.	306	...
JUNE.										
1	...	100.1	80.8	19.3	45	39	S.S.W.	N.W.	212	...
2	...	101.1	80.8	20.3	45	43	W.	N.W.	143	...
3	0.08	95.3	76.8	18.5	46	45	W.	N.W.	119	...
4	0.43	96.1	74.6	21.5	72	52	W.N.W.	S.S.W.	131	...
5	...	99.3	77.4	21.9	61	41	W.N.W.	W.N.W.	161	...
6	...	100.4	78.5	21.9	46	36	W.N.W.	W.N.W.	223	...
7	...	102.1	79.8	22.3	44	31	W.S.W.	W.N.W.	296	...
8	...	100.5	81.9	18.6	47	38	W.S.W.	W.N.W.	307	...
9	...	97.9	81.3	16.6	50	38	W.S.W.	W.N.W.	231	...
10	...	99.1	79.8	19.3	54	43	S.W.	W.	208	...
11	...	100.3	77.8	22.5	48	39	C.	W.S.W.	178	...
12	...	104.3	78.8	25.5	44	49	S.W.	S.W.	172	...
13	...	103.8	78.2	25.6	43	32	W.	W.	173	...
14	...	105.4	80.5	24.9	43	33	W.N.W.	S.W.	160	1
15	...	105.2	81.1	24.1	45	29	W.N.W.	N.W.	189	...
16	...	104.2	77.6	26.6	46	38	W.S.W.	S.S.W.	104	...
17	0.13	103.1	79.0	24.1	51	40	W.N.W.	S.S.W.	138	...
18	...	100.4	80.0	20.4	50	33	W.	W.N.W.	154	...
19	...	104.2	80.8	23.4	49	40	W.N.W.	S.S.W.	141	...
20	1.77	100.3	75.9	24.4	59	36	W.N.W.	W.N.W.	126	...
21	...	100.4	77.8	22.6	54	34	W.	W.S.W.	97	...
22	...	100.2	79.8	20.4	56	44	N.W.	N.W.	80	...
23	...	98.7	80.1	18.6	48	41	W.S.W.	N.W.	98	...
24	...	99.2	78.9	20.3	54	51	C.	C.	72	...
25	...	100.1	77.5	22.6	51	40	N.N.W.	C.	70	...
26	...	100.3	79.5	20.8	52	45	W.N.W.	C.	87	...
27	...	101.3	78.1	23.2	54	44	N.W.	W.	109	...
28	0.52	97.1	74.1	23.0	69	45	W.	N.W.	130	...
29	...	98.2	77.4	20.8	59	41	W.N.W.	N.W.	129	...
30	...	99.1	80.4	18.7	59	40	N.W.	N.W.	...	...

SMALL-POX.

45. During the year under review there was an increase in the mortality from small-pox, the deaths in 1892 having amounted to 43,757 against 41,322 in 1891. In the Malabar district the disease prevailed with great severity and caused a little over one-fourth of the total deaths.

46. The number of deaths registered from small-pox in each year since 1872 is given in the table on page 23, and in the subjoined table the ratios per mille of population are given:—

Table showing the ratios of small-pox deaths for a series of years.

Years.	Ratio of small-pox deaths per mille of population.	Years.	Ratio of small-pox deaths per mille of population.
1872	1.2	1883	1.3
1873	1.7	1884	2.1
1874	1.5	1885	1.2
1875	0.8	1886	0.6
1876	0.8	1887	0.7
1877	3.0	1888	0.8
1878	1.9	1889	1.0
1879	0.6	1890	1.0
1880	0.5	1891	* 1.2
1881	0.5	1891	+ 1.4
1882	1.6	1892	1.3

47. The small-pox death-rate for the presidency in 1892 was 1.3 per 1,000 of population against 1.2, the rate for 1891.

48. In form VIII in the appendix is given the monthly distribution of deaths from small-pox in the different districts of the presidency. The largest number of deaths (6,872) occurred in March and the fewest (1,619) in November. The maximum mortality from small-pox in this presidency is usually attained during the dry months and the minimum during the rainy months, and it would appear that rainfall is unfavorable to the prevalence of small-pox and drought favorable to the development of the disease. In both 1890 and 1891 the rainfall was deficient and in each year following these there was a great increase in the small-pox mortality.

49. There were 6,092 children under one year of age and 14,314 over one and under twelve years of age who died from small-pox in 1892. The largest number of deaths from small-pox occurred, as is usually the case, among infants and children under twelve years of age, 46.6 per cent. of the total mortality being borne by them. Compared with 1890 and 1891 it is found that the proportion of children who died in 1892 was less than in either of the two preceding years.

50. In all the districts there were deaths registered from small-pox in 1892. In ten districts (Anantapur, Chingleput, Cuddapah, Kistna, Madras, Madura, North Arcot, South Arcot, Tanjore and Tinnevely) there was a decrease in the deaths from small-pox in 1892 when contrasted with 1891; in eleven there was an increase and in one (Nilgiris) the number of deaths was the same. Although the mortality from this disease was greater in 1892 than in 1891, yet it will be seen that the increase is chiefly due to the great prevalence of small-pox in the Malabar and Godavari districts, where 7,320 more deaths were registered in 1892 than in 1891. As regards the excessive death-rate (4.4) in the Malabar district, vaccination has always been opposed by the people and its practice is carried on under many disadvantages. In this district the houses, as a rule, are scattered and are not collected together as in other districts forming villages and towns, and the females (whose influence on the household is greater in Malabar than in other parts of the presidency) are greatly opposed to vaccination. Further the Moplah population is very conservative and ignorant and resist any new practice. The District Surgeon, in his report for 1892, states: "Small-pox which had prevailed in epidemic form throughout 1891 continued throughout 1892 causing great havoc; it was present in virulent form throughout the whole district causing 10,467 deaths against 5,092 in the previous year; the taluk of Ponani, with its crowded Moplah population and

* Calculated on the Census population of 1891.

† Calculated on the Census population of 1881.

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highly insanitary conditions suffering most; 3,356 persons being registered as having succumbed to the disease in that taluk alone. The greatest mortality for the whole district from this epidemic occurred in the first four months of the year, during which period 7,519 persons are registered as having died. At the close of the year, the epidemic was declining but still existed in all taluks."

51. The lowest death-rate (0.06) was obtained by Madras and vaccination in this town is carried on in a most satisfactory and efficient manner. The subjoined table shows the death-rates from small-pox in Madras, and it will be seen that since 1884 very few deaths from small-pox have been annually registered and that even when cases do occur much havoc is not caused—a proof that the town is well protected by vaccination from the disease:—

Madras Town.

Years.	Deaths from small-pox.	Ratio per 1,000 of population.	Remarks.
1884	3,997	10.2	Vaccination was made compulsory in the Madras Municipality on the 15th May 1884.
1885	25	0.06	
1886	1	0.002	
1887	12	0.03	
1888	35	0.09	
1889	42	0.1	
1890	72	0.2	
1891	65	* 0.1	
1892	25	† 0.2	
		0.06	

* Calculated on the Census population of 1891.

† Calculated on the Census population of 1881.

From annual form VI-B in the appendix it will be seen that for towns the death-rate from small-pox (1.3) was the same as for districts.

52. In the following table is shown the small-pox mortality in the municipal towns during 1892:—

Small-pox.

No.	Municipalities.	Number of deaths from small-pox.	Ratio per mille of population.	No.	Municipalities.	Number of deaths from small-pox.	Ratio per mille of population.
1	Cochin	321	19.9	29	Nellore	10	0.3
2	Palghat	344	8.7	30	Ootacamund	4	0.3
3	Tellicherry	184	6.9	31	Tanjore	6	0.3
4	Calicut	360	5.6	32	Srirangam	3	0.2
5	Coimbatore	206	4.5	33	Parakkimedi	5	0.2
6	Anakapalle	57	3.4	34	Bezvada	4	0.2
7	Madura	253	2.9	35	Tirupatūr	5	0.2
8	Tuticorin	60	2.4	36	Chidambaram	13	0.2
9	Vellore	96	2.1	37	Negapatam	4	0.2
10	Ellore	51	1.7	38	Mannargudi	2	0.1
11	Ongole	16	1.5	39	Cuddapah	3	0.1
12	Trichinopoly	137	1.5	40	Guntūr	2	0.1
13	Tirupati	15	1.1	41	Dindigul	3	0.1
14	Cocanada	36	0.9	42	Máyavaram	3	0.1
15	Rajahmundry	20	0.7	43	Vizianagrum	1	0.09
16	Periyakulam	11	0.7	44	Karūr	2	0.05
17	Cannanore	19	0.7	45	Masulipatam	2	0.05
18	Cuddalore	33	0.7	46	Mangalore	1	0.03
19	Gudiyatam	12	0.6	47	Vizagapatam	..	..
20	Conjeeveram	21	0.5	48	Anantapur	..	..
21	Palni	8	0.5	49	Adóni	..	..
22	Coonoor	3	0.5	50	Erode	..	..
23	Salem	34	0.5	51	Chicacole	..	..
24	Bimlipatam	5	0.5	52	Berhampore	..	..
25	Kumbakonam	20	0.4	53	Kurnool	..	..
26	Tinnevely	9	0.4	54	Wárajápet	..	..
27	Palamcottah	7	0.4	55	Ványambádi	..	..
28	Bellary	19	0.3				
				Total		2,445	1.5

Out of the 55 municipal towns, deaths from small-pox were registered in 47 and in 8 towns no deaths were recorded. Cochin heads the list with a ratio of 19.9 per 1,000. Vaccination is not compulsory in Cochin and the people are greatly opposed to it, and many believe that when small-pox is prevalent vaccination will cause an attack of small-pox. A large proportion also of the deaths from small-pox were not among the residents of Cochin Municipality, but were among people who came from the neighbouring Native States of Travancore and Cochin to be treated in hospital or among the labourers who work during the season in the yards, &c.

FEVERS.

53. On looking at the table on page 23, it will be seen that excluding "other causes" by far the largest number of deaths is recorded as due to "fevers." The number of registered deaths attributed to fevers in 1892 was 280,627 or 33,598 more than in the previous year and the mortality was greater than in any year since 1879; when 285,477 persons died from fevers. Although the fever death-rate was made higher in some parts of the presidency owing to deaths from influenza being recorded under fevers, yet the principal cause of the increased mortality from fevers was no doubt the heavy rainfall that occurred in 1892; and further the impoverished state of a large part of the population, due to the failure of crops and the consequent high prices of food, lowered the condition of the public health and so rendered many of the inhabitants less able to withstand the effects of the insanitary conditions which surround them. The death-rate from fevers in 1892 was 8.3 per mille against 7.3 in 1891 and 7.3, the average of previous five years.

54. The deaths registered from fevers during the ten years 1883 to 1892 were as follows:—

Years.	Number.	Years.	Number.
1883	203,786	1888	204,561
1884	215,977	1889	230,172
1885	218,786	1890	262,855
1886	221,679	1891	247,029
1887	240,860	1892	280,627

55. The following table shows the deaths recorded from "fevers" in the several districts of the presidency in each year since 1883:—

Districts.	Population for which returns were received in 1892.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.
Anantapur	708,143	4,359	4,622	4,789	4,377	6,185	2,212	2,185	4,189	2,698	2,987
Bellary	909,661	1,530	1,548	1,358	1,370	2,407	5,444	5,829	7,438	7,001	9,522
Chingleput	1,133,901	5,574	6,082	6,114	6,741	6,198	5,393	5,938	6,454	7,453	7,099
Coimbatore	2,003,911	12,843	12,897	10,776	11,185	12,898	11,016	12,935	15,732	13,912	14,676
Cuddapah	1,271,721	11,243	12,282	14,648	15,412	18,906	18,258	16,642	19,444	16,801	21,362
Ganjam	1,896,400	12,018	10,789	10,354	10,739	16,669	11,414	15,852	13,876	14,165	20,123
Godavari	2,077,858	14,221	16,857	16,617	19,205	17,444	12,145	17,286	17,536	17,753	18,446
Kistna	1,855,024	12,933	14,056	12,910	14,925	14,486	11,310	14,780	15,446	14,655	17,514
Kurnool	817,660	9,984	10,771	11,015	11,492	15,916	15,008	13,536	15,569	14,315	18,691
Madras	436,875	3,422	3,726	3,553	3,758	3,973	3,306	4,064	4,588	6,635	6,794
Madura	1,673,318	9,158	9,496	10,265	9,845	7,760	7,083	7,619	9,491	8,770	8,499
Malabar	2,636,674	27,961	24,816	22,577	19,290	17,311	18,617	17,993	18,158	17,808	20,118
Nellore	1,463,357	7,702	8,094	8,999	8,999	9,481	8,708	7,940	10,415	11,539	12,894
Nilgiris	96,765	768	1,063	1,177	1,038	931	1,050	980	1,502	1,498	1,715
North Arcot	2,179,585	10,487	11,755	15,724	15,821	16,901	13,839	14,386	17,275	16,097	15,898
Salem	1,961,784	10,081	10,908	12,517	14,136	16,142	13,810	14,517	19,545	15,129	14,540
South Arcot	2,162,336	10,110	10,524	10,563	12,193	13,075	12,797	12,644	15,216	14,926	12,546
South Canara	1,052,002	7,410	10,384	8,992	7,727	6,866	6,680	6,005	10,303	7,618	8,766
Tanjore	2,227,081	3,742	4,074	3,356	3,486	3,556	3,196	3,171	4,101	4,885	4,616
Tinnevely	1,915,792	5,937	6,448	5,900	5,055	5,550	4,932	5,047	6,421	5,868	5,893
Trichinopoly	1,371,726	6,823	5,973	5,605	5,530	6,194	6,132	6,066	7,802	6,790	5,540
Vizagapatam	1,942,195	15,952	18,812	20,977	19,355	22,011	12,211	24,457	22,363	20,773	32,138
Total, Madras Presidency	33,693,179	203,786	215,977	218,786	221,679	240,860	204,561	230,172	262,855	247,029	280,627

56. In all the districts, with the exception of Chingleput, Madura, North Arcot, Salem, South Arcot and Trichinopoly the death-rates from fevers were higher in

increase in the mortality took place in the Vizagapatam district, the death-rate in 1892 being 21.7 per mille of population, while in 1891 it was 12.9. In 1892 greater attention was given to registration in this district, and allowing for this the increase was due to the prevalence of cholera in 1892, and also to many deaths having been registered from fevers and small-pox. In Gódvári district the death-rate in 1892 was also much greater than that of 1891, and was due to a large mortality being recorded under cholera and small-pox. The greatest decrease in the mortality occurred in the South Arcot district, the death-rate for 1892 being 18.8 per mille against 29.6 in 1891, and was mainly due to the deaths registered from cholera and small-pox being much less than those in the preceding year. In Madras there was also a marked decrease in the mortality in 1892, the death-rate in 1892 being 46.5 against 53.1 in 1891, and was chiefly due to the deaths recorded under all other causes, cholera and dysentery and diarrhoea being less than in 1891.

29. The death-rates per 1,000 of population among the rural and urban population in each district of the presidency during 1892 as compared with 1891 are given in the subjoined table:—

No.	Districts.	Ratio of deaths per 1,000 of population.	
		1892.	1891.
1	Anantapur { Urban ..	23.9	* 28.8 † 34.3
	 { Rural ..	20.3	* 24.7
2	Bellary { Urban ..	31.9	* 30.2
	 { Rural ..	26.8	* 25.2 § 30.4
3	Chingleput { Urban ..	27.6	* 29.6 † 28.6
	 { Rural ..	23.1	* 28.3 † 33.0
4	Coimbatore { Urban ..	25.7	* 30.5 † 36.2
	 { Rural ..	18.0	* 21.2 † 25.9
5	Cuddapah { Urban ..	38.6	* 29.6 † 26.8
	 { Rural ..	24.0	* 22.3 † 25.4
6	Ganjam { Urban ..	24.2	* 19.3 † 20.3
	 { Rural ..	13.9	* 9.5 † 13.3
7	Gódvári { Urban ..	29.8	* 19.2 † 23.2
	 { Rural ..	26.9	* 19.2 † 22.2
8	Kistna { Urban ..	33.2	* 29.2 † 36.0
	 { Rural ..	27.2	* 25.4 † 30.3
9	Kurnool { Urban ..	54.9	* 27.9 † 33.3
	 { Rural ..	34.2	* 27.4 † 32.9
10	Madras { Urban ..	46.5	* 53.1
	 { Rural ..		† 59.4
11	Madura { Urban ..	25.3	* 31.8 † 37.0
	 { Rural ..	18.7	* 23.1 † 28.1

* Calculated on the census of 1891.

† These rates are those given in the annual report for 1891 and were calculated on the census population of 1891.

‡ Urban rate for Anantapur-Bellary.

§ Rural rate for Anantapur-Bellary.

No.	Districts.	Ratio of deaths per 1,000 of population.	
		1892.	1891.
12	Malabar { Urban ..	35.7	* 31.6 † 33.4
	 { Rural ..	22.5	* 18.1 † 20.4
13	Nellore { Urban ..	20.9	* 31.4 † 34.2
	 { Rural ..	19.9	* 16.7 † 20.0
14	Nūlgiris { Urban ..	27.2	* 22.5 † 25.7
	 { Rural ..	25.1	* 23.4 † 24.4
15	North Arcot { Urban ..	23.8	* 26.4 † 28.2
	 { Rural ..	18.2	* 21.7 † 26.1
16	Salem { Urban ..	18.4	* 24.7 † 27.3
	 { Rural ..	18.5	* 20.4 † 25.2
17	South Arcot { Urban ..	18.1	* 33.0 † 29.4
	 { Rural ..	18.8	* 29.5 † 35.5
18	South Canara { Urban ..	30.8	* 20.5 † 25.9
	 { Rural ..	21.9	* 18.7 † 20.4
19	Tanjore { Urban ..	27.7	* 29.4 † 30.9
	 { Rural ..	25.5	* 25.8 † 27.0
20	Tinnevelly { Urban ..	26.1	* 25.0 † 27.2
	 { Rural ..	21.7	* 23.3 † 26.4
21	Trichinopoly { Urban ..	26.5	* 29.2 † 31.2
	 { Rural ..	19.4	* 25.4 † 28.8
22	Vizagapatam { Urban ..	27.6	* 21.6 † 25.2
	 { Rural ..	21.2	* 16.6 † 12.4
Total ..		27.6	* 27.4 † 30.0
		21.9	* 21.9 † 25.9

* Calculated on the census of 1891.

† These rates are those given in the annual report for 1891 and were calculated on the census population of 1891.

The death-rate in 1892 among the urban population was higher than among the rural, the ratios being 27.6 and 21.9, respectively, against 27.4 and 21.9 in 1891. In all the districts, with the exception of Salem and South Arcot, the urban death-rates were higher than the rural. Judging from the death-rates amongst the rural population, the most unhealthy district in 1892, excluding Madras, was Kurnool, where fevers prevailed to a great extent.

30. In the following table are given the deaths registered in the fifty-five municipal towns and in the districts, exclusive of municipal towns, proportionally considered with the population:—

1892 than in 1891. The highest death-rate (22·8) occurred, as usually happens, in the Kurnool district and the lowest (2·2) in the Tanjore district. The rates of fever mortality were also high in the Nilgiris, Cuddapah, Vizagapatam and Madras districts.

57. In table IX in appendix the monthly distribution of deaths from fevers is shown. The largest number of deaths (25,789) was recorded in the month of August and the fewest (19,822) in June.

58. The subjoined table shows the deaths and death-rates from fevers in districts and municipalities :—

No.	Districts, exclusive of municipal towns.	Number of deaths from fevers.	Ratio per mille of population.	No.	Municipalities.	Number of deaths from fevers.	Ratio per mille of population.
1	Kurnool	17,929	22·6	1	Kurnool	762	31·4
2	Nilgiris	1,532	19·8	2	Coonoor	99	17·7
				3	Ootacamund	84	6·0
3	Vizagapatam	31,279	16·9	4	Anakapalle	196	11·5
				5	Bimlipatam	73	7·5
4	Cuddapah	21,071	16·8	6	Vizagapatam	354	10·4
5	Madras	6,794	15·6	7	Vizianagrum	236	7·7
				8	Cuddapah	291	16·9
6	Ganjam	19,677	10·7	9	Berhampore	153	6·0
				10	Chitacole	137	7·5
7	Bellary	8,691	10·5	11	Parlakimedi	156	9·5
				12	Adoni	347	13·2
8	Kistna	16,820	9·5	13	Bellary	484	8·4
				14	Bezavada	169	8·2
				15	Guntur	279	12·0
9	Godavari	17,758	8·9	16	Masulipatam	246	6·3
				17	Cocanada	223	5·5
10	Nellore	12,666	8·9	18	Ellore	241	8·2
11	South Canara	8,417	8·3	19	Rajahmundry	224	7·9
				20	Nellore	153	5·2
12	Malabar	19,274	7·8	21	Ongole	75	6·9
				22	Mangalore	349	8·6
				23	Cannanore	225	8·4
				24	Calicut	246	3·8
13	Coimbatore	14,286	7·4	25	Cochin	38	2·4
				26	Palghat	250	6·3
				27	Tellicherry	85	3·2
				28	Coimbatore	232	5·0
				29	Erode	77	6·3
14	Salem	13,863	7·4	30	Karur	81	7·5
				31	Salem	337	4·9
				32	Tirupatūr	154	9·4
15	North Arcot	15,155	7·2	33	Vaniyambadi	186	11·7
				34	Gudiyatam	158	8·4
16	Chingleput	6,766	6·2	35	Tirupati	176	12·4
17	South Arcot	12,217	5·8	36	Vellore	279	6·2
				37	Walajpet	130	12·4
18	Madura	7,937	5·5	38	Conjeeveram	333	7·8
				39	Chidambaram	134	7·2
19	Anantapur	2,915	4·2	40	Cuddalore	195	4·1
20	Trichinopoly	4,821	3·8	41	Dindigul	31	1·5
				42	Madura	408	4·7
21	Tinnevely	5,488	3·0	43	Palni	37	2·2
				44	Periyakulam	86	5·2
				45	Anantapur	22	3·2
				46	Srirangam	105	4·9
				47	Trichinopoly	614	6·9
				48	Palamcottah	47	2·5
				49	Tinnevely	132	5·3
				50	Tuticorin	226	9·1
				51	Kumbakonam	318	5·8
				52	Mannargudi	75	3·7
22	Tanjore	3,732	1·8	53	Máyavaram	130	5·4
				54	Negapatam	358	6·1
				55	Tanjore	303	5·6
Total ..		269,088	8·4	Total ..		11,539	7·0

The presidency district rate was 8·4 per mille of population or 1·4 greater than the municipal presidency rate (7·0). In 23 municipal towns the death-rates were higher than those of the district and in the remaining 32 municipalities they were lower.

DYSENTERY AND DIARRHOEA.

59. The Government of India having directed that the designation of diseases entered in the annual form No. X be changed from "bowel-complaints" to "dysentery and diarrhoea," all diseases which are not included under "dysentery and diarrhoea" and which used to come under bowel-complaints are now registered under "all other causes."

60. There were 32,293 deaths recorded under "dysentery and diarrhoea" in 1892 or 1,930 less than the number (34,223) registered in 1891.

61. The subjoined table shows the death-rates under "bowel-complaints from 1883 to 1890 and those for 1891 and 1892 under "dysentery and diarrhoea" :—

Years.	Ratio per mille of population.	Years.	Ratio per mille of population.
1883	0·7	1889	1·0
1884	1·0	1890	0·9
1885	1·1	1891	* 1·0
1886	0·9	1892	† 1·2
1887	0·9		1·0
1888	1·0		

62. The death-rate for 1892 was 1·0. There is no doubt that many of the deaths from "dysentery and diarrhoea" may be attributed to the people having to resort to unwholesome kinds of food owing to failure of crops and the high prices of food. The district which recorded the highest mortality from "dysentery and diarrhoea" was Madras with a death-rate of 8·9 per 1,000 and following it comes Chingleput with a ratio of 3·2 per 1,000. These two districts usually return the highest death ratios from "dysentery and diarrhoea." The lowest ratios were recorded in the Anantapur (0·3), Ganjam (0·4) and Salem (0·4) districts. In eight districts (Bellary, Cuddapah, Ganjam, Godavari, Malabar, Nellore, South Canara and Vizagapatam) there were more deaths recorded in 1892 than in 1891, while in the remaining fourteen they were less. Table X in appendix shows the deaths from "dysentery and diarrhoea" during each month of the year. The largest number of deaths (4,481) was recorded in January and the smallest (1,830) in April.

63. The following table shows the number of deaths registered from "dysentery and diarrhoea" in each district and municipality during 1892 :—

* Calculated on the Census population of 1891.

† Calculated on the Census population of 1881.

	Page
Bellary	75
Conjeevaram	
Coimbatore	
Erode	76
Karúr	
Cuddapah	
Berhampore	
Chicacole	
Parlakimedi	77
Cocanada	
Ellore	
Rajahmundry	
Guntūr	78
Masulipatam	
Bezwada	
Kurnool	
Dindigul	
Madura	79
Palni	
Periyakulam	
Calicut	
Cannanore	
Cochin	80
Palghat	
Tellicherry	
Nellore	
Ongole	
Coonoor	81
Ootacamund	
Gudiyātam	
Tirupati	82
Vellore	
Walajapet	
Salem	
Tirupatūr	
Vāniyambādi	83
Chidambaram	
Cuddalore	
Mangalore	
Kumbakonam	84
Māyaveram	
Mannārgudi	
Nagapatam	
Tanjore	85
Palanccottah	
Tinnevelly	
Tuticorin	
Seirangam	86
Trichinopoly	
Anakāpalle	
Bimlipatam	
Vizagapatam	87
Vizianagram	
Madras	

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Godāvari	91
Kistna	
Kurnool	
Madura	
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Nellore	

Nilgiris	
North Arcot	
Salem	93
South Canara	
South Arcot	
Tanjore	94
Tinnevelly	
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Anantapur	
Gooty and Tadpatri	
Penukonda, Dharmavaram, Hindūpur and Madakasira	
Bellary	96
Alūr	
Hospet	
Adōni	
Kūdligi	
Harpanahalli	
Hadagally	
Sandūr State	97
Tiruvallūr	
Ponnēri	
Saidapet	
Chingleput	
Madurantakam	
Conjeeveram	
Coimbatore	98
Erode	
Satyamangalam	
Pollachi	
Palladam	
Bhavāni	
Kollegal	
Udamalpet	
Karūr	99
Dhārāpuram	
Badvel	
Proddatur	
Sidhout	
Pullampet	
Cuddapah	
Jammalnadugu	100
Rāyachōti	
Pulivendla	
Kadiri	
Vayalpad	
Chicacole	
Berhampore	
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Parlakimedi and Tekkali Zemindaries	
Godāvari	
Rōpalle	
Bāpatla	
Guntūr	
Palnad	
Narasaraopet	
Gudivāda	102
Sattenapalle	
Bandar	
Nandigāma	
Bezwada	
Venukonda	
Nuzvid	
Vissannapet Division	
Pattikonda	103
Ramallakot	
Nandikotkur	
Nandyal	
Koilkuntla	
Sirvel	
Cumbum	104
Markapur	
Madura	

No.	Districts, exclusive of municipal towns.	Number of deaths from dysentery and diarrhoea.	Ratio per mille of population.	No.	Municipalities.	Number of deaths from dysentery and diarrhoea.	Ratio per mille of population.
1	Madras	3,863	8.9	1	Conjeeveram ..	169	4.0
2	Chingleput	3,477	3.2	2	Cannanore	74	2.8
3	Malabar	5,445	2.2	3	Calicut	356	5.5
4	South Canara	1,362	1.3	4	Cochin	86	5.3
5	Bellary	966	1.2	5	Pálghat	92	2.3
6	Nilgiris	87	1.1	6	Tellicherry	63	2.4
7	Cuddapah	705	0.6	7	Mangalore	201	4.9
8	Nellore	843	0.6	8	Adóni	27	1.0
9	North Arcot	1,234	0.6	9	Bellary	94	1.6
10	Coimbatore	931	0.5	10	Coonoor	28	5.0
11	Kurnool	384	0.5	11	Ootacamund	48	3.4
12	Tinnevelly	1,033	0.5	12	Cuddapah	23	1.3
13	Godávári	744	0.4	13	Ongole	33	3.0
14	Kistna	765	0.4	14	Nellore	11	0.4
15	Madura	644	0.4	15	Gudiyátam	94	5.0
16	Salem	779	0.4	16	Tirupati	43	3.0
17	South Arcot	881	0.4	17	Vellore	210	4.7
18	Vizagapatam	807	0.4	18	Wárajápet	40	3.8
19	Anantapur	218	0.3	19	Coimbatore	110	2.4
20	Ganjam	606	0.3	20	Erode	16	1.3
21	Tanjore	711	0.3	21	Karúr	46	4.3
22	Trichinopoly	294	0.2	22	Kurnool	44	1.8
				23	Palamcottah	37	2.0
				24	Tinnevelly	106	4.3
				25	Tuticorin	115	4.6
				26	Cocanada	229	5.7
				27	Ellore	97	3.3
				28	Rajahmundry	147	5.2
				29	Bezvada	123	6.0
				30	Guntúr	88	3.8
				31	Masulipatam	77	2.0
				32	Dindigul	6	0.3
				33	Madura	255	2.9
				34	Palni	9	0.5
				35	Periyakulam	69	4.2
				36	Salem	83	1.2
				37	Tirupatúr	19	0.3
				38	Ványambádi	4	0.3
				39	Chidambaram	47	2.5
				40	Cuddalore	72	1.5
				41	Anakápallo	45	2.6
				42	Bimlipatam	104	10.7
				43	Vizagapatam	229	6.8
				44	Vizianagrum	20	0.6
				45	Anantapur	4	0.6
				46	Berhampore	62	2.4
				47	Chicacole	58	3.2
				48	Parlakimedi	83	5.1
				49	Kumbakonam	211	3.9
				50	Mannárgudi	75	3.7
				51	Máyavaram	99	4.2
				52	Negapatam	235	4.0
				53	Tanjore	451	8.3
				54	Srirangam	29	1.3
				55	Trichinopoly	313	3.6
	Total ..	26,779	0.8		Total ..	5,514	3.4

The district presidency rate was 0.8 per 1,000 of population and was 2.6 less than the municipal presidency rate (3.4). In 51 municipal towns the death-rates were higher than in the districts and in 4 they were lower.

The highest death-rate in municipal towns from "dysentery and diarrhoea" is reported to have occurred at Bimlipatam, where it attained the ratio of 10.7 and next to it comes Tanjore with a death-rate of 8.3. The lowest death-rate (0.3) was registered at Dindigul and Ványambádi.

INJURIES.

64. The deaths registered in 1892 from injuries amounted to 11,312, or 770 more than the number (10,542) recorded in 1891. The death-rate per 1,000 of population was 0.3 in 1892.

The following table shows the deaths from injuries for the past twenty years:—

Years.	Suicides.	Wounds and accidents.	Snake-bite and killed by wild beasts.	Total.	Years.
1873 ..	2,077	9,185	2,889	14,251	1873
1874 ..	1,876	8,590	2,899	13,065	1874
1875 ..	1,811	8,057	2,553	12,421	1875
1876 ..	1,715	7,083	2,377	11,175	1876
1877 ..	2,575	11,797	2,088	16,460	1877
1878 ..	2,464	10,554	1,989	15,007	1878
1879 ..	1,926	8,324	2,369	12,619	1879
1880 ..	1,487	6,985	2,373	10,845	1880
1881 ..	1,603	7,532	2,392	11,527	1881
1882 ..	1,644	7,665	2,302	11,611	1882
1883 ..	1,477	7,714	2,318	11,509	1883
1884 ..	1,514	7,498	2,290	11,502	1884
1885 ..	1,573	7,716	2,370	11,659	1885
1886 ..	1,628	9,057	2,418	13,103	1886
1887 ..	1,784	7,339	2,205	11,328	1887
1888 ..	2,483	6,587	2,331	11,401	1888
1889 ..	2,392	6,768	2,346	11,506	1889
1890 ..	1,991	6,369	2,042	10,402	1890
1891 ..	1,916	6,322	2,304	10,542	1891
1892 ..	2,120	7,094	2,098	11,312	1892

There was an increase in the number of deaths registered from suicides and wounds and accidents in 1892 when compared with 1891 and a decrease in the number of deaths from "snake-bite" and "killed by wild beasts." Excluding towns, the death-rates in the various districts only varied from 0.2 per 1,000 of population in the Ganjam district to 0.5 in the Chingleput, Cuddapah and South Canara districts. As is generally the case, there were more suicides among females than males. The largest number of suicides occurred in Tinnevelly and in the Nilgiris, no deaths from this cause were recorded. There were 7,094 deaths recorded as due to wounds and accidents, and as frequently happens the largest number of deaths occurred in the North Arcot district. Snakes and wild beasts caused 2,098 deaths, the largest number (231) occurring in the Tanjore district.

ALL OTHER CAUSES.

65. The registered mortality from "all other causes" in 1892 amounted to 303,733 against 315,664 in 1891, giving a death-rate of 9.0 per mille for the year under report against 9.4 for the preceding year. The death-rates under this head during the last ten years are shown in the subjoined table:—

Years.	Ratio per mille of population.	Years.	Ratio per mille of population.
1883 ..	8.0	1889 ..	10.1
1884 ..	9.1	1890 ..	10.1
1885 ..	9.2	1891 ..	* 9.4
1886 ..	9.3	1892 ..	† 11.1
1887 ..	9.8		9.0
1888 ..	9.8		

66. The following statement showing the ratios of deaths from cholera, small-pox, fevers, dysentery and diarrhoea per mille of population in 1892 in each circle of registration is given as required by Government of India—vide G.O., Mis. No. 2366, dated 12th November 1886, Public:—

* Calculated on the Census population of 1891.

† Calculated on the Census population of 1891.

Table showing the Death-rates of Districts and Municipalities arranged in order of sequence.

Districts exclusive of Municipal towns.				Municipalities.			
Death-rate.				Death-rate.			
No.	Districts.	Ratio per mille, 1892.		No.	Municipalities.	Ratio per mille, 1892.	
1	Madras	46.5					
2	Kurnool	34.5		1	Kurnool	55.2	
3	Kistna	27.3		2	Masulipatam	26.8	
4	Gó dávari	26.8		3	Guntúr	27.4	
5	Bellary	26.7		4	Bezwada	40.9	
6	Tanjore	25.4		5	Cocanada	35.9	
7	Nílگیرis	25.1		6	Rajahmundry	32.8	
8	Cuddapah	24.0		7	Ellore	31.2	
9	Chingleput	22.9		8	Bellary	35.2	
10	Malabar	22.5		9	Adóni	34.6	
11	South Canara	21.9		10	Tanjore	29.3	
12	Tinnevelly	21.8		11	Kumbakónam	29.1	
13	Vizagapatam	21.2		12	Máyavaram	31.2	
14	Anantapur	20.2		13	Negapatam	27.1	
15	Nellore	19.9		14	Mannárgudi	24.2	
16	Trichinopoly	19.4		15	Ootacamund	23.1	
17	South Arcot	18.7		16	Oonoor	37.4	
18	Madura	18.6		17	Cuddapah	38.6	
19	Salem	18.4		18	Conjeeveram	32.5	
20	North Arcot	18.1		19	Tellicherry	34.0	
21	Coimbatore	18.0		20	Calicut	38.0	
22	Ganjam	18.9		21	Palghat	32.6	
				22	Cochin	50.3	
				23	Cannanore	27.8	
				24	Mangalore	30.8	
				25	Tinnevelly	32.3	
				26	Palamcottah	28.2	
				27	Tuticorin	28.3	
				28	Vizagapatam	33.3	
				29	Bimlipatam	40.7	
				30	Vizianagram	22.2	
				31	Ankápalle	34.2	
				32	Anantapur	36.3	
				33	Nellore	19.7	
				34	Ongole	24.3	
				35	Trichinopoly	25.7	
				36	Srirangam	29.8	
				37	Cuddalore	18.8	
				38	Chidambaram	24.5	
				39	Madura	29.3	
				40	Dindigul	20.5	
				41	Periyakulam	38.2	
				42	Palni	21.4	
				43	Salem	18.2	
				44	Vániyambádi	30.2	
				45	Tiruppattúr	19.2	
				46	Vellore	25.4	
				47	Walajapet	27.0	
				48	Gudiyattám	30.1	
				49	Tirupati	29.6	
				50	Coimbatore	27.3	
				51	Erode	21.7	
				52	Karúr	23.1	
				53	Chicacole	23.8	
				54	Berhampore	26.2	
				55	Parlákimedi	22.9	
	Total ..	21.9			Total ..	29.4	

Districts.	No.	Circles of Registration.	Population for which returns were received.	Ratio per mille of population.			
				Cholera.	Small-pox.	Fevers.	Dysentery and Diarrhoea.
Anantapur.	1	Anantapur ... M.T.C.	6,973	11.5	...	3.2	0.6
	2	Tadpatri ... T.C.	10,275	2.0	...	...	0.2
	3	Anantapur ... R.C.	97,296	1.8	0.1	2.9	0.1
	4	Gooty ... R.C.	142,577	2.2	0.1	3.6	0.3
	5	Tadpatri ... R.C.	102,373	0.05	0.05	0.6	0.3
	6	Pennkonda ... R.C.	80,269	1.9	0.2	8.4	0.3
	7	Dharmavaram ... R.C.	118,714	0.4	0.3	7.5	0.4
	8	Hindupur ... R.C.	81,674	...	0.4	3.7	0.4
	9	Madakasira ... R.C.	67,992	0.06	0.3	2.7	0.4
	9	Total ...	708,143	1.2	0.2	4.1	0.3
Bellary.	10	Bellary ... M.T.C.	57,780	6.2	0.3	8.4	1.6
	11	Adoni ... M.T.C.	26,216	4.5	...	13.2	1.0
	12	Hospet ... T.C.	12,869	4.5	...	19.3	0.3
	13	Kampli ... T.C.	10,528	5.9	0.1	16.7	0.1
	14	Rayadurg ... T.C.	10,378	11.1	...	11.6	...
	15	Bellary ... R.C.	120,800	3.0	0.2	9.7	0.8
	16	Hospet ... R.C.	69,103	1.5	0.2	26.3	0.6
	17	Kudligi ... R.C.	94,295	1.8	0.8	9.3	0.9
	18	Hadagalli ... R.C.	104,035	2.6	1.7	6.3	3.7
	19	Harpanahalli ... R.C.	82,240	3.8	0.3	10.7	2.0
	20	Alur ... R.C.	88,076	1.8	0.02	6.5	0.8
	21	Adoni ... R.C.	134,551	2.2	0.04	5.3	0.7
	22	Rayadurg ... R.C.	87,419	2.3	0.1	12.8	0.2
	23	Zemindary ...	11,371	1.9	...	29.3	0.3
	14	Total ...	909,661	2.7	0.4	10.5	1.2
Chingleput.	24	Conjeeveram ... M.T.C.	42,543	0.9	0.5	7.8	4.0
	25	St. Thomas' Mount ... T.C.	12,140	0.6	...	2.5	2.4
	26	Saidapet ... R.C.	209,477	2.0	0.3	7.0	3.3
	27	Chingleput ... R.C.	137,176	1.3	0.1	5.2	4.3
	28	Madurantakam ... R.C.	263,130	1.4	0.3	6.2	2.7
	29	Conjeeveram ... R.C.	176,121	3.3	0.6	7.6	4.4
	30	Tiruvallur ... R.C.	170,916	1.3	0.2	7.3	2.1
	31	Ponnéri ... R.C.	122,398	1.1	0.4	7.3	2.6
	8	Total ...	1,133,901	1.7	0.3	6.3	3.2
Coimbatore.	32	Coimbatore ... M.T.C.	46,007	0.7	4.5	5.0	2.4
	33	Erode ... M.T.C.	12,238	2.4	...	6.3	1.3
	34	Karur ... M.T.C.	10,740	1.9	0.1	7.5	4.3
	35	Coimbatore ... R.C.	260,421	2.0	1.5	10.1	0.4
	36	Erode ... R.C.	234,677	0.8	0.9	5.1	0.7
	37	Satyamangalam ... R.C.	184,088	1.0	0.4	10.3	0.3
	38	Pollachi ... R.C.	183,650	0.04	0.4	7.2	0.7
	39	Palladam ... R.C.	270,384	0.5	2.1	9.4	6.3
	40	Bhavani ... R.C.	119,867	2.6	2.0	10.4	1.1
	41	Kollegal ... R.C.	88,524	0.4	2.5	7.2	0.4
	42	Udumalpet ... R.C.	143,056	0.5	0.3	7.2	0.2
	43	Karur ... R.C.	201,043	1.7	1.4	4.8	0.4
	44	Dhárápura ... R.C.	249,216	0.7	0.9	3.2	0.4
	13	Total ...	2,003,911	1.0	1.3	7.3	0.5
Cuddapah.	45	Cuddapah ... M.T.C.	17,211	4.1	0.1	16.9	1.3
	46	Badvel ... R.C.	93,150	14.0	0.03	19.3	0.5
	47	Proddatur ... R.C.	98,417	2.6	0.01	14.8	0.4
	48	Sidhout ... R.C.	66,809	3.5	0.1	15.5	0.4
	49	Pullampet ... R.C.	149,093	2.7	0.4	17.9	0.4
	50	Cuddapah ... R.C.	137,455	3.1	0.1	14.5	0.4
	51	Jammalamadugu ... R.C.	101,273	1.3	0.3	13.9	0.3
	52	Pativenda ... R.C.	105,842	0.07	0.02	14.6	0.8
	53	Ráyahóti ... R.C.	113,234	1.7	0.1	19.5	0.7
	54	Kadiri ... R.C.	134,892	0.3	0.1	14.9	0.9
	55	Vayalpad ... R.C.	127,935	2.0	1.5	24.4	0.9
	56	Madanapalle ... R.C.	127,310	0.06	0.5	14.7	0.9
	12	Total ...	1,271,721	2.6	0.3	16.8	0.6

Districts.	No.	Circles of Registration.	Population for which returns were received.	Ratio per mille of population.			
				Cholera.	Small-pox.	Fevers.	Dysentery and Diarrhoea.
Ganjam.	57	Chicacole ... M.T.C.	18,204	0.05	...	7.5	3.2
	58	Berhampur ... M.T.C.	25,493	3.0	...	6.0	2.4
	59	Parlakimedi ... M.T.C.	16,379	1.1	0.2	9.5	5.1
	60	Chicacole ... R.C.	194,330	0.02	0.2	16.3	0.4
	61	Berhampur ... R.C.	297,736	0.7	0.4	13.5	0.7
	62	Goomsur ... R.C.	185,831	0.2	0.3	13.7	0.3
	63	Zemindaries ...	851,109	0.1	0.3	11.1	0.3
	64	Agency Tracts ...	307,318	...	0.01	17.2	0.01
	8	Total ...	1,896,400	0.2	0.3	10.6	0.4
Gólavari.	65	Cocanada ... M.T.C.	40,068	7.6	0.9	5.5	5.7
	66	Rajahmundry ... M.T.C.	28,279	5.9	0.7	7.9	5.2
	67	Ellore ... M.T.C.	29,296	4.8	1.7	8.2	3.3
	68	Pithápuram ... T.C.	13,731	1.4	1.3	1.7	0.7
	69	Peddápuram ... T.C.	13,652	1.6	0.3	1.0	0.2
	70	Samurakotah ... T.C.	13,409	2.5	1.9	14.7	0.3
	71	Dowlaisweram ... T.C.	10,454	9.6	1.4	0.2	0.3
	72	Rámachandrapuram ... R.C.	261,183	9.4	3.3	9.5	0.4
	73	Narsapur ... R.C.	230,315	6.8	2.0	2.6	0.1
	74	Amalápuram ... R.C.	256,072	9.0	2.7	5.6	0.2
	75	Tanuku ... R.C.	204,040	8.6	5.8	7.9	0.3
	76	Bhimavaram ... R.C.	121,990	11.1	2.4	4.3	0.8
	77	Ellore ... R.C.	142,585	2.5	3.9	11.5	0.3
	78	Yernagudem ... R.C.	136,204	5.0	2.4	12.1	0.4
	79	Rajahmundry ... R.C.	106,866	5.0	1.8	12.5	0.4
	82	Peddápuram ... R.C.	124,028	4.9	1.9	16.8	0.7
	81	Bhadrachalam ... R.C.	42,317	0.9	8.6	6.6	0.9
	82	Zemindaries * ...	303,369	3.9	2.8	12.2	0.4
	18	Total ...	2,077,853	6.5	3.0	8.9	0.6
Kistna.	83	Mesulipatam ... M.T.C.	38,667	0.08	0.05	6.3	2.0
	84	Guntur ... M.T.C.	23,267	3.5	0.1	12.0	3.8
	85	Bezawada ... M.T.C.	20,611	8.8	0.2	8.2	6.0
	86	Chirála ... T.C.	10,581	...	4.3	9.2	1.7
	87	Répalé ... R.C.	222,756	0.6	3.6	3.1	0.2
	88	Bápatla ... R.C.	171,345	0.8	4.7	8.8	0.7
	89	Guntur ... R.C.	143,367	0.9	2.0	9.3	0.6
	90	Palnad ... R.C.	142,005	8.7	7.0	18.2	0.3
	91	Narasaraopet ... R.C.	156,354	2.1	5.4	13.3	0.6
	92	Gudiráda ... R.C.	118,308	3.6	3.5	3.0	0.4
	93	Sattenapalle ... R.C.	138,611	1.9	3.3	14.0	0.4
	94	Masulipatam ... R.C.	159,547	1.8	2.8	2.7	0.2
	95	Nandigáma ... R.C.	126,698	2.6	4.3	11.2	0.5
	96	Bezawada ... R.C.	85,731	1.1	1.2	14.5	0.5
	97	Vinnukonda ... R.C.	82,451	7.8	2.5	14.7	0.3
	98	Zemindaries ...	214,735	1.4	2.2	8.9	0.3
	16	Total ...	1,855,024	2.4	3.5	9.4	0.6
Kurnool.	99	Kurnool ... M.T.C.	24,306	5.5	...	31.4	1.8
	100	Nandyal ... T.C.	10,704	36.1	...	15.7	0.4
	101	Ramallakot ... R.C.	100,590	2.9	0.1	22.8	0.3
	102	Pattikonda ... R.C.	138,703	1.4	0.1	18.0	0.3
	103	Nandikotkur ... R.C.	88,559	0.7	0.2	32.9	0.3
	104	Nandyal ... R.C.	85,542	4.6	0.1	21.8	1.0
	105	Koilkuntla ... R.C.	86,543	2.6	0.1	20.1	0.6
	106	Sirvel ... R.C.	65,164	2.1	0.3	22.4	0.8
	107	Cumbum ... R.C.	117,578	16.3	2.0	21.2	0.5
	108	Markapur ... R.C.	99,971	11.4	1.0	24.9	0.4
	10	Total ...	817,660	6.0	0.5	22.8	0.5
Madras.	109	Madras ... M.T.C.	436,375	1.3	0.06	15.6	8.9
	110	Madura ... M.T.C.	87,121	0.2	2.9	4.7	2.9
	111	Dindigul ... M.T.C.	20,115	0.9	0.1	1.5	0.3
	112	Periyakulam ... M.T.C.	16,363	14.7	0.7	5.2	4.2
	113	Palni ... M.T.C.	16,940	...	0.5	2.2	0.5
	114	Ramnád ... T.C.	13,589	0.6	...	0.4	...
	115	Aruppukóttai ... T.C.	12,673	12.4	0.1	4.1	2.2
	116	Kilakarai ... T.C.	12,396	0.8	...	7.7	1.7
	117	Paramakudi ... T.C.	10,001	...	...	4.7	...

* Includes Agency tracts.

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PART II.

SANITARY ENGINEERING, WITH APPENDICES.

Districts.	No.	Circles of Registration.	Population for which returns were received.	Ratio per mille of population.			
				Cholera.	Small-pox.	Fevers.	Dysentery and Diarrhoea.
Madura—cont.	118	Madura R.C.	173,755	2.0	1.5	6.3	0.3
	119	Melūr R.C.	148,650	1.6	1.7	1.3	0.1
	120	Tirumangalam R.C.	264,620	0.4	2.3	6.4	0.6
	121	Periyakulam R.C.	246,845	1.7	2.7	8.5	0.5
	122	Dindigul R.C.	370,857	2.2	0.6	5.6	0.5
	123	Palni R.C.	178,110	2.4	0.7	3.1	0.3
	124	Sattenandal villages, &c.	1,283	...	...	7.0	...
	15	Total ...	1,573,318	1.8	1.6	5.4	0.6
Malabar.	125	Tellicherry M.T.C.	26,631	7.5	6.9	3.2	2.4
	126	Calicut M.T.C.	64,798	6.7	5.6	3.8	5.5
	127	Palghat M.T.C.	39,367	0.5	8.7	6.3	2.3
	128	Cochin M.T.C.	16,147	1.5	19.9	2.4	5.3
	129	Cannanore M.T.C.	26,653	3.2	0.7	8.4	2.8
	130	Chirakkal R.C.	283,471	9.9	2.5	8.1	1.3
	131	Kottayam R.C.	168,260	3.2	4.0	9.4	1.0
	132	Kurumbanād R.C.	304,011	4.2	1.0	9.2	1.8
	133	Calicut R.C.	171,582	4.4	4.1	8.4	2.5
	134	Ernad R.C.	339,187	3.2	4.7	8.9	3.3
	135	Ponnani R.C.	449,253	1.1	7.5	3.8	3.6
	136	Walanad R.C.	332,334	1.3	2.7	7.4	2.4
	137	Palghat R.C.	332,627	0.06	4.9	8.2	0.8
	138	Wynaad R.C.	76,965	0.3	10.2	15.8	0.5
	139	Cochin R.C.	5,988	0.2	1.3	2.5	3.3
	15	Total ...	2,636,674	3.1	4.4	7.6	2.3
Nellore.	140	Nellore M.T.C.	29,128	2.3	0.3	5.2	0.4
	141	Ongole M.T.C.	10,832	0.09	1.5	6.9	3.0
	142	Gudur R.C.	135,985	0.3	0.3	5.6	0.5
	143	Rapur R.C.	61,305	1.3	0.8	13.3	0.5
	144	Nellore R.C.	168,548	0.4	0.4	5.8	0.6
	145	Atmakūru R.C.	101,148	2.1	0.5	11.8	0.6
	146	Kāvali R.C.	83,102	0.8	0.5	5.8	0.6
	147	Udayagiri R.C.	100,219	2.2	0.6	9.2	0.5
	148	Kandukur R.C.	148,463	0.8	1.3	4.5	0.5
	149	Kanigiri R.C.	131,221	1.2	0.6	9.0	0.4
	150	Ongole R.C.	214,361	0.5	1.9	6.9	0.9
	151	Zemindaries	279,045	2.4	1.2	6.9	0.9
	12	Total ...	1,463,357	1.2	0.9	8.8	0.6
Nilgiris.	152	Ootacamund M.T.C.	13,991	...	0.3	17.7	5.0
	153	Coonoor M.T.C.	5,586	0.2	0.5	23.0	0.8
	154	Nilgiris R.C.	52,168	...	0.7	13.3	1.8
	155	South-East Wynaad R.C.	25,020	0.8	1.2	13.3	1.8
	4	Total ...	96,765	0.2	0.8	17.7	1.7
North Arcot.	156	Vellore M.T.C.	44,724	1.1	2.1	6.2	4.7
	157	Wāljāpet M.T.C.	10,485	0.09	...	12.4	3.8
	158	Gudiyāttam M.T.C.	18,745	5.8	0.6	8.4	5.0
	159	Tirupati M.T.C.	14,288	1.1	1.1	12.4	3.0
	160	Kālahasti T.C.	11,715	2.1	0.1	5.9	...
	161	Arcot T.C.	10,928	1.8	...	4.5	0.3
	162	Ambūr R.C.	10,583	0.09	...	4.5	0.4
	163	Chittoor R.C.	200,186	1.9	1.5	8.8	0.2
	164	Chendragiri R.C.	100,030	1.2	1.1	7.6	0.1
	165	Palmaner R.C.	48,131	1.5	0.4	9.0	0.4
	166	Gudiyāttam R.C.	157,863	2.1	0.6	8.0	0.5
	167	Vellore R.C.	137,367	1.8	0.8	8.0	0.7
	168	Pōlūr R.C.	131,368	0.8	0.5	6.5	0.8
	169	Wandiwaah R.C.	177,719	0.6	0.9	2.4	0.9
	170	Arcot R.C.	165,948	0.9	1.3	4.3	1.0
	171	Wāljāpet R.C.	228,630	1.9	1.2	4.4	0.5
	172	Zemindaries	710,925	1.6	0.9	9.1	0.5
	17	Total ...	2,179,585	1.5	0.9	7.3	0.7
Salem.	173	Salem M.T.C.	67,640	2.3	0.5	4.9	1.2
	174	Vāniyambādi M.T.C.	15,838	8.4	...	11.7	0.3
	175	Tiruppattūr M.T.C.	16,463	0.5	0.2	9.4	1.2
	176	Sendamangalam T.C.	13,354	1.5	0.5	0.5	...
	177	Rasipuram T.C.	10,539	0.2	...	0.1	...
	178	Salem R.C.	338,759	1.3	1.2	6.4	0.2

Districts.	No.	Circles of Registration.	Population for which returns were received.	Ratio per mille of population.			
				Cholera.	Small-pox.	Fevers.	Dysentery and Diarrhoea.
Salem—cont.	179	Atur R.C.	133,202	1.5	0.7	8.5	0.3
	180	Nāmakkal R.C.	286,686	2.1	0.5	5.9	0.3
	181	Tiruchengōdu R.C.	248,667	3.9	1.0	7.9	0.4
	182	Hosūr R.C.	155,693	0.6	0.4	8.5	0.5
	183	Krishnagiri R.C.	152,116	3.2	0.3	5.9	0.7
	184	Dharmapuri R.C.	178,420	0.7	1.3	5.8	0.3
	185	Tiruppattūr R.C.	156,295	2.6	0.6	9.7	0.7
	186	Ūttangarai R.C.	138,112	0.9	1.1	12.5	0.7
	14	Total ...	1,961,754	2.0	0.8	7.4	0.4
South Arcot.	187	Cuddalore M.T.C.	47,025	1.9	0.7	4.1	1.5
	188	Chidambaram M.T.C.	18,634	1.7	0.2	7.2	2.5
	189	Porto Novo T.C.	14,045	3.1	0.1	2.8	0.1
	190	Tiruvannāmalai T.C.	12,148	1.1	0.1	3.2	0.1
	191	Cuddalore R.C.	299,908	1.4	1.2	4.9	0.2
	192	Villupuram R.C.	301,690	1.2	1.2	4.2	0.5
	193	Chidambaram R.C.	249,569	2.8	0.9	5.4	0.3
	194	Tindivanam R.C.	315,994	1.3	0.7	3.8	1.1
	195	Kallakurchi R.C.	240,179	2.4	0.03	9.3	0.1
	196	Tirukkōyilūr R.C.	257,115	2.1	1.0	5.6	0.2
	197	Tiruvannāmalai R.C.	193,238	0.9	0.4	7.9	0.5
	198	Vriddhachalam R.C.	222,791	2.2	0.3	7.6	0.2
	12	Total ...	2,162,336	1.8	0.7	5.8	0.5
S. Canara.	199	Mangalore M.T.C.	40,620	1.3	0.05	8.6	4.9
	200	Mangalore R.C.	237,974	0.3	0.4	7.6	0.9
	201	Kāsaragod R.C.	280,655	3.0	0.6	5.7	1.3
	202	Uppitangadi R.C.	118,804	0.5	0.8	10.7	1.0
	203	Udipi R.C.	253,699	0.9	0.4	6.9	1.8
	204	Coondapoor R.C.	120,250	...	0.1	16.5	2.1
	6	Total ...	1,052,002	1.2	0.5	8.3	1.5
Tanjore.	205	Tanjore M.T.C.	54,258	3.7	0.3	5.6	8.3
	206	Kumbakōnam M.T.C.	54,254	2.7	0.4	5.8	3.9
	207	Māyavaram M.T.C.	23,754	3.0	0.1	5.4	4.2
	208	Negapatam M.T.C.	58,573	1.7	0.2	6.1	4.0
	209	Mannārgudi M.T.C.	20,392	6.0	0.2	3.7	3.7
	210	Tiruvātūr T.C.	12,934	1.0	...	1.6	0.5
	211	Tanjore R.C.	356,021	4.5	0.3	2.2	0.3
	212	Kumbakōnam R.C.	323,350	8.1	0.3	2.0	0.3
	213	Māyavaram R.C.	220,977	2.3	0.4	3.2	0.7
	214	Shivāli R.C.	119,802	3.2	...	1.6	0.3
	215	Nannilam R.C.	215,905	4.0	0.7	1.0	0.3
	216	Negapatam R.C.	18,177	4.1	0.2	1.6	0.5
Tinnevely.	217	Mannārgudi R.C.	167,033	4.2	0.1	1.5	0.2
	218	Tirutturaippūndi R.C.	180,293	4.6	0.01	1.3	0.3
	219	Pattukkōttai R.C.	271,359	0.7	0.3	1.6	0.1
	15	Total ...	2,227,081	4.1	0.3	2.2	0.8
Tinnevely.	220	Tinnevely M.T.C.	24,756	2.8	0.4	5.3	4.3
	221	Palamcottah M.T.C.	18,612	7.5	0.4	2.5	2.0
	222	Tuticorin M.T.C.	24,964	1.8	2.4	9.1	4.6
	223	Srivilliputtūr T.C.	21,448	0.2	1.2	1.6	...
	224	Kolasōkarapatnam T.C.	15,910	8.0	2.0	5.8	0.1
	225	Virudupatti T.C.	14,075	0.5	0.1	2.8	1.2
	226	Viravanallur T.C.	13,951	6.2	0.2	2.1	...
	227	Rajahpōlyam T.C.	13,301	0.07	...	0.2	...
	228	Tenkāsi T.C.	12,861	4.6	6.3	3.5	2.0
	229	Sivakāsi T.C.	12,184	2.4	...	4.8	0.2
	230	Kāyalpatnam T.C.	11,464	...	1.7	9.3	...
	231	Kalladākurchi T.C.	11,096	13.0	1.0	0.5	...
	232	Ottappidāram R.C.	316,990	0.5	1.3	5.2	1.1
	233	Tenkārai R.C.	260,186	3.6	0.9	2.6	0.4
	234	Tinnevely R.C.	141,252	4.5	0.6	1.2	0.7
	235	Srivilliputtūr R.C.	155,761	0.9	1.1	1.3	0.4
	236	Sankaranēyinarkōyil R.C.	213,798	0.5	1.7	1.0	0.1
	237	Nāngunēri R.C.	174,410	1.3	0.5	2.8	0.3
	238	Ambāsamudram R.C.	158,552	5.4	1.3	3.4	0.6
	239	Sāttūr R.C.	158,046	0.7	1.0	5.0	0.5
	240	Tenkāsi R.C.	142,075	4.1	1.0	2.3	0.6
	21	Total ...	1,915,702	2.3	1.1	3.1	0.7



6

TWENTY-NINTH ANNUAL REPORT
OF THE
SANITARY COMMISSIONER FOR MADRAS,
1892.

SECTION I.

METEOROLOGY OF THE YEAR.

Information given under SECTION V, GENERAL POPULATION.

SECTION II.

(a) EUROPEAN ARMY.

SECTION III.

(a) NATIVE ARMY.

SECTION IV.

(a) JAILS.

SECTION VII.

(b) VACCINATION.

SECTION VIII.

(a) SANITARY WORKS—MILITARY.

(a) Omitted by Order of Government, dated 20th April 1888, No. 419, Public.

(b) Omitted by Orders of Government, dated 12th July 1886, No. 1455, and 3rd May 1888, No. 465, Public, and reported upon separately.

District.	No.	Circles of Registration.	Population for which returns were received.	Ratio per mille of population.			
				Cholera.	Small-pox.	Fevers.	Dysentery and Diarrhoea.
Trichinopoly.	241	Trichinopoly M.T.C.	89,666	3.3	1.5	6.9	3.6
	242	Srirangam M.T.C.	21,632	4.0	0.3	4.9	1.3
	243	Trichinopoly R.C.	243,561	1.8	0.3	2.8	0.3
	244	Musiri R.C.	282,615	1.3	0.1	2.9	0.2
	245	Kulittalai R.C.	243,685	0.7	0.2	1.3	0.2
	246	Perambalur R.C.	195,004	0.9	0.1	4.2	0.1
	247	Udaiyarpalayam R.C.	201,530	2.4	0.2	4.5	0.3
	248	Zemindaries	89,033	3.6	0.6	13.7	0.4
	8	Total ...	1,371,726	1.7	0.3	4.0	0.5
Vizagapatam.	249	Vizagapatam M.T.C.	33,961	2.9	0.03	10.4	6.8
	250	Bimlipatam M.T.C.	9,696	1.2	0.5	7.5	10.7
	251	Vizianagram M.T.C.	30,735	1.5	0.1	7.7	0.6
	252	Anakapalle M.T.C.	17,001	3.9	3.4	11.5	2.6
	253	Bobbili T.C.	14,448	...	0.3	6.7	...
	254	Sálúru T.C.	12,910	...	...	17.1	5.6
	255	Palkonda T.C.	10,364	...	...	21.1	...
	256	Párvatipuram T.C.	10,053	...	...	21.7	0.2
	257	Sarvasiddhi R.C.	154,950	6.5	1.8	18.8	0.7
	258	Narasapatnam or Golconda R.C.	118,512	7.3	0.5	22.9	1.0
	259	Anakapalle R.C.	135,145	3.2	1.3	17.3	0.7
	260	Vizagapatam R.C.	62,806	3.3	0.8	15.0	0.9
	261	Vizavalli R.C.	197,865	1.3	1.5	18.9	0.3
	262	Bimlipatam R.C.	105,456	0.5	1.4	14.6	0.3
	263	Srungavarapukota R.C.	129,319	0.2	1.3	18.9	0.2
	264	Vizianagram R.C.	135,718	0.6	0.3	14.4	0.3
	265	Gajapatnagar R.C.	123,795	...	1.1	14.6	0.3
	266	Chipurapalle R.C.	156,826	0.4	0.5	14.3	0.2
	267	Sálúru R.C.	70,782	...	0.4	15.0	0.2
	268	Bobbili R.C.	114,312	...	0.2	15.7	0.2
	269	Palkonda R.C.	198,444	...	0.2	17.0	0.2
	270	Parvatipuram R.C.	99,097	...	0.1	17.8	1.2
	22	Total ...	1,942,195	1.7	0.3	16.5	0.6

SECTION IX.

SANITARY WORKS—CIVIL.

MUNICIPALITIES.

67. The number of municipalities administered under the District Municipalities Act IV of 1884 continued the same as in the previous year, viz., 55. The affairs of each municipal town were looked after by a council consisting of not less than 12 members and presided over by a chairman, in whom the executive administration is vested. In the City of Madras, however, Madras Act I of 1884, as amended by Acts VII of 1884 and II of 1892, was in operation.

68. *Sanitary works.*—The appended statement gives a short description of the works undertaken and carried out by the municipal councils, together with a brief account of each town in respect of its water-supply, drainage and conservancy. The sanitary works executed during the year under report may be brought under one or other of the following heads:—

- (a) Sinking, repairing and cleansing wells, &c.
- (b) Construction and repair of drains, public latrines, cinerators, dust-bins, markets, slaughter-houses, &c.
- (c) Improvement of village-sites, &c.

69. Detailed information regarding drainage and water-supply works will be found furnished in the report of the Sanitary Engineer printed as Part II of this volume. As has been pointed out in previous reports the drinking water supplies and drainage of towns remain, as a rule, in a very defective and insanitary condition and, as often remarked, until they are put in a satisfactory condition a marked decrease in the mortality of our towns cannot be hoped for. In the matter of conservancy there has been improvement in many cases and particulars of the establishments maintained and material employed for conservancy purposes in the various towns are given in the subjoined statement:—

Establishment.	1891.	1892.	Material.	1891.	1892.
Inspectors, Overseers, &c.	198	204	Carts	1,149	1,223
Maistries	108	116	Dust-bins	8,175	8,905
Peons	213	257	Public latrines	1,191	1,164
Sweepers, &c.	2,360	2,317	Private latrines	22,918	27,082
Toties for public and private latrines.	1,670	1,897			
Tank watchers	161	178			

Under all heads with the exception of "Sweepers, &c.," and "Public latrines," there was an increase in 1892 as compared with 1891. The staff employed in each town worked under the immediate supervision of the chairman assisted by the divisional councillors. In most towns the servants were more closely looked after in 1892, while in a few the control exercised was indifferent or lax. The cleanliness of towns depends not only on the numerical strength of the staff employed but chiefly on the degree of care and interest evinced by the authorities concerned in the cause.

SECTION V.

GENERAL POPULATION.

RAINFALL.

1. The amount of rain registered in 1892, viz., 58.43 inches, was greater than in any of the preceding twenty years, and was above the average of ten years by 12.60 inches. In twelve districts (Tanjore, Madras, South Arcot, Tinnevely, Nilgiris, Chingleput, Trichinopoly, Madura, Salem, Coimbatore, North Arcot and Nellore) the rainfall was below the average, the decrease being most marked in the district of Tanjore, where an aggregate fall in 1892 of 28.68 inches was measured against the corresponding average annual rainfall of 48.43 inches for ten years. In ten districts (South Canara, Malabar, Godavari, Kistna, Vizagapatam, Kurnool, Cuddapah, Anantapur, Bellary and Ganjam) the rainfall was above the average. As is always the case the heaviest falls occurred in South Canara and Malabar. It rained in 1892 on 65.1 days, the average of ten years being 62.3.

2. The subjoined table shows the rainfall, the prices of food-supply and the mortality from various causes during the year under notice compared with the figures for the preceding five years and the mean average of the quinquennial period:—

Years.	Deaths.							Rainfall.	Prices of food in seers of 80 tolahs for the rupee.		
	Cholera.	Small-pox.	Fever.	Dysentery and diarrhoea.	Injuries.	All other causes.	Total.		Rice.	Ragi.	Cholum.
1892 ...	79,033	43,757	280,627	* 32,293	11,312	303,733	750,755	58.43	10.3	17.3	16.1
1891 ...	98,773	41,322	247,029	* 34,223	10,542	315,664	747,553	38.26	11.8	22.4	21.1
1890 ...	35,288	28,092	262,855	26,608	10,402	287,149	650,394	39.49	12.7	26.2	21.6
1889 ...	76,020	29,138	230,172	29,122	11,506	285,220	661,178	48.38	13.6	27.8	24.6
1888 ...	58,677	21,858	204,561	27,721	11,401	272,797	597,015	43.92	15.3	29.4	27.5
1887 ...	28,359	21,472	240,830	26,679	11,328	276,977	604,775	51.04	15.5	29.9	28.0
Average of quinquennial period (1887 to 1891).	59,423	28,376	237,095	28,871	11,036	287,381	652,182	44.22	13.8	27.1	24.6

* Dysentery and diarrhoea only.

This table shows that more deaths were registered in 1892 than in any of the preceding five years, the increase being chiefly due to the high mortality from cholera, small-pox, fevers, dysentery and diarrhoea, and all other causes; that the rainfall was greater and that the prices of food were higher than in any of the preceding five years.

RAINFALL.

Table contrasting the Monthly Rainfall in the Madras Presidency during 1890, 1891 and 1892, with the average of previous ten years ending 1889.

Districts.	Number of places of observation.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Total.	
		Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.
Anantapur.	{ Average of 10 years 1880 ... 1891 ... 1892 ... }	0.06	0.2	...	...	...	...	0.36	0.9	1.75	3.3	1.82	4.1	1.93	4.9	3.98	6.7	4.40	6.5	4.63	7.1	2.62	4.5	0.33	1.1	22.00	39.5
Bellary	{ Average of 10 years 1880 ... 1891 ... 1892 ... }	0.08	0.1	...	...	...	...	0.72	1.6	1.95	4.0	3.50	6.0	2.27	7.7	3.53	6.9	4.79	8.1	4.91	7.5	1.80	3.8	0.14	0.5	23.80	46.6
Canara, South.	{ Average of 10 years 1880 ... 1891 ... 1892 ... }	0.14	0.4	...	...	...	...	0.90	2.4	4.52	8.0	39.73	27.4	40.08	29.6	24.34	26.4	10.55	19.0	9.30	13.6	3.49	6.2	0.52	1.3	132.59	134.4
Chingleput.	{ Average of 10 years 1880 ... 1891 ... 1892 ... }	0.50	0.9	...	...	...	...	0.15	0.3	1.50	1.7	2.71	4.9	3.39	6.9	4.01	8.6	4.68	6.7	9.82	9.8	14.04	11.9	6.31	5.7	47.42	55.7
Coimbatore.	{ Average of 10 years 1880 ... 1891 ... 1892 ... }	0.20	0.6	...	...	...	...	1.65	2.7	3.31	7.1	2.22	4.3	1.32	4.4	2.48	5.5	3.26	5.1	4.56	10.1	4.72	8.3	1.71	5.8	26.44	53.9
Cuddapah.	{ Average of 10 years 1880 ... 1891 ... 1892 ... }	0.06	0.1	...	...	...	...	0.27	0.5	1.13	2.8	2.32	5.0	2.49	4.8	4.00	7.4	4.50	7.2	6.34	8.0	5.89	6.7	1.57	2.2	29.38	44.2
Ganjam.	{ Average of 10 years 1880 ... 1891 ... 1892 ... }	0.06	0.1	...	...	...	...	0.19	0.9	4.35	8.9	5.35	9.2	7.09	12.1	6.05	13.0	7.52	13.8	9.08	7.3	3.31	4.8	1.03	1.7	43.09	70.1
Godavari.	{ Average of 10 years 1880 ... 1891 ... 1892 ... }	0.08	0.1	...	...	...	...	0.22	0.4	1.33	3.2	4.80	6.1	5.62	8.4	5.35	7.5	6.78	7.2	6.16	6.7	4.49	4.0	0.63	0.7	35.75	44.8

70. The public latrine accommodation provided in the various towns is exhibited in the annexed table:—

Name of Municipality.	Population per census of 1891.	Number of public latrines.	Proportion of latrines to population.	Name of Municipality.	Population per census of 1891.	Number of public latrines.	Proportion of latrines to population.
Coonoor	5,586	10	1 to 558	Tinnevely	24,756	20	1 to 1,238
Anantapur	6,973	8	1 to 872	Tuticorin	24,964	15	1 to 1,664
Bimlipatam	9,696	3	1 to 3,232	Berhampore	25,493	22	1 to 1,153
Wárajápet	10,485	9	1 to 1,165	Adóni	26,216	14	1 to 1,873
Karúr	10,740	13	1 to 826	Tellicherry	26,631	29	1 to 918
Ongole	10,832	7	1 to 1,547	Canmanore	26,653	11	1 to 2,423
Erode	12,238	14	1 to 874	Rajahmundry	28,279	18	1 to 1,571
Ootacamund	13,991	44	1 to 318	Nellore	29,128	24	1 to 1,214
Tirupati	14,238	11	1 to 1,294	Ellore	29,296	21	1 to 1,395
Vániyambádi	15,838	12	1 to 1,320	Vizianagram	30,735	22	1 to 1,397
Cochin	16,147	10	1 to 1,614	Vizagapatam	33,961	73	1 to 465
Periyakulam	16,363	9	1 to 1,818	Masulipatam	38,667	13	1 to 2,974
Parákimedi	16,379	114	1 to 144	Palghat	39,367	13	1 to 3,028
Tirupatúr	16,463	4	1 to 4,115	Cocanada	40,068	19	1 to 2,109
Palni	16,940	5	1 to 3,388	Mangalore	40,620	12	1 to 3,385
Anakápalle	17,001	19	1 to 895	Conjeeveram	42,543	23	1 to 1,850
Cuddapah	17,211	42	1 to 410	Vellore	44,724	21	1 to 2,130
Chicacole	18,204	6	1 to 3,034	Coimbatore	46,007	29	1 to 1,586
Palamcottah	18,612	8	1 to 2,326	Cuddalore	47,025	21	1 to 2,239
Chidambaram	18,634	9	1 to 2,070	Kumbakónam	54,254	34	1 to 1,596
Gudiyátam	18,745	12	1 to 1,562	Tanjore	54,258	28	1 to 1,938
Dindigul	20,115	17	1 to 1,183	Bellary	57,780	26	1 to 2,222
Mannárgudi	20,392	8	1 to 2,549	Negapatam	58,573	17	1 to 3,445
Bezwada	20,611	15	1 to 1,374	Calicut	64,798	10	1 to 6,479
Srirangam	21,632	18	1 to 1,202	Salem	67,640	48	1 to 1,409
Guntúr	23,267	18	1 to 1,293	Madura	87,121	10	1 to 8,712
Máyavaram	23,754	8	1 to 2,969	Trichinopoly	89,666	80	1 to 1,120
Kurnool	24,306	38	1 to 640	Total	1,634,616	1,164	1 to 1,404

71. It will be seen from the above that in no less than 30 towns the number of latrines allowed is out of all proportion to the population. In some towns latrines are not freely made use of by the people, owing either to their inconvenient location or to their not being kept in a satisfactory condition. In putting up latrines due care should be taken to see that the sites selected for the purpose are conveniently situated—not far away from dwellings. As a rule there ought to be at least one latrine for every 1,000 of the people living, and until this proportion is reached and the penal sections of the Municipal Act are properly enforced, the streets and by-lanes of towns will continue to be the resort for purposes of nature.

72. The system of cleaning private privies by municipal agency was in force in 53 towns against 48 in the previous year, but in a great many of these the number of houses served formed only a small fraction of the total number of houses in them. According to the census of 1891 there were in all 288,622 occupied houses in the towns, and of these, only 27,082 houses have as yet been cleaned by municipal

agency. The subjoined table shows the extent to which the service was taken advantage of by the townsfolk:—

Name of Municipality.	Number of occupied houses as per census of 1891.	Number of houses served by the municipality.	Proportion per cent. of columns 3 to 2.	Name of Municipality.	Number of occupied houses as per census of 1891.	Number of houses served by the municipality.	Proportion per cent. of columns 3 to 2.
Coonoor	1,464	128	9	Tinnevely	5,912	129	2
Anantapur	1,372	117	8	Tuticorin	4,649	731	16
Bimlipatam	1,998	288	14	Berhampore	5,554	582	10
Wárajápet	2,167	270	12	Adóni	4,784	740	16
Karúr	1,741	73	4	Tellicherry	3,477	389	11
Ongole	2,062	246	12	Canmanore	4,243	300	7
Erode	1,950	120	6	Rajahmundry	4,831	874	18
Ootacamund	3,500	144	4	Nellore	6,377	580	9
Tirupati	2,918	170	6	Ellore	5,226	247	5
Vániyambádi	2,844	...	...	Vizianagram	6,566	1,031	16
Cochin	2,570	243	9	Vizagapatam	7,020	420	6
Periyakulam	3,142	63	2	Masulipatam	7,960	189	2
Parákimedi	3,366	70	2	Palghat	6,810	450	7
Tirupatúr	2,823	...	...	Cocanada	4,808	250	5
Palni	2,653	100	4	Mangalore	7,128	2,500	35
Anakápalle	3,626	59	2	Conjeeveram	6,430	2,116	33
Cuddapah	4,057	501	12	Vellore	6,707	398	6
Chicacole	3,693	250	7	Coimbatore	6,875	552	8
Palamcottah	3,694	70	2	Cuddalore	8,422	40	...
Chidambaram	3,648	86	2	Kumbakónam	7,946	550	7
Gudiyátam	3,275	121	4	Tanjore	9,742	648	7
Dindigul	3,183	11	4	Bellary	11,565	1,497	13
Mannárgudi	3,592	120	3	Negapatam	9,793	1,416	14
Bezwada	2,466	25	1	Calicut	9,839	827	8
Srirangam	15,785	1,70	10	Salem	10,865	500	5
Guntúr	4,243	178	4	Madura	13,439	514	4
Máyavaram	4,585	263	6	Trichinopoly	4,163	3,064	74
Kurnool	5,074	50	1	Total	288,622	27,082	9

23. It will thus be seen that in the majority of towns the system is very indifferently worked. It has been repeatedly urged by the Inspecting Officers that the cleansing of private latrines in India can be better and more efficiently done by a municipal than a private agency. In giving effect to this suggestion the authorities concerned should not be swayed by considerations other than what would secure the cleanliness of towns. In five towns, viz., Tirupati, Anakápalle, Mannárgudi, Ellore and Madura, the system was for the first time introduced during the year. In twenty-eight towns it had progressed, the increase in the number of latrines brought under municipal management being most marked in Conjeeveram (1,799), Trichinopoly (1,454), Negapatam (308), Palghat (230), Vizagapatam (210), Cocanada (156), Wárajápet (130), Calicut (117) and Salem (115). In seventeen towns there was a retrogression in this direction, the greatest decrease occurring in Kurnool, Tuticorin and Vizianagram, where the number of latrines fell by 1,150, 559 and 242 respectively.

Table contrasting the Monthly Rainfall in the Madras Presidency during 1890, 1891 and 1892, with the average of previous ten years ending 1889—continued.

Districts.	Number of places of observation.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Total.	
		Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.
Kistna	{ Average of 10 years 1890 ... 1891 ... 1892 ...	0.08	0.1	0.06	0.1	0.37	0.6	0.11	0.4	1.39	2.6	4.41	7.1	4.53	9.1	5.60	9.3	5.76	9.2	5.56	8.1	4.64	5.1	0.75	1.03	33.36	52.7
		...	...	...	...	0.58	0.8	0.07	0.2	0.22	0.5	6.24	10.0	5.67	9.5	4.47	9.2	4.17	7.4	3.73	4.7	6.42	5.5	0.27	0.8	31.84	48.6
		...	...	...	...	0.30	0.4	0.18	0.6	0.49	1.3	1.70	3.0	5.08	9.8	4.40	8.7	6.26	8.7	2.22	3.8	0.18	0.2	...	...	21.20	36.9
Kurnool	{ Average of 10 years 1890 ... 1891 ... 1892 ...	0.04	0.1	...	...	0.25	0.4	2.38	0.9	1.11	2.7	3.18	6.4	3.37	8.6	4.11	8.7	5.09	8.6	5.07	7.6	2.54	4.6	0.50	0.9	27.64	49.5
		...	...	...	...	0.12	0.1	0.79	2.0	0.78	2.6	4.31	8.3	2.51	8.3	6.70	10.5	7.87	12.7	3.05	4.7	2.09	5.2	0.32	1.4	23.14	56.1
		...	...	...	...	0.02	0.1	0.75	1.1	0.33	0.6	2.98	4.0	4.3	8.27	5.5	2.49	4.9	2.33	5.3	0.24	0.8	...	...	...	15.41	26.9
Madras	{ Average of 10 years 1890 ... 1891 ... 1892 ...	0.80	2.3	0.54	0.3	0.15	0.8	0.49	0.8	1.53	2.3	2.39	3.8	3.45	13.5	4.43	13.5	4.78	11.1	12.73	14.7	16.92	15.9	7.12	9.3	55.33	94.3
		...	...	...	...	...	...	0.17	1.0	...	...	6.07	12.0	7.33	15.0	2.21	12.0	2.59	12.0	4.17	12.0	4.61	12.0	0.49	5.0	27.99	83.0
		...	...	...	...	...	...	0.43	2.0	...	...	4.02	12.0	7.82	22.0	2.41	12.0	2.16	10.0	13.42	18.0	4.87	12.0	5.29	17.0	30.43	94.0
Madura	{ Average of 10 years 1890 ... 1891 ... 1892 ...	0.51	1.2	0.38	0.4	0.55	1.0	1.54	3.3	2.47	4.6	1.10	2.7	0.96	2.3	2.48	5.0	2.44	4.9	4.89	10.2	6.73	10.1	4.45	6.5	28.50	62.2
		...	...	...	...	0.64	1.3	0.68	1.4	0.85	1.8	3.6	3.6	1.40	2.9	2.48	5.0	2.27	4.4	9.52	8.2	3.73	6.8	0.65	1.5	28.82	45.1
		...	...	...	...	0.20	0.3	2.16	4.1	1.34	2.4	1.14	2.7	0.29	0.7	0.88	2.0	1.03	1.9	17.17	19.5	5.40	7.2	3.13	5.9	38.19	51.5
Malabar	{ Average of 10 years 1890 ... 1891 ... 1892 ...	0.04	...	0.68	1.0	0.09	...	2.75	5.0	1.03	2.0	2.39	3.0	1.30	3.0	3.76	6.0	1.02	2.0	6.80	7.0	0.84	1.0	0.79	2.0	20.47	32.0
		...	...	...	...	0.05	0.2	0.50	1.1	0.80	1.5	32.12	25.8	29.31	27.7	16.39	21.1	7.91	14.5	9.19	14.0	5.78	9.1	1.01	2.3	113.28	131.6
		...	...	...	...	0.05	0.3	0.68	1.0	0.83	1.5	26.92	26.9	27.53	26.9	10.85	14.0	8.11	13.7	5.40	11.2	2.86	5.0	0.94	1.7	91.90	122.8
Nellore	{ Average of 10 years 1890 ... 1891 ... 1892 ...	0.12	0.3	0.06	1.9	1.08	1.9	3.71	5.8	4.55	8.1	25.70	23.2	33.70	27.7	13.48	17.6	2.40	7.9	14.08	16.4	3.39	4.6	0.65	1.1	103.92	91.5
		...	...	...	...	0.87	2.0	7.47	14.0	16.47	16.0	14.87	20.0	58.40	29.0	21.41	26.0	5.69	15.0	15.24	15.0	2.41	4.0	0.14	...	148.06	141.0
		...	...	...	...	0.11	0.2	0.23	0.4	1.05	1.5	1.75	3.8	2.01	5.0	2.69	5.0	2.98	5.5	10.07	9.0	11.63	9.4	8.19	3.4	36.00	43.8
North Arcot.	{ Average of 10 years 1890 ... 1891 ... 1892 ...	0.25	0.5	0.05	0.1	0.17	0.3	0.37	0.7	2.48	3.7	2.59	4.9	2.61	5.1	5.53	8.1	5.19	6.7	7.74	8.7	9.48	9.0	4.20	4.2	40.55	52.0
		...	...	...	...	0.13	0.5	1.06	1.3	1.60	3.4	4.87	6.3	4.02	6.3	3.57	5.6	4.55	6.0	6.36	9.0	3.31	5.5	0.87	1.7	30.43	46.0
		...	...	...	...	0.24	0.4	0.37	0.7	0.43	1.1	2.85	5.1	0.92	2.9	2.63	3.3	4.17	5.9	8.07	9.2	2.79	4.6	4.37	6.3	27.96	42.7
N'giris	{ Average of 10 years 1890 ... 1891 ... 1892 ...	0.01	...	0.22	...	0.03	...	0.48	1.0	1.39	3.0	5.31	7.0	5.71	8.0	9.41	13.0	6.58	8.0	5.25	6.0	0.68	1.0	1.77	3.0	36.84	50.0
		...	...	...	...	0.01	...	0.23	0.4	1.05	1.5	1.75	3.8	2.01	5.0	2.69	5.0	2.98	5.5	10.07	9.0	11.63	9.4	8.19	3.4	36.00	43.8
		...	...	...	...	0.01	...	0.23	0.4	1.05	1.5	1.75	3.8	2.01	5.0	2.69	5.0	2.98	5.5	10.07	9.0	11.63	9.4	8.19	3.4	36.00	43.8
Total	{ Average of 10 years 1890 ... 1891 ... 1892 ...	0.68	1.8	0.22	0.6	1.72	3.2	3.24	6.6	6.03	11.9	9.49	16.3	11.50	19.4	8.87	18.0	6.89	14.1	10.63	17.5	8.38	14.2	3.75	6.7	71.40	130.3
		...	...	...	...	0.69	1.8	6.02	11.5	5.36	12.4	9.06	17.6	10.54	17.2	6.12	18.0	4.38	12.9	8.87	14.5	3.68	8.0	2.46	3.2	62.46	124.2
		...	...	...	...	1.50	1.3	5.83	11.0	4.86	11.0	6.03	12.0	13.69	16.0	9.57	17.0	4.24	5.5	11.66	20.4	3.47	6.2	2.46	5.1	65.50	97.5

Table contrasting the Monthly Rainfall in the Madras Presidency during 1890, 1891 and 1892, with the average of previous ten years ending 1889—continued.

Districts.	Number of places of observation.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Total.	
		Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.		
Salem	{ Average of 10 years 1890 ... 1891 ... 1892 ...	0.17	0.2	0.03	0.08	0.44	0.7	1.06	2.0	4.49	7.1	2.28	4.9	2.48	4.9	5.99	8.4	4.65	6.8	6.91	9.9	5.42	8.3	1.55	...	35.77	56.6
		0.20	0.7	...	...	0.72	1.5	1.32	3.2	3.62	6.8	2.59	5.8	2.48	6.2	5.19	7.3	3.77	7.4	5.55	8.8	4.12	6.1	0.65	...	30.91	54.7
		0.38	0.6	0.92	2.6	0.72	0.9	0.86	1.6	0.96	1.5	26.10	5.3	0.63	3.0	1.54	3.4	3.62	5.0	5.83	9.7	1.41	3.3	0.87	...	43.74	40.2
South Arcot.	{ Average of 10 years 1890 ... 1891 ... 1892 ...	0.47	0.7	0.04	0.1	0.22	0.4	0.36	0.7	2.87	3.5	1.79	4.1	2.74	5.04	6.20	8.9	5.02	6.8	9.12	10.1	10.84	10.8	6.39	6.3	46.66	57.4
		0.56	0.6	...	...	0.13	0.2	0.70	1.0	1.13	2.2	3.86	5.4	3.64	6.4	4.06	6.8	6.58	7.5	7.36	9.2	4.59	7.8	0.84	2.4	33.45	50.5
		1.40	1.7	2.21	3.5	0.23	0.2	0.13	0.4	1.60	2.4	1.54	3.1	0.44	1.4	1.84	5.1	3.79	4.7	12.72	13.3	4.41	6.7	10.37	10.4	40.68	52.9
Tanjore	{ Average of 10 years 1890 ... 1891 ... 1892 ...	0.14	...	0.26	...	0.01	...	0.42	1.0	1.23	2.0	3.30	5.0	5.14	6.0	8.11	12.0	4.60	6.0	2.72	4.0	0.88	2.0	2.53	3.0	29.34	41.0
		0.89	1.3	0.30	0.4	0.30	0.3	0.49	0.9	2.52	3.3	1.96	3.6	1.89	3.6	4.61	7.01	3.63	6.1	9.17	4.7	12.89	12.6	9.78	9.8	48.43	54.2
		1.28	1.9	0.25	0.5	0.07	0.2	0.93	1.6	0.47	0.8	3.05	5.1	2.19	4.7	5.01	7.6	6.35	7.9	11.73	12.4	7.62	12.7	0.94	2.0	39.89	57.4
Tinnevely	{ Average of 10 years 1890 ... 1891 ... 1892 ...	0.21	0.6	1.91	3.2	0.07	0.1	0.05	0.2	3.90	8.4	0.77	1.2	0.80	1.9	1.87	3.4	1.30	2.4	14.71	18.8	5.99	7.6	16.83	15.4	48.41	58.2
		0.16	1.0	0.32	1.0	...	...	0.19	0.8	0.48	1.3	3.59	4.0	2.89	5.0	8.10	12.0	3.08	4.0	4.47	6.0	2.30	4.0	3.10	6.0	28.68	47.0
		0.68	1.5	0.59	0.9	1.16	1.9	1.69	3.0	2.04	3.8	1.09	2.6	0.73	2.1	0.94	2.4	1.78	2.5	6.49	9.5	8.13	11.0	5.10	6.4	30.42	47.6
Trichinopoly.	{ Average of 10 years 1890 ... 1891 ... 1892 ...	0.20	0.7	1.67	2.0	1.46	3.5	2.43	4.4	0.61	1.3	0.51	1.7	0.32	1.4	1.18	2.7	0.47	1.2	5.00	6.7	2.79	6.4	2.14	3.2	18.78	35.5
		0.76	0.6	2.65	4.6	3.91	5.3	2.03	3.6	1.15	2.5	1.25	1.5	0.24	0.9	0.23	0.5	0.87	1.2	15.29	19.9	8.55	8.7	3.68	6.6	40.61	55.9
		0.16	...	1.28	2.0	0.12	...	5.31	5.0	0.75	1.0	0.64	2.0	0.59	2.0	0.88	2.0	0.17	1.0	2.70	6.0	1.33	3.0	1.43	3.0	15.36	27.0
Vizagapatnam.	{ Average of 10 years 1890 ... 1891 ... 1892 ...	0.36	0.9	0.02	0.04	0.22	0.4	1.01	1.4	3.99	6.1	1.30	2.4	1.39	2.2	4.27	6.5	3.81	6.2	7.34	10.8	6.83	10.5	4.08	6.4	34.62	53.8
		0.53	1.6	0.05	0.3	0.19	0.6	1.59	2.1	2.07	4.1	3.12	4.9	1.63	3.2	5.10	7.5	3.92	7.2	11.13	11.7	4.44	7.9	0.13	0.5	33.90	51.6
		0.04	0.2	2.95	4.4	0.61	0.7	0.48	1.2	1.50	2.7	1.41	2.4	0.26	0.7	2.91	2.8	2.70	4.0	11.53	14.6	2.46	5.5	3.86	8.5	30.71	47.7
Total	{ Average of 10 years 1890 ... 1891 ... 1892 ...	0.23	1.0	0.21	...	...	...	0.37	1.0	1.52	3.0	1.36	3.0	1.93	4.0	6.84	9.0	1.82	3.0	7.56	8.0	0.48	1.0	1.04	3.0	23.86	36.0
		0.13	0.4	0.17	0.4	0.68	1.3	0.71	1.6	2.50	4.4	5.50	7.8	7.50	12.9	7.94	12.5	7.55	10.8	6.37	8.0	1.29	4.8	0.88	1.2	41.22	66.1
		0.02	0.1	...	...	0.69	1.8	1.39	2.0	1.56	3.6	8.93	12.3	6.62	13.8	10.55	16.6	9.38	15.0	4.83	7.2	3.56	5.5	0.60	1.1	48.11	78.9
Total	{ Average of 10 years 1890 ... 1891 ... 1892 ...	...	...	...	...	0.63	...	0.82	2.5	1.12	3.0	6.89	11.5	10.11	15.0	8.68	13.0	12.19	14.5	12.63	10.0	0.82	1.0	...	...	33.32	50.4
		0.31	0.1	0.14	0.2	0.39	0.1	0.97	0.2	2.75	4.7	6.08	7.7	6.32	9.1	6.18	9.8	5.17	8.3	7.49	9.7	7.04	8.5	2.99	3.9	45.83	62.3
		0.24	0.6	0.27	0.3	0.61	1.3	1.59	3.1	1.85	3.7	6.78	9.1	7.22	9.3	5.19	9.0	4.62	9.0	6.26	8.6	4.01	6.6	0.85	1.8	39.49	62.4
Total	{ Average of 10 years 1890 ... 1891 ... 1892 ...	0.36	0.4	1.21	2.1	0.77	1.2	0.88	1.6	1.63	2.6	5.40	5.4	5.96	5.5	5.23	8.4	3.35	6.0	7.96	10.8	2.61	4.1	2.90	4.5	38.26	52.6
		0.46	0.1	0.26	0.4	0.82	0.1	1.70	3.3	2.83	4.2	5.69	8.9	10.66	10.7	10.36	14.2	6.22	9.6	9.15	10.0	9.08	1.5	1.20	1.9	58.43	65.1

Statement showing the Conservancy Establishment in each Municipality of the Madras Presidency during the year 1892.

Municipalities.	Population as per census of 1891.	Number of inspectors.	Number of super-visors.	Number of overseers.	Number of maitries.	Number of peons.	Number of sweepers, &c.	Number of toties for cleaning public latrines.	Number of toties for private scavenging.	Number of latrines scavenged by the municipality.	Number of carts.	Number of latrines.				Number of dust-bins.			Number of tank watchers.
												Pucka built.	Brick-wall enclosures.	Mud-wall enclosures.	Tatty.	Wooden.	Masonry.	Iron.	
Coonoor ...	5,586	1	...	...	1	...	18	7	7	128	16	10	...	...	...	2	...	45	...
Anantapur ...	6,973	1	...	...	...	...	14	8	3	117	4	1	...	...	...	...	26	46	...
Bimlipatam ...	9,696	1	...	...	...	...	37	3	24	283	2	3	...	...	...	...	30	...	7
Walajapet ...	10,485	2	...	...	...	...	14	9	3	270	7	9	...	...	...	...	50	480	1
Karūr ...	10,740	2	...	...	...	...	27	7	2	73	7	3	...	...	...	...	31	33	...
Ongole ...	10,832	1	...	...	...	...	20	4	6	246	3	...	...	...	...	...	63	...	...
Erode ...	12,238	1	...	...	...	...	24	16	2	120	22	4	...	...	...	...	76	85	1
Ootacamund ...	13,991	3	...	...	...	...	65	25	20	144	26	44	...	...	...	...	...	36	...
Tirupati ...	14,238	1	1	...	...	...	37	5	6	170	18	...	...	...	...	...	145	30	...
Vaniyambādi ...	15,838	...	...	...	...	...	40	11	...	...	20	1	...	...	...	...	...	90	...
Periyakulam ...	16,363	1	...	...	...	...	8	5	1	63	10	...	...	...	...	...	13	23	...
Parlakimedi ...	16,379	1	...	...	...	...	32	6	16	70	5	4	...	...	...	...	...	...	3
Tirupatūr ...	16,463	...	...	...	...	...	32	8	...	...	13	1	...	...	...	...	32	55	1
Palni ...	16,940	1	...	...	...	...	10	4	2	100	11	...	...	...	...	...	23	10	...
Cochin ...	16,147	1	...	...	...	...	21	24	15	243	3	4	...	...	...	...	...	5	...
Anakāpalle ...	17,001	...	...	...	...	...	54	21	3	59	5	2	...	...	...	...	20	23	...
Cuddapah ...	17,211	2	...	...	...	...	6	29	...	501	16	14	...	...	...	...	166	7	...
Chicacole ...	18,204	...	...	...	...	...	38	6	15	250	6	1	...	...	...	...	28	10	...
Palamcottah ...	18,612	1	...	...	...	...	7	6	4	70	13	6	...	...	...	...	106	...	...
Chidambaram ...	18,634	1	...	...	...	...	20	6	2	86	12	...	...	...	...	...	262	54	...
Gudiyātām ...	18,745	1	...	...	...	...	16	10	3	121	17	3	...	...	...	...	100	31	...
Dindigul ...	20,115	2	...	...	...	...	28	17	4	133	30	2	...	...	...	...	28	18	...
Mannārgudi ...	20,392	2	...	...	...	...	34	2	4	120	20	...	...	...	...	...	18	36	...
Bezvada ...	20,611	1	...	...	...	...	36	10	1	25	25	11	...	...	...	...	129	...	...
Srirangam ...	21,632	3	...	...	...	...	13	21	18	1,670	23	...	...	...	...	...	84	1	...
Guntūr ...	23,267	...	...	...	...	...	36	34	12	178	30	18	...	...	...	...	7	18	...
Māyavaram ...	23,754	3	...	...	...	...	5	15	5	3,253	21	4	...	...	...	...	150	22	...
Kurnool ...	24,306	1	...	...	...	...	38	13	2	50	7	38	...	...	...	...	255	...	...
Tinnevely ...	24,756	4	...	...	...	...	6	39	10	3	129	22	4	...	...	...	53	74	...
Tuticorin ...	24,964	2	...	...	...	...	16	18	...	731	16	4	...	...	...	...	43	43	...
Berhampore ...	25,493	4	...	...	...	...	83	21	26	582	19	...	...	...	...	...	120	...	...
Adōni ...	26,216	...	...	...	...	...	30	20	13	740	6	8	...	...	...	...	74	51	...
Tellicherry ...	26,631	3	...	...	...	...	16	17	389	15	5	...	...	...	...	...	40	...	...
Cannanore ...	26,653	3	...	...	...	...	18	14	8	300	12	11	...	...	...	...	11	...	...
Rajahmundry ...	28,279	2	...	...	...	...	46	22	33	874	8	3	...	...	...	...	95	74	...
Nellore ...	29,128	2	...	...	...	...	45	24	13	580	28	...	...	...	...	...	60	45	...
Ellore ...	29,296	5	...	...	...	...	29	23	15	247	11	...	...	...	...	...	25	11	...
Vizianagram ...	30,735	4	7	6	...	...	113	11	63	1,031	32	22	...	...	...	...	143	30	...
Vizagapatam ...	33,961	14	...	...	...	...	115	55	21	420	10	...	...	...	...	...	243	...	...
Masulipatam ...	38,667	5	...	...	...	...	44	8	8	189	23	5	...	...	...	...	...	151	...
Palghat ...	39,367	1	...	...	...	...	42	16	14	450	30	9	...	...	...	...	...	137	...
Cocanada ...	40,068	1	...	...	...	...	47	42	12	250	9	9	...	...	...	...	88	15	...
Mangalore ...	40,620	1	7	...	...	...	24	...	32	2,500	5	7	...	...	...	...	376	73	...
Conjeeveram ...	42,543	4	1	...	...	...	40	12	28	2,116	31	14	...	...	...	...	387	210	...
Vellore ...	44,724	5	...	...	...	...	35	58	12	398	47	21	...	...	...	...	...	112	...
Coimbatore ...	46,007	2	...	...	...	...	78	28	28	552	39	17	...	...	...	...	187	38	...
Cuddalore ...	47,025	7	...	...	...	...	51	24	9	40	30	12	...	...	...	...	170	93	...
Kumbakōnam ...	54,254	6	...	...	...	...	24	20	28	550	38	13	...	...	...	...	203	30	...
Tanjore ...	54,258	6	...	...	...	...	88	35	20	648	34	...	...	...	...	...	285	95	...
Bellary ...	57,780	10	...	...	...	...	66	47	28	1,497	68	15	...	...	...	...	519	28	...
Negapatam ...	58,573	6	...	...	...	...	80	16	80	1,416	41	2	...	...	...	...	22	...	...
Calicut ...	64,798	1	...	...	...	...	60	17	27	827	17	5	...	...	...	...	47	156	...
Salem ...	67,640	2	...	...	...	...	192	55	14	500	50	4	...	...	...	...	28	327	...
Madura ...	87,121	6	...	...	...	...	56	41	11	514	79	8	...	...	...	...	212	100	...
Trichinopoly ...	89,666	14	...	...	...	...	16	70	96	3,064	110	2	...	...	...	...	...	...	27
Total ...	1,634,616	154	17	33	116	257	2,317	1,070	827	27,082	1,223	383	304	137	280	604	5,126	3,175	178
Madras ...	436,375	2	...	20	50	144	1,326	455	15	15	661	...	220	...	...	...	2,001	1,593	...

The total estimated receipts of the towns for 1892-93 were Rs. 25,51,800 against Rs. 26,52,995 for the previous year. Of this amount, Rs. 15,39,485 or 60.3 per cent. was assigned for expenditure on sanitation, and the actual outlay incurred during the first nine months of that year was Rs. 7,85,927 or 51.1 per cent. In the following towns less than 75 per cent. of the allotment was utilized in the period under notice:—

Towns.	Percentage of expenditure.
Anantapur ..	74.1
Calicut ..	73.4
Walajapet ..	73.4
Vizianagram ..	72.7
Madura ..	72.3
Gudiyātām ..	72.3
Karūr ..	71.2
Tellicherry ..	70.5
Guntūr ..	70.3
Anakāpalle ..	70.0
Bellary ..	68.8
Negapatam ..	68.3
Cuddapah ..	67.7
Coonoor ..	66.3
Palamcottah ..	65.7
Adōni ..	65.3
Vizagapatam ..	64.5
Dindigul ..	62.7
Kumbakōnam ..	62.2
Bimlipatam ..	61.5
Erode ..	61.2
Berhampore ..	60.8
Vaniyambādi ..	60.0
Māyavaram ..	59.6
Vellore ..	59.2
Rajahmundry ..	59.1
Tirupatūr ..	58.5
Tuticorin ..	58.1
Cuddalore ..	53.7
Cannanore ..	53.6
Salem ..	51.8
Nellore ..	50.9
Ongole ..	50.5
Chidambaram ..	49.8
Periyakulam ..	48.5
Palghat ..	45.9
Palni ..	44.9
Mannārgudi ..	44.3
Tanjore ..	43.7
Srirangam ..	42.8
Trichinopoly ..	14.9

74. The annexed statement shows in detail the expenditure for the first nine months in 1892-93 under each item of sanitation and the transactions for the full year 1891-92:—

	1891-92 (for the full year).		1892-93.	
	Amount sanctioned.	Amount spent.	Amount sanctioned.	Amount spent in 9 months ending December 1891.
	RS.	RS.	RS.	RS.
For conservancy ..	4,30,288	4,13,767	4,72,590	3,55,154
For improvement of village or town sites ..	1,89,750	1,84,832	2,21,826	1,50,297
For improvement of water-supply, cleansing, repairing and construction of tanks and wells ..	2,70,656	62,611	5,36,019	1,72,309
For sanitary arrangements during fairs and festivals.	11,890	13,175	13,520	6,661
For construction and repair of markets and slaughter-houses ..	31,060	22,441	47,408	13,808
For other sanitary objects ..	2,55,646	1,13,366	2,48,122	87,698
Total ..	11,89,290	8,10,192	15,39,485	7,85,927

PRICES OF FOOD.

3. The following table shows the prices of the three grains in general use in Southern India, viz., rice, cholam and ragi during 1890, 1891 and 1892, compared with the average of ten years. *Rice*.—In all the districts the prices of this staple article of food were above the average, having varied from 11·9 seers for the rupee in the Malabar district to 9·2 in the Madras district. *Cholam*.—Omitting South Canara and Malabar where this grain is not sold, the prices during 1892 were higher than the average of ten years in all the districts, with the exception of Chingleput, where they were cheaper. The prices ranged from 18·0 seers for the rupee in the Cuddapah district to 12·6 in the Madras district. *Ragi*.—This hardy grain was above the average prices also in all the districts and the prices (omitting the Nilgiris) varied from 20·7 in the Ganjam district to 14·6 in the Salem district.

Table showing the Average Quantities of Food Grains, in seers of 80 tolahs, procurable for a Rupee in the Madras Presidency during 1890, 1891 and 1892, compared with the average of previous ten years ending 1889.

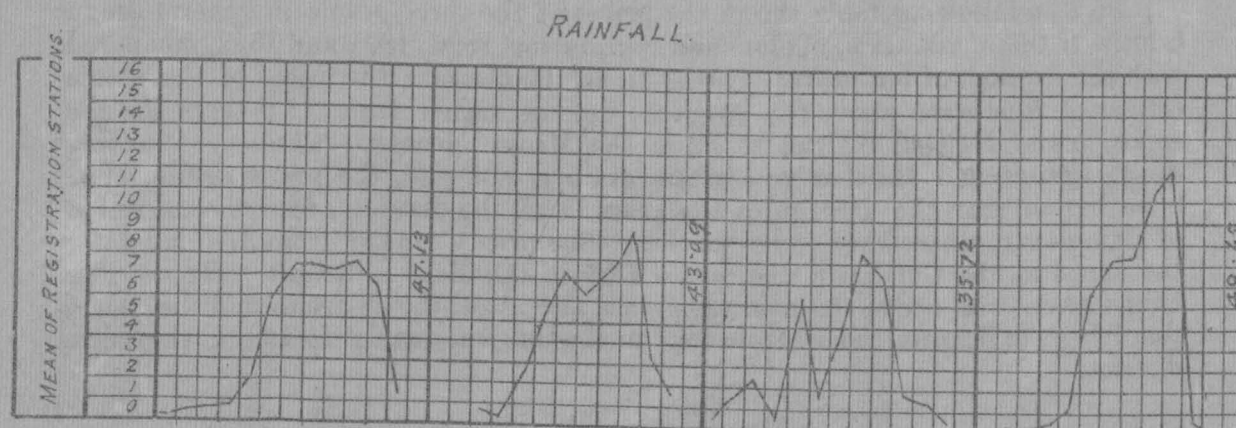
Average of previous ten years ending 1889.																									
Grain.		Ganjam.	Visagapatnam.	Godavari.	Kistna.	Nellore.	Cuddapah.	Amantapur.	Bellary.	Kurnool.	Madras.	Chingleput.	N. Arcot.	S. Arcot.	Tanjore.	Trichinopoly.	Madurai.	Tinnevely.	Coimbatore.	Nilgiris.	Salem.	S. Canara.	Malabar.		
January	Average of 10 years...	18.5	14.4	15.4	13.7	15.2	15.2	*	14.1	13.3	13.8	16.0	16.7	16.7	16.5	16.2	15.2	14.7	14.3	14.9	11.5	13.1	15.1	14.7	
	1891	15.3	14.7	15.7	14.1	13.3	13.8	15.6	13.0	12.1	11.3	12.7	13.3	13.1	16.2	15.2	14.7	11.5	10.9	12.2	10.6	13.4	13.7	14.7	
	1892	19.9	18.3	15.1	13.8	11.8	11.6	13.1	11.8	12.4	10.8	11.7	11.4	12.8	13.8	11.2	11.1	10.5	11.4	9.8	12.5	13.7	11.8	14.8	
	Average of 10 years...	11.8	10.2	10.2	10.2	9.5	8.9	8.5	8.7	8.7	8.9	10.1	9.5	10.1	12.1	10.4	10.4	10.4	9.9	8.0	8.2	12.6	14.6	14.6	
February	1890	18.6	14.8	15.5	15.9	15.3	15.2	*	14.2	12.3	14.1	16.7	16.8	17.3	17.0	15.6	15.3	14.8	14.8	12.0	13.0	15.6	14.6	14.6	
	1891	16.4	15.3	15.7	14.4	13.7	13.8	15.4	12.0	12.5	11.5	12.9	13.7	12.3	17.0	15.6	15.3	14.8	14.8	12.0	13.0	15.6	14.6	14.6	
	1892	18.9	18.1	15.3	14.9	12.0	11.8	13.0	12.1	12.4	10.7	11.6	11.6	12.6	13.3	11.3	11.3	10.6	11.3	8.0	12.0	15.2	14.6	14.6	
	Average of 10 years...	11.8	10.7	10.3	10.1	9.1	8.3	8.7	9.0	8.7	9.1	10.2	9.4	11.1	12.0	10.3	10.9	10.6	10.1	8.0	9.3	12.3	14.4	14.4	
March	1890	18.6	13.6	15.6	14.9	15.2	15.5	*	14.2	12.3	14.1	16.8	16.7	17.1	17.3	15.9	15.7	15.3	15.0	12.1	13.2	15.3	14.4	14.4	
	1891	18.2	15.2	15.5	14.4	13.5	13.8	15.4	12.7	12.5	11.2	13.1	13.4	12.1	17.3	15.9	15.7	15.3	15.0	12.1	13.2	15.3	14.4	14.4	
	1892	18.9	18.0	15.2	14.0	12.1	11.9	13.0	11.9	12.4	10.9	11.2	11.7	12.5	13.4	11.6	11.4	11.2	11.3	8.6	12.0	15.2	14.4	14.4	
	Average of 10 years...	11.7	10.6	10.6	10.4	9.2	8.3	8.8	9.1	8.9	9.0	10.2	9.6	10.6	11.7	10.4	11.4	10.7	10.1	8.2	9.4	11.9	11.1	11.1	
April	1890	18.5	14.6	15.5	15.1	15.3	15.3	*	13.9	13.3	14.2	16.2	16.8	17.1	17.1	15.9	15.6	15.3	15.2	12.0	13.4	14.1	12.0	12.0	
	1891	17.1	14.9	15.5	14.2	13.4	13.5	14.9	12.5	12.0	11.4	12.5	13.2	12.1	18.2	11.8	11.7	10.8	12.0	12.7	13.4	14.1	12.0	12.0	
	1892	18.6	17.9	14.9	14.0	11.9	11.7	13.1	11.6	12.5	10.2	11.8	11.7	12.7	13.6	12.1	11.7	11.2	11.2	9.8	12.1	13.4	12.0	12.0	
	Average of 10 years...	13.2	14.4	14.3	14.3	15.5	15.4	*	13.8	13.2	14.2	16.8	16.9	17.0	16.7	15.6	15.6	15.3	15.2	12.0	13.4	14.1	12.0	12.0	
May	1890	17.3	14.7	15.6	14.1	13.3	13.6	14.7	12.3	12.0	11.7	12.4	12.9	12.2	12.1	11.7	11.7	11.3	10.5	12.2	9.8	13.1	13.9	12.7	
	1891	18.3	17.8	14.9	14.0	12.2	11.7	13.0	11.3	12.4	11.9	11.3	11.6	12.2	13.6	12.0	11.3	11.0	11.2	9.7	12.0	13.1	11.3	14.8	
	1892	11.1	10.0	10.5	10.2	9.1	9.0	8.9	8.4	9.2	9.0	10.0	11.2	9.8	9.5	9.9	10.3	11.5	10.9	10.8	8.1	10.9	11.9	14.8	
	Average of 10 years...	18.1	14.2	14.9	14.7	15.4	15.5	*	13.8	13.1	14.1	17.3	16.5	16.8	16.3	15.3	15.4	14.2	14.6	11.8	12.4	14.8	13.8	14.8	
June	1890	17.0	14.5	15.3	13.6	13.4	13.8	15.2	12.5	11.8	11.9	12.3	12.9	12.1	11.9	11.4	10.2	11.8	10.6	10.8	8.6	12.7	13.8	11.1	
	1891	18.1	17.6	14.1	13.2	11.9	11.5	12.9	11.3	11.9	11.4	12.0	11.4	12.4	13.5	11.6	11.5	10.7	11.1	9.3	11.6	12.0	11.9	14.8	
	1892	10.9	10.1	10.8	10.5	9.2	9.0	9.1	8.4	9.3	8.8	9.6	10.9	9.6	9.6	9.9	9.9	11.2	10.3	10.0	8.2	10.2	11.9	14.8	
	Average of 10 years...	17.9	14.1	14.9	14.6	15.5	15.4	*	13.8	13.0	13.7	15.7	15.2	16.0	15.7	14.7	14.7	13.7	14.3	11.7	11.8	14.2	13.7	14.8	
July	1890	16.3	17.1	13.9	12.8	11.5	11.2	12.3	11.3	11.9	11.9	12.0	12.5	11.9	11.5	10.7	10.3	9.8	11.3	9.9	12.3	13.4	10.7	14.8	
	1891	10.9	9.9	10.9	10.3	9.7	9.3	10.6	11.3	12.0	11.0	12.0	10.6	12.1	12.9	11.0	11.1	10.6	10.9	9.2	11.4	10.7	14.8	14.8	
	1892	17.3	13.4	14.1	14.5	15.4	15.2	*	13.8	13.0	13.7	15.7	15.2	16.0	15.7	14.7	14.7	13.7	14.3	11.7	11.8	14.2	13.7	14.8	
	Average of 10 years...	16.7	14.3	15.0	13.5	12.8	12.7	13.8	12.3	11.8	11.0	11.8	12.3	12.0	11.2	10.6	10.3	9.8	11.2	9.8	12.2	13.6	10.6	14.8	
August	1890	16.7	10.3	11.3	10.9	11.4	10.9	12.8	11.1	11.0	10.6	10.1	10.2	11.2	12.6	10.8	10.7	10.4	10.4	9.0	10.8	11.3	10.9	14.8	
	1891	10.3	9.9	10.9	10.3	9.7	9.3	10.6	11.3	12.0	11.0	12.0	10.6	12.1	12.9	11.0	11.1	10.6	10.9	9.2	11.4	10.7	14.8	14.8	
	1892	17.3	13.4	14.1	14.5	15.4	15.2	*	13.8	13.0	13.7	15.7	15.2	16.0	15.7	14.7	14.7	13.7	14.3	11.7	11.8	14.2	13.7	14.8	
	Average of 10 years...	16.3	13.1	14.3	14.2	15.3	14.2	*	13.7	13.0	13.7	15.4	16.0	15.9	15.4	14.4	14.2	13.7	13.9	11.5	11.7	14.0	13.7	14.8	
September	1890	15.2	14.3	15.0	13.5	12.8	12.7	13.8	12.3	11.8	11.0	11.8	12.3	12.0	11.2	10.6	10.3	9.8	11.2	9.8	12.2	13.6	10.6	14.8	
	1891	16.7	10.3	11.3	10.9	11.4	10.9	12.8	11.1	11.0	10.6	10.1	10.2	11.2	12.6	10.8	10.7	10.4	10.4	9.0	10.8	11.3	10.9	14.8	
	1892	10.3	9.9	10.9	10.3	9.7	9.3	10.6	11.3	12.0	11.0	12.0	10.6	12.1	12.9	11.0	11.1	10.6	10.9	9.2	11.4	10.7	14.8	14.8	
	Average of 10 years...	16.3	13.1	14.3	14.2	15.3	14.2	*	13.7	13.0	13.7	15.4	16.0	15.9	15.4	14.4	14.2	13.7	13.9	11.5	11.7	14.0	13.7	14.8	
October	1890	15.2	14.3	15.0	13.5	12.8	12.7	13.8	12.3	11.8	11.0	11.8	12.3	12.0	11.2	10.6	10.3	9.8	11.2	9.8	12.2	13.6	10.6	14.8	
	1891	16.7	10.3	11.3	10.9	11.4	10.9	12.8	11.1	11.0	10.6	10.1	10.2	11.2	12.6	10.8	10.7	10.4	10.4	9.0	10.8	11.3	10.9	14.8	
	1892	10.3	9.9	10.9	10.3	9.7	9.3	10.6	11.3	12.0	11.0	12.0	10.6	12.1	12.9	11.0	11.1	10.6	10.9	9.2	11.4	10.7	14.8	14.8	
	Average of 10 years...	16.3	13.1	14.3	14.2	15.3	14.2	*	13.7	13.0	13.7	15.4	16.0	15.9	15.4	14.4	14.2	13.7	13.9	11.5	11.7	14.0	13.7	14.8	
November	1890	17.5	15.4	14.7	13.6	12.7	13.5	14.2	12.3	12.0	11.0	11.6	12.1	11.7	12.1	10.8	10.4	10.4	10.5	11.7	11.8	14.2	13.7	14.8	
	1891	14.0	12.2	12.8	12.7	11.4	10.1	10.3	10.9	10.0	10.0	10.3	11.1	10.9	11.2	10.6	10.0	11.0	10.9	9.7	8.2	10.7	11.8	14.8	
	1892	12.4	11.6	12.7	12.1	11.1	10.8	11.2	10.2	11.0	9.9	11.2	10.7	10.6	10.0	10.0	11.0	10.4	10.5	11.7	11.8	14.2	13.7	14.8	
	Average of 10 years...	17.1	13.2	12.7	14.0	15.2	15.0	*	13.6	13.1	13.3	15.5	16.0	15.9	15.6	14.9	14.2	14.2	14.7	11.0	12.4	14.3	14.2	14.8	
December	1890	18.2	16.0	14.6	13.6	12.3	13.2	14.0	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	
	1891	13.4	11.9	11.7	11.6	10.9	9.3	9.0	9.4	9.5	9.8	10.0	10.2	11.2	12.4	10.7	10.6	10.4	10.8	8.0	10.5	11.8	11.9	14.8	
	1892	13.0	11.8	12.5	11.9	10.9	10.8	11.2	10.7	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	14.8	
	Average of 10 years...	17.7	13.6	14.8	14.1	15.1	15.1	*	13.7	13.0	13.4	15.4	16.1	17.0	15.7	14.7	14.1	14.1	14.6	11.3	10.8	12.6	13.6	11.3	
Total	1890	11.8	10.4	10.1	10.3	9.3	7.8	7.9	7.8	12.7	12.2	10.8	11.7	11.4	12.4	13.1	11.2	11.2	10.4	9.7	8.6	8.6	12.2	14.6	14.1
	1891	17.8	13.9	12.3	11.9	10.9	11.1	11.4	10.5	11.2	9.2	9.0	9.5	9.2	11.2	12.2	10.4	10.3	10.3	9.9	7.8	8.2	12.6	14.6	14.1
	1892	17.1	15.1	15.2	13.9	13.0	13.5	13.7	12.4	12.1	11.5	12.5	12.1	12.7	12.0	12.2	11.4	11.1	10.4	11.9	9.0	11.3	12.4	11.6	14.1
	Average of 10 years...	11.8	10.7	11.2	11.0	9.8	9.5	9.9	9.8	9.8	9.8	10.5	10.2	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5

* Information not available.

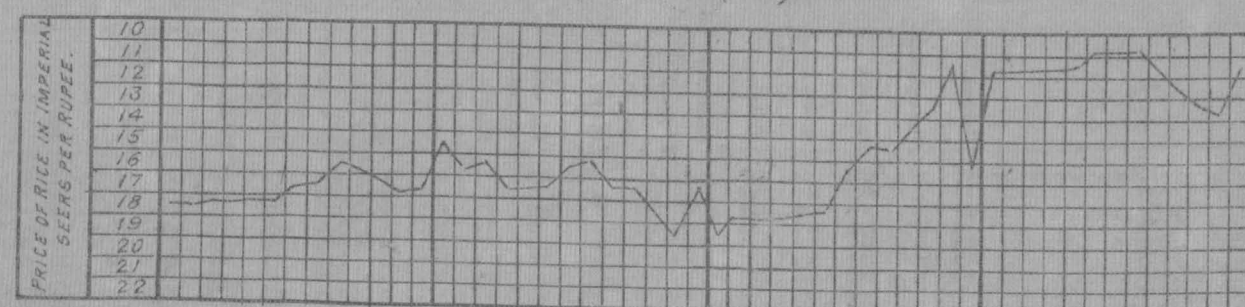
DIAGRAM SHOWING THE RAINFALL & PRICE OF FOOD (RICE) IN THE DISTRICTS OF GANJAM & VIZAGAPATAM.
FOR 3 YEARS ENDING 1892 COMPARED WITH AVERAGE OF 10 YEARS.

GANJAM

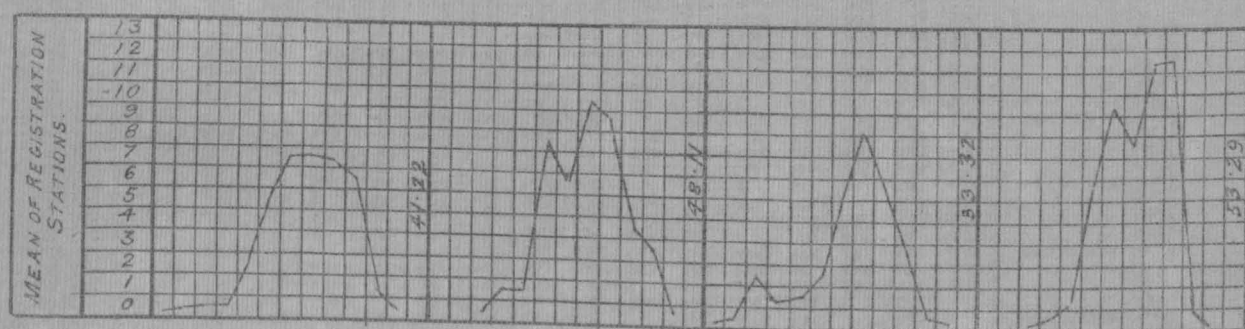
DISTRICTS.	YEARS												AVERAGE OF 10 YEARS.												1890												1891												1892											
	MONTHS.																																																											
	JAN.	FEB.	MAR.	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL.	JAN.	FEB.	MAR.	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL.	JAN.	FEB.	MAR.	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL.																					



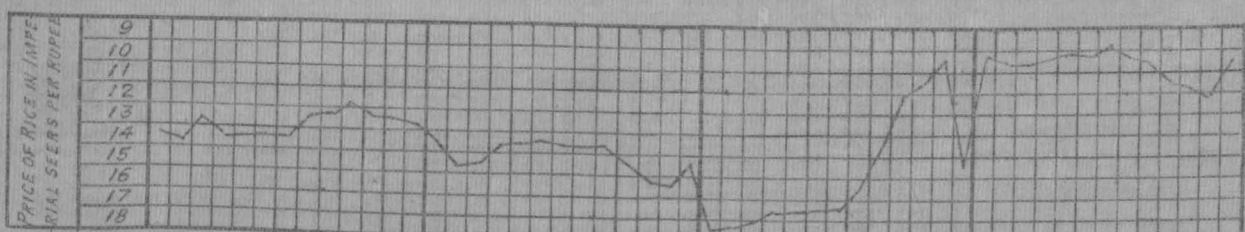
PRICE OF FOOD (RICE)



VIZAGAPATAM
RAINFALL



PRICE OF FOOD (RICE)



Reg: No. 895 -- Copies 275

Zinco., Survey Office, Madras
1893

Statement showing the Estimated Income and Allotment for Sanitary Purposes in each Municipality during the year 1892-93.

Municipalities.	Population as per census of 1891.	Estimated income, 1892-93.	Rate per cent. of sanitary allotment to estimated income.	Rate per cent. of sanitary expenditure to amount sanctioned.	1892-93.										Sanitary allotment.	Conservancy.	Improvement of town-sites.	Improvement of water-supply, including cleaning, repairing, &c.	Sanitary arrangements during fairs and festivals.	Construction and repair of markets and slaughter-houses.	Other sanitary objects, including construction and repair of tanks, &c.				
					Sanitary allotment.		Conservancy.		Improvement of town-sites.		Improvement of water-supply, including cleaning, repairing, &c.		Sanitary arrangements during fairs and festivals.									Construction and repair of markets and slaughter-houses.		Other sanitary objects, including construction and repair of tanks, &c.	
					Allotment.	Expenditure during the 9 months ending December 1892.	Allotment.	Expenditure.	Allotment.	Expenditure.	Allotment.	Expenditure.	Allotment.	Expenditure.								Allotment.	Expenditure.	Allotment.	Expenditure.
Anantapur	6,973	23,770	15%	74.1	3,760	2,786	2,450	1,797	920	611	20	17	...	40	8	330	330	...	...						
Adoni	26,216	20,930	40%	63.3	12,950	8,207	8,350	5,449	2,000	1,105	310	102	...	200	186	1,000	1,211	...	...						
Bellary	57,780	73,070	69%	68.8	43,830	30,018	27,390	23,356	6,000	3,008	4,290	3,240	...	800	893	1,370	1,190	...	...						
Conjeevaram	42,643	33,050	42%	98.1	14,060	12,950	9,390	11,150	8,308	...	...	...	...	...	...	...	...	...	...						
Cumbaloor	46,907	43,230	39%	79.8	12,950	4,340	2,503	2,910	1,086	150	41	400	112	80	61	450	395	100	50						
Erode	12,238	12,280	34%	61.2	4,240	5,480	3,900	3,460	2,390	1,700	1,430	220	30	...	...	...	...	...	...						
Cuddalore	10,740	15,010	33%	71.2	5,480	21,222	7,500	5,536	...	...	...	...	...	...	...	...	...	...	...						
Berhampore	17,211	66,020	47%	67.7	31,572	6,488	5,300	4,430	3,820	1,806	200	153	...	400	19	330	11	...	...						
Chicacole	25,493	26,830	39%	60.8	10,680	4,072	3,070	2,468	1,630	1,310	800	843	...	100	...	450	418	350	11						
Chikabimol	18,204	20,550	39%	61.9	8,074	2,910	2,620	2,080	1,928	...	...	...	...	...	...	...	...	...	...						
Cochin	16,379	11,906	23%	90.0	2,910	17,336	7,000	6,108	5,126	...	...	...	...	...	...	...	...	...	...						
Ellore	41,068	40,710	50%	85.7	20,475	8,518	7,080	5,023	2,000	1,700	5,504	1,320	1,322	...	2,160	300	2,400	1,100	...						
Rajahmundry	28,296	26,170	43%	84.7	10,060	10,359	5,300	4,008	5,516	1,829	600	325	...	2,138	2,138	1,307	1,307	...	...						
Boiwada	28,279	34,470	50%	50.1	17,260	29,475	5,350	7,250	4,000	2,408	5,260	4,148	...	1,000	872	2,370	672	...	...						
Guntur	20,611	51,020	68%	83.5	35,285	16,109	8,520	7,250	4,000	2,408	5,260	4,148	...	250	275	750	672	...	...						
Masulipatam	26,267	36,720	58%	70.3	21,590	10,060	8,080	5,100	3,908	300	248	1,200	922	...	800	295	90	115	...						
Kurnool	38,067	45,080	28%	75.8	10,060	10,551	7,050	6,540	3,250	...	...	...	...	...	...	...	...	...	...						
Dindigul	24,300	33,760	31%	97.9	10,780	10,551	7,050	6,540	3,250	...	...	...	...	...	...	...	...	...	...						
Madura	20,115	24,270	54%	62.7	13,110	8,225	6,080	5,875	3,420	1,500	2,000	1,670	...	1,000	770	6,000	5,170	...	...						
Palni	67,121	110,280	39%	72.3	46,985	53,065	33,280	23,410	1,000	227	210	50	...	1,100	250	100	...	...	...						
Periyakulam	16,940	13,000	38%	83.3	4,906	2,236	2,480	1,682	1,000	...	...	...	...	...	...	...	...	...	...						
Alicut	16,363	13,000	31%	83.3	4,585	2,223	2,720	1,828	1,530	281	70	51	...	800	625	800	...	...	...						
Canimare	44,798	62,580	30%	73.4	16,470	14,264	9,010	6,088	5,500	6,743	...	...	...	...	...	...	...	...	...						
Cochin	25,053	26,580	30%	83.6	10,500	10,600	6,730	4,918	2,720	712	190	...	...	...	...	...	...	...	...						
Palghat	16,147	20,400	47%	77.8	6,220	4,807	4,660	3,433	1,490	1,208	30	20	...	80	28	1,800	1,800	...	...						
Tellicherry	39,307	74,430	29%	45.0	30,180	26,147	7,510	4,338	1,490	1,208	30	20	...	80	28	1,800	1,800	...	...						
Nellore	20,031	46,080	30%	70.3	13,270	15,270	9,354	8,000	6,186	3,600	2,333	50	44	...	2,000	...	...	...	...						
Onole	29,138	44,550	42%	50.9	18,650	16,056	6,954	8,060	5,785	2,500	600	300	...	...	...	...	...	...	...						
Gudiyattam	10,892	13,620	11%	80.5	5,700	2,878	2,600	1,900	300	16	...	...	...	...	...	...	...	...	...						
Tirupati	74,258	16,270	26%	72.3	4,270	3,683	3,400	2,439	...	...	...	...	...	...	...	...	...	...	...						
Vellore	44,724	130,450	63%	80.2	1,02,906	2,730	4,540	2,908	1,050	55	201	144	...	1,016	21	1,000	216	...	...						
Walajpet	10,445	13,250	60%	50.2	36,530	21,639	14,670	10,387	18,390	10,490	1,400	905	...	430	169	34,328	21,000	...	...						
Ocoonor	10,445	13,250	60%	50.2	36,530	21,639	14,670	10,387	18,390	10,490	1,400	905	...	430	169	34,328	21,000	...	...						
Ootacamund	6,598	20,070	12%	68.3	4,830	2,335	2,400	2,042	...	...	...	...	...	...	...	...	...	...	...						
Salem	13,001	27,750	12%	73.2	4,830	2,335	2,400	2,042	...	...	...	...	...	...	...	...	...	...	...						
Tirupattur	67,649	65,850	51%	67.8	34,027	50,158	20,730	15,050	15,093	48,280	38,174	...	...	2,615	...	...	...	...	...						
Vaniyambadi	10,463	14,670	32%	68.2	4,735	15,046	15,063	3,220	1,652	2,215	1,900	...	...	...	...	...	...	...	...						
Chidambaram	15,898	10,800	38%	60.0	5,630	2,761	2,559	1,801	1,490	438	80	60	...	150	163	550	100	...	...						
Cuddalore	18,634	16,750	38%	49.3	6,530	2,177	2,300	1,960	...	...	...	...	...	...	...	...	...	...	...						
Mangalore	47,625	45,480	46%	53.7	20,180	3,216	3,670	2,732	...	...	...	...	...	...	...	...	...	...	...						
Kumbakonam	40,629	45,140	45%	78.3	19,420	10,846	10,710	6,218	...	...	...	...	...	...	...	...	...	...	...						
Mamangudi	54,254	87,470	67%	62.2	59,165	10,740	9,213	5,258	8,090	7,005	1,000	448	...	200	200	2,600	1,600	...	...						
Mayavaram	20,592	21,900	61%	44.3	13,460	30,785	14,480	9,734	8,090	8,482	1,250	448	...	200	200	2,600	1,600	...	...						
Nagapattinam	23,734	32,080	35%	53.6	11,220	5,063	5,280	2,514	2,290	2,100	1,000	750	250	173	250	221	1,430	473	...						
Tanjore	24,238	60,780	61%	63.3	37,640	6,084	5,800	4,247	2,490	1,278	470	334	180	183	900	605	1,000	2,300	...						
Palamcottah	18,612	25,740	82%	43.7	21,170	15,806	10,408	5,110	1,000	964	1,000	86	...	160	50	1,000	547	1,000	1,145						
Tinnevely	24,704	10,730	24%	63.7	4,890	55,701	12,610	10,408	5,074	3,100	2,553	800	30	...	1,300	500	6,800	2,300	...						
Tuticorin	24,964	20,100	43%	83.4	8,030	92,070	13,060	5,110	1,000	765	100	86	...	160	50	1,000	547	1,000	1,145						
Srirangam	21,822	25,500	57%	68.1	16,800	5,214	3,240	2,358	1,230	765	100	86	...	160	50	1,000	547	1,000	1,145						
Trichinopoly	80,695	3,25,200	80%	42.8	12,820	8,524	5,190	4,631	2,990	1,800	880	205	70	60	100	74	1,070	1,031	...						
Anakkapalle	17,001	14,790	52%	70.0	7,740	9,769	6,440	4,228	6,850	3,070	1,540	700	...	50	13	640	63	...	...						
Bimilipatam	9,000	12,800	48%	71.5	5,830	9,769	6,440	4,228	6,850	3,070	1,540	700	...	50	13	640	63	...	...						
Vizianagaram	33,061	42,230	55%	61.5	23,400	5,492	8,080	4,400	5,400	830	...	...	...	...	...	...	...	...	...						
Vizianagaram	30,735	28,240	61%	72.7	17,340	41,855	34,180	25,362	11,750	9,467	2,23,780	4,234	...	500	354	650	120	...	...						
Total	1,634,010	25,61,800	60%	61.1	16,30,485	7,90,027	4,72,800	3,65,154	2,21,826	1,50,297	5,55,019	172,300	13,520	6,601	47,408	13,806	2,48,122	87,696	...						
Madras	430,375	12,90,000	28%	81.5	3,67,008	2,09,779	2,88,000	2,10,266	57,532	55,833	6,452	13,082	...	34	1,070	1,070	13,720	1,892	...						

ABSTRACT OF SANITARY REPORTS OF MUNICIPALITIES.

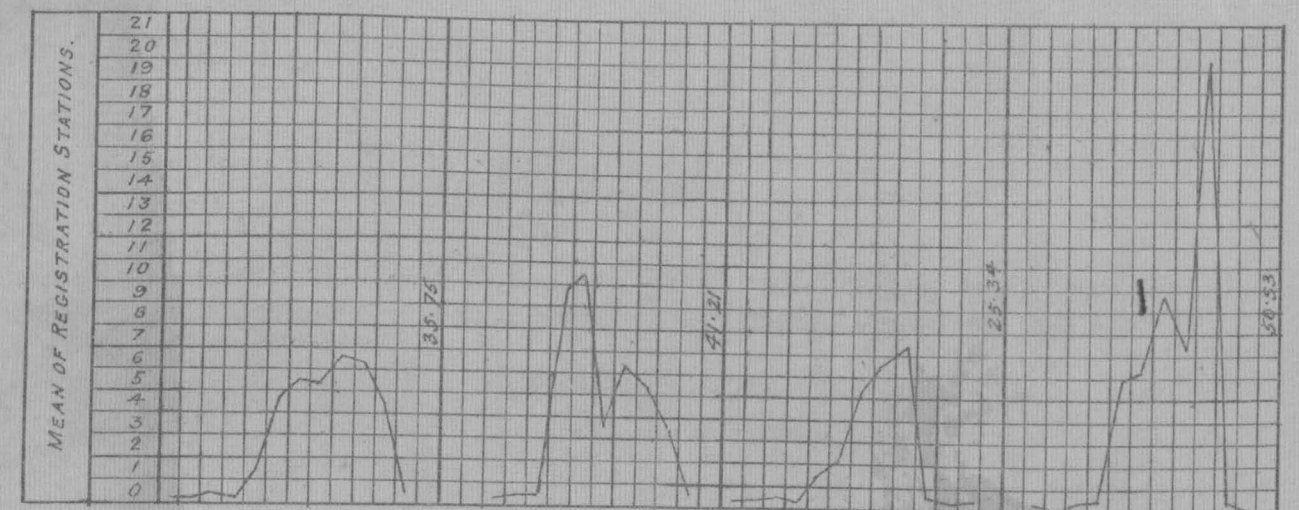
Number.	Districts.	Municipalities.	Population.	Death-rate.	Drainage.	Water.	Domestic cleansing and conservancy.	Measures taken to remedy the evils in each Municipality.	Net receipts from conservancy, 1892-93.	Net expenditure on conservancy, 1892-93.
1	Anantapur.	Anantapur.	6,973	30.3	No system. U-shaped drains exist in the principal streets. Elsewhere side-cuttings carry off storm water. Cess-pools abound. They are cleaned once or twice a year.	Obtained from wells and a tank. The wells are reserved for drinking purposes, but the tank is not conserved. Scarcely was felt in the months of March, April and May.	The refuse from streets and houses are collected in dust-bins and carried twice daily to the rubbish depot. The night-soil is removed in iron trucks and buried in trenches at some distance from the rubbish depot. There are 8 public latrines (one pukka built) which are kept fairly clean and freely used by the people.	A few wells, latrines, dust-bins, a market and a slaughter-house were repaired at a cost of Rs. 70.	Rs. 0.45-11-6	Rs. 2,709-12-6
2	Adoni.	Adoni.	26,216	34.6	Pukka drains exist in the southern part of the town, but are not part of any system. Cess-pools abound and are seldom if ever cleaned out.	From step-wells and springs. These are reserved for drinking purposes and guarded by watchmen. The new water-supply scheme will come into operation from 1st April.	The town sweepings are collected in dust-bins and removed to a place some distance from the town and sold. There are 12 public latrines which are freely used. Private scavenging is in force. There are also 5 animals.	Some small streets were paved and improved. Some new latrines were constructed and others repaired. Drains were repaired and drinking-water sources conserved (Rs. 250). The number of scavengers and latrines were increased to keep narrow lanes and corners of the town clean. Steps were taken to persuade ryots to use night-soil as manure. Certain wells were repaired (Rs. 1,177). Some latrines were constructed and repaired (Rs. 184). Slaughter-houses were repaired (Rs. 188). Certain drinking sources were improved and carefully scavenged (Rs. 221). Surveys were taken in connection with a proposed water-supply scheme and the supply channel of Mainwaring tank has been fenced in.	Rs. 2,679-13-1	Rs. 2,709-12-6
3	Bellary.	Bellary.	57,780	35.2	No system. By side-cuttings. House sewage flows into back-yards, where it soaks into the soil. A few cess-pools exist and they are cleaned when necessary. New cess-pools are not allowed to be constructed.	Mainly from the Mainwaring tank and the fort ditch, but also from some wells. Quality reported to be wholesome. Watchmen are appointed to guard these sources and the supply channels of the tanks and fort ditch are carefully looked after.	The rubbish is removed daily in carts to selected places where, after rotting, it is sold as manure. There are 26 public latrines which are freely used, but this accommodation is insufficient.	Rs. 894 were spent towards the improvement of water supply. Paddy-pear and rank vegetation removed (Rs. 112). Construction and repair of latrines (Rs. 2,342). Dust-bins and slaughter-houses were repaired (Rs. 24). Markets repaired (Rs. 64). Some additions to private scavenging staff were made.	Rs. 2,809-13-11	Rs. 29,047-10-11
4	Chingleput.	Conjeevaram.	42,643	32.5	No system. By side-cuttings. House sewage flows into back-yards, where it soaks into the soil. A few cess-pools exist and they are cleaned when necessary. New cess-pools are not allowed to be constructed.	Obtained from wells, tanks and springs in the river Vagavay and spring channels. Quality sufficient. Water obtained from the quarters close to the Vagavay is good in quality. The rain-fed tanks and those fed by the Lohakal channel are subject to contamination. Four tanks outside temples are reserved for drinking and watched over, but the quality of the water is inferior. A few of the drinking-water wells are provided with perapets, platforms, &c.	The garbage from streets and houses is removed in carts to the depôts outside town limits, where it is stored and periodically sold to ryots. There are 23 public latrines, 14 of which are of corrugated iron, the rest being brick-wall enclosures. The night-soil from public and private latrines is removed in night-soil carts to the rubbish depôts and buried in pits in the manner indicated by the Sanitary Commissioner. Private scavenging is in force.	Rs. 894 were spent towards the improvement of water supply. Paddy-pear and rank vegetation removed (Rs. 112). Construction and repair of latrines (Rs. 2,342). Dust-bins and slaughter-houses were repaired (Rs. 24). Markets repaired (Rs. 64). Some additions to private scavenging staff were made.	Rs. 3,327-12-0	Rs. 11,682-6-0

DIAGRAM SHOWING THE RAINFALL & PRICE OF FOOD (RICE) IN THE DISTRICTS OF GODAVARI &
KISTNA FOR 3 YEARS ENDING 1892. COMPARED WITH AVERAGE OF 10 YEARS.

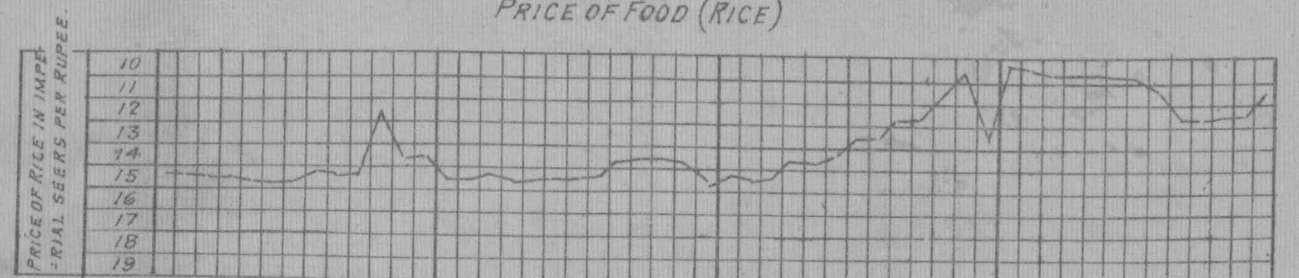
GODAVARI

DISTRICTS	YEARS		AVERAGE OF 10 YEARS.												1890												1891												1892																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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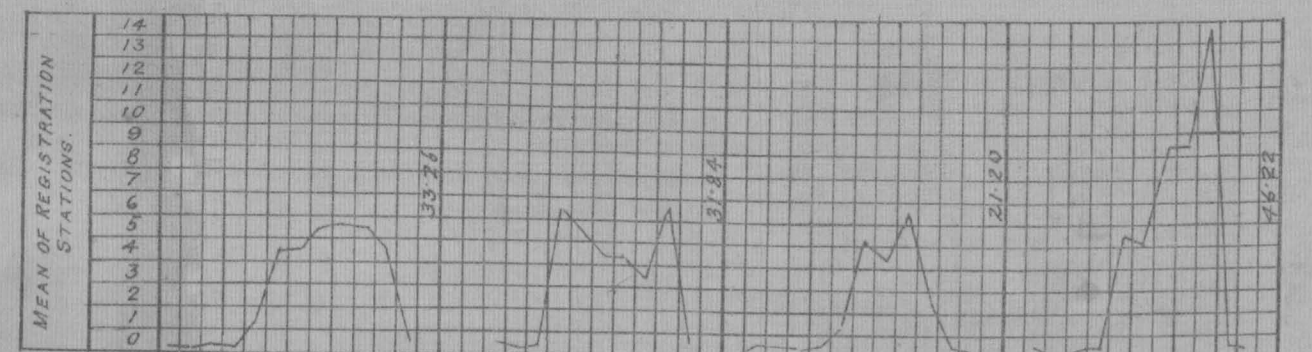
RAINFALL



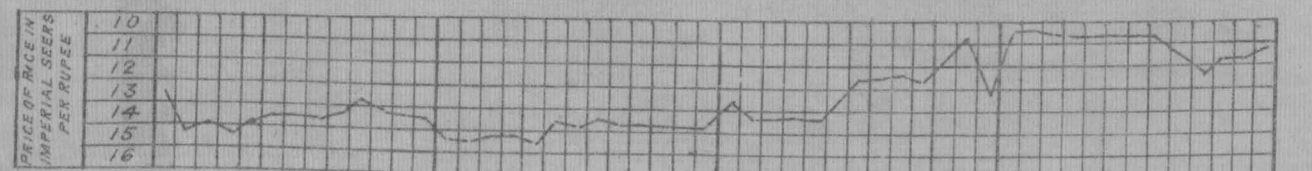
PRICE OF FOOD (RICE)



KISTNA
RAINFALL



PRICE OF FOOD (RICE)



Number.	Districts.	Municipalities.	Population.	Death-rate.	Drainage.	Water.	Domestic cleansing and conservancy.	Measures taken to remedy the evils in each Municipality.	Net receipts from conservancy, 1892-93.	Net expenditure on conservancy, 1892-93.
6		Coimbatore.	46,007	27.3	Defective and without system. By side-cuttings which are, as a rule, kept in a foul condition. A proper system of drainage is a pressing necessity, and one is reported to be under consideration.	Sources same as last reported, viz., wells and tanks. Quantity sufficient, but quality generally bad. The Teppakulam is guarded by a watchman. Most of the public wells, of which there are 27, are provided with parapet walls and platforms, but their surroundings are in an insanitary condition. A few of the private wells contain good drinking water. A water-supply scheme is under consideration.	Indifferent. The house and street sweepings are removed in carts to several depots and burnt in cinerators. Each depot has a cinerator, but the cinerators are in a dilapidated condition. There are 29 public latrines freely used, but in bad repair. Streets, lanes, gardens, &c., are also used for purposes of nature. The contents of latrines are removed to a night-soil depot and buried. The night-soil depot was in an unsatisfactory condition. Private scavenging is very successfully carried on.	Wells, latrines, drains and a market were repaired (Rs. 1,500), and Rs. 30 were spent in conserving drinking sources.	...	...
6		Erode.	12,268	21.7	Defective and without system. Mainly by side-cuttings. A masonry drain exists in Kottai street. Cess-pools abound, but they are never cleaned.	Sources same as last reported, viz., the Calingrayen channel, a tank in the fort, a few wells and the river Canvery. Quality fairly good. As remarked in last year's report the channel is still subject to pollution.	Fairly well attended to. System same as last reported. The streets are swept twice a day and the garbage, &c., carted to a depot and eventually sold, while the market sweepings are incinerated. There are 14 public latrines which are freely used and fairly well attended to. Their contents are carted away and buried in trenches. Private scavenging is in force and the system is to be extended. There are 161 dust-bins.	Rs. 112 were spent towards the improvement of water-supply. Some markets were repaired and others constructed (Rs. 395). A latrine was repaired (Rs. 81). Prickly-pear was removed (Rs. 41). Four iron night-soil carts have been indented for.	Rs. 604-10-0	Rs. 3,185-4-1
7		Karur.	10,740	28.1	No system. By side-cuttings. A masonry drain exists in Kottai street. A drainage scheme is in contemplation.	From the river Amravathy and wells. The river water is good and freely used. Seventeen wells are set apart for drinking and they are provided with parapet walls and platforms.	The streets are swept daily, and the refuse is carted to two depots outside the town limits where it is either burnt or sold as manure. There are 13 public latrines in good order and fairly clean. They are freely resorted to.	Rs. 30 were spent on improvements to water-supply. Some dust-bins were repaired (Rs. 50).	...	...
8		Cuddapah.	17,211	38.6	By side-cuttings; defective and without system. Cess-pools exist, into which the house sewage flows. They are emptied occasionally only.	Same as last reported, the Booga spring water being in use. Wells are not now used by the people.	The streets are swept morning and evening and the rubbish, &c., removed in country carts to the night-soil depot. The contents of latrines are taken in covered carts and buried in trenches; the accumulation of rubbish and night-soil is sold annually as manure. There are 42 public latrines on the dry-earth system. They are fairly well attended to and freely used. Private scavenging is in force, but works indifferently.	Rs. 266 were spent in the sinking and repair of wells. Rs. 225 in improvement of town-site and Rs. 576 were devoted to the construction and repair of latrines and markets. Rs. 14,652 are reported to have been spent on other improvements to water-supply, but the nature of the work is not particularized.	Rs. 1,178-7-8	Rs. 7,521-10-0

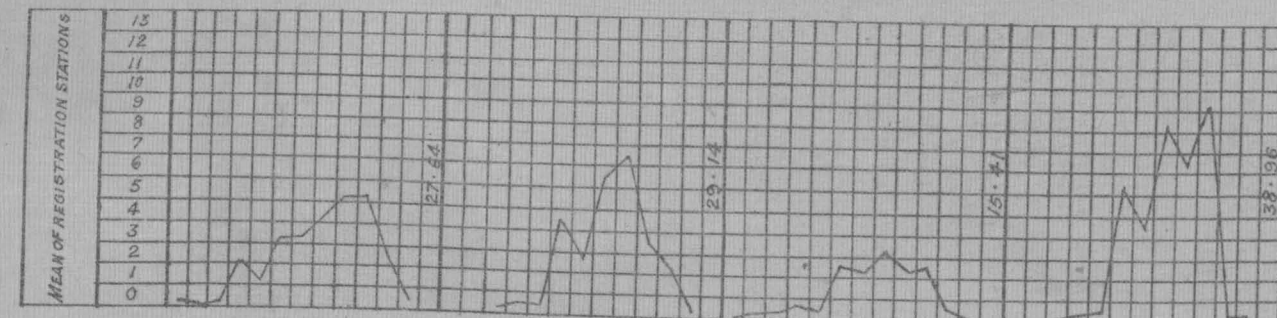
9		Berhampore.	25,193	26.2	Defective. U and V shaped drains exist in the principal streets. Masonry cess-pools exist and exist they are cleaned daily.	From tanks and wells; the former are subjected to pollution. Three tanks are set apart for drinking purposes and guarded by watchmen.	System same as last reported. The sweepings and refuse are collected in dust-bins, whence they are removed to depots outside the town and incinerated. There are 22 public latrines in good order and the night-soil is removed in covered baskets and buried in trenches outside the town.	Rs. 200 were laid out in improvements to water-supply. Rs. 230 in the construction of latrines, dust-bins and markets, and Rs. 370 in repairs to latrines, cinerators, markets and slaughter-houses.	Rs. 1,127-5-0	Rs. 6,043-13-10
10		Channarayana.	18,204	23.2	Defective. Natural drainage is towards the river on the west. The drainage scheme referred to in last report has been abandoned. There are 40 cess-pools, which are cleaned by municipal agency.	Obtained from tanks, wells and river. The tank-water is subject to contamination from its being used for burning and burying dead bodies. The tanks have raised embankments and are guarded by watchmen. The wells are provided with parapet walls and platforms. Sixteen wells and 3 tanks are reserved for drinking.	The street sweepings, &c., are taken to depots on the outskirts of the town and finally sold to ryots. The night-soil is removed in covered baskets to depots situated on the northern and southern extremities of the town and buried in pits. A movable cart carrying iron latrine was provided during the year. The latrines are freely used by the people.	Tanks and wells were repaired and drinking sources conserved (Rs. 843). Prickly-pear and rank vegetation removed (Rs. 182). A few dust-bins were constructed (Rs. 226) and drains repaired (Rs. 115). One portable corrugated iron latrine was purchased (Rs. 78).	Rs. 1,400-0-0	Rs. 3,190-5-4
11		Parthakumthi.	10,379	22.9	Natural and satisfactory. A few cess-pools exist and they are cleaned out daily.	Sources same as last reported, viz., wells and tanks. Quality fair. Two tanks are reserved for drinking purposes and guarded against pollution.	System same as last reported. The rubbish is taken to the cinerators, where it is burnt and sold as manure. There are 10 latrines in good condition and freely used.	A well was sunk and others repaired (Rs. 296). Drinking sources were conserved (Rs. 114). Some dust-bins and a drain were constructed (Rs. 172). A few latrines of corrugated iron were constructed (Rs. 190).	Rs. 221-8-7	Rs. 2,412-13-3
12		Ottum.	40,068	26.9	No system. A main sewer runs from the market tank to the salt creek and the main drain leading from this is in an insanitary condition. Recommendations for its improvement have been made by the Municipal Council. Drainage of houses flows into the main sewer. A few private cess-pools exist and they are, as a rule, in a filthy condition.	Sources same as last reported. Cess-pools from the Godavari river, wells and tanks. Quantity sufficient, but quality indifferent. Eight tanks and 3 wells are set apart for drinking. The tanks and the tanks are subject to pollution, though the latter are watched over. The reservoirs and cinerators also need protection from contamination.	The street sweepings, &c., are burnt in cinerators and the ashes used to mix with the night-soil. There are 19 latrines which are freely used by the people. The night-soil is buried in pits some distance from the cinerators.	Rs. 151 were spent in the construction and repair of tanks, Rs. 1,373 in conservancy of drinking sources and other improvements to water-supply, such as providing platforms to fresh-water cisterns and tanks and repairing supply channels. Two iron latrines were constructed and others repaired (Rs. 2,342). Rs. 744 in the construction of dust-bins, and Rs. 1,084 in repairs to drains, markets and removal of prickly-pear and rank vegetation.	Rs. 501-4-0	Rs. 9,706-8-0
13		Ellore.	29,286	31.2	Same as last reported. No system. By side-cuttings. Cess-pools exist in the main streets. Drains discharge into irrigation channels. House sewage flows into cess-pools, public drains or into streets. Cess-pools exist but they are indifferent, though they are supposed to be cleaned daily.	From the Krishna canal, a tank, wells and irrigation channels. Quality bad; subject to much pollution. Wells have parapet walls and platforms. The tank is guarded by a watchman.	The rubbish is stored in 6 depots and sold annually. There are 21 public latrines in fair order and freely used by the people. Private scavenging is in force.	Conservancy of drinking sources and other improvements to water-supply (Rs. 108). Construction of dust-bins and a slaughter-house (Rs. 745) and repairs to latrines and drains (Rs. 903).	Rs. 811-6-0	Rs. 6,815-7-5

15
 DIAGRAM SHOWING THE RAINFALL & PRICE OF FOOD (CHOLUM) IN THE DISTRICTS OF KURNOOL & BELLARY
 FOR 3 YEARS ENDING 1892 COMPARED WITH AVERAGE OF 10 YEARS.

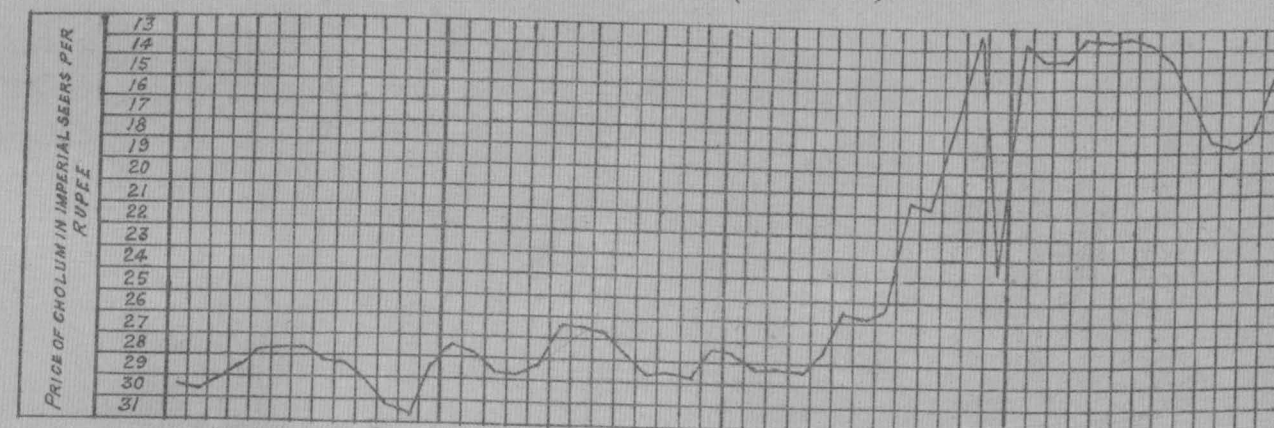
KURNOOL

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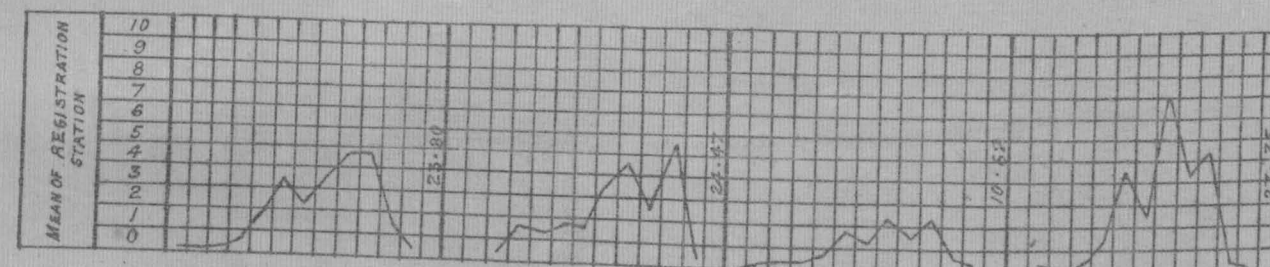
RAINFALL.



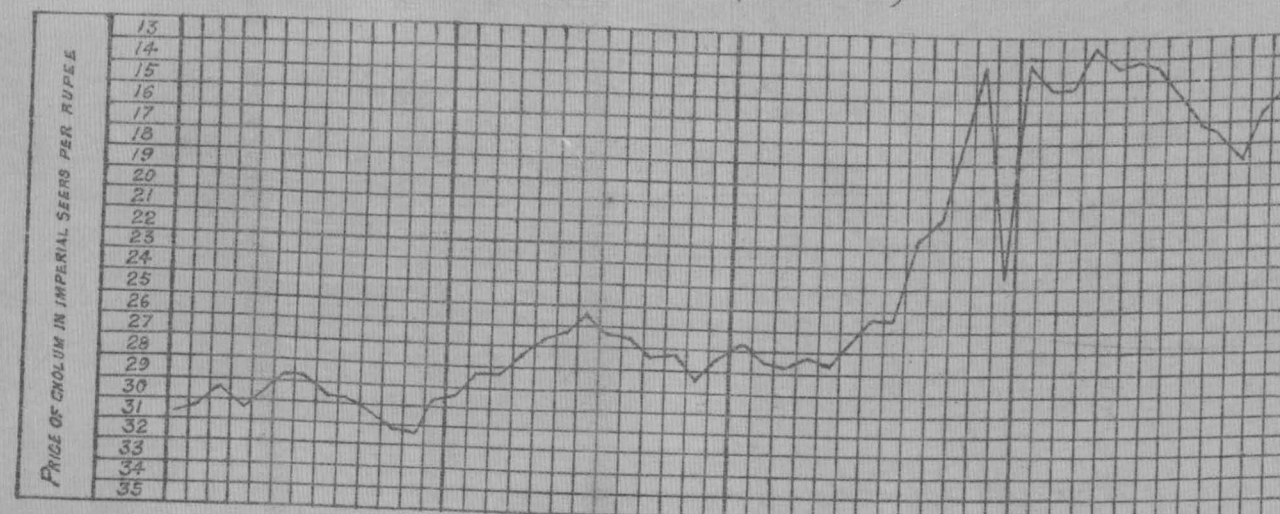
PRICE OF FOOD (CHOLUM)



BELLARY. RAINFALL.



PRICE OF FOOD (CHOLUM)



ABSTRACTS OF SANITARY REPORTS OF MUNICIPALITIES—continued.

Number.	District.	Municipality.	Population.	Death-rate.	Drainage.	Water.	Domestic cleansing and conservancy.	Measures taken to remedy the evils in each Municipality.	Net receipts from conservancy, 1892-93.	Net expenditure on conservancy, 1892-93.
23	Calicut.		64,798	38.0	No change since last report. The 4 main drains, into which the street drains empty get blocked frequently and cause considerable nuisance.	Same as last reported. From wells and tanks. Said to be fairly good and sufficient. A scheme for supplying a portion of the town with good drinking-water is under consideration.	One portion of the rubbish is buried and the rest is burnt on the road side and on the beach. Another portion is used to fill up hollows and low-lying places in private compound. There are 5 pukka-built and 6 sentry-box latrines and 2 more metal ones are to be put up. The night-soil is buried. The refuse is collected in dust-bins and removed to a site 3 miles distant from the town, where it is buried. There are 15 pukka-masonry latrines on the dry-earth system and 9 sentry-box latrines on the beach. Private scavenging is in force, but the service does not appear to be popular.	A market was repaired at a cost of Rs. 623.	Rs. 1,370-7-0	Rs. 10,746-5-1
24	Cannanore.		26,658	27.8	No system in the old Moplah town. Latent stone drains exist in the cantonment bazaar street and Birmacherry. Cess-pools are to be found in the Moplah town, but not in the cantonment.	Obtained from wells. Good and sufficient. Twenty-three wells are used for drinking purposes. The municipal wells are all provided with parapet walls and lacerte drains and notices are put up from time to time warning the public against polluting the water-supply. Numerous private wells exist, but the surroundings in some cases are unsatisfactory.	The refuse is collected in dust-bins and removed to a village 3 miles to the south-west of the town. There are 44 latrines, which are freely used. The night-soil for the greater portion of the year was taken to a farm to the east of the town.	No works of importance were undertaken during the year. Some wells, latrines, a market and a slaughter-house were repaired at an aggregate cost of Rs. 314.	Rs. 801-11-9	Rs. 6,081-5-9
25	Malabar.	Cochin.	16,147	50.3	No system. Masonry drains are provided to a few streets whilst side-cuttings carry off storm water in others. House sewage flows into street drains in the better part of the town, elsewhere it soaks into the ground.	Bad. Obtained from shallow wells. No tanks or wells are set apart for drinking. The well-to-do obtain their supply from Alwaye. Rain water collected in iron tanks is distributed to the poor by the council during the monsoon.	The rubbish and street sweepings, collected in dust-bins, are partly sold as manure and partly burnt at a place some distance from the town. There are 14 latrines in all and they are freely used.	Nothing exceptional. Rs. 331 were spent on other improvements to water-supply and town-sites, such as filling up of hollows, &c., and Rs. 237 on repairs to latrines, dust-bins, drains and markets.	Rs. 796-4-0	Rs. 4,518-8-7
26	Palghat.		39,367	32.6	No system. Storm water flows through side channels. House sewage flows into backyard and in some cases into streets.	Drinking water is obtained exclusively from wells. Each house or group of houses having a well of its own. Quality generally good. The 9 municipal wells are provided with parapet walls and side flooring, but most of the private ones are not so protected. Tanks are used for bathing, &c., purposes.	The town refuse is collected at the depots and auctioned annually. There are 13 public latrines, 1 being masonry and 8 Crawford's patent, and they are used to some extent. Conservancy received attention during the year and the system of private scavenging was extended.	Rs. 277 were spent on repairs to wells, latrines, drains, burial-grounds, slaughter-house, &c., and Rs. 83 on sanitary improvements during fairs and festivals. Certain public wells were provided with masonry drains; private scavenging was extended to Brahmin villages. Number of night-soil and rubbish carts was increased.	Rs. 300-2-6	Rs. 6,681-8-7
27	Tellicherry.		26,631	34.0	By side channels. No system. Seven masonry drains exist. No cess-pools.	Obtained entirely from public and private wells. Quality good. Twenty public wells and a tank are set apart for drinking. The latter is not much used.	Fairly well attended to. The street sweepings and rubbish are collected in stone dust-bins and eventually removed in carts and buried. The solid contents of latrines are removed in night-soil carts and buried as stated in last report, while the liquid	Repairs to tanks and wells (Rs. 44); construction and repair of latrines (Rs. 148); and repairs to drains and a market (Rs. 443).	Rs. 1,516-10-6	Rs. 8,210-12-2

171A10

Number.	District.	Municipality.	Population.	Death-rate.	Drainage.	Water.	Domestic cleansing and conservancy.	Measures taken to remedy the evils in each Municipality.	Net receipts from conservancy, 1892-93.	Net expenditure on conservancy, 1892-93.
28	Nellore.		29,128	19.7	Defective and without system. Twenty-two streets are provided with badly constructed drains which discharge into the irrigation channels. In these streets house drains discharge into streets. Elsewhere house sewage flows into cess-pools or into the streets.	From wells, reservoirs, irrigation channels, and the river Pennar. Water from wells within the town is brackish while that from wells outside is drinkable. The channels, reservoirs and the river are subjected to pollution. Some of the wells have parapet walls, drains, platforms, and a few have pulleys.	Un satisfactory. The great bulk of the rubbish is stored in backyards and unoccupied lands for manual purposes, a small portion only being taken to the rubbish depot. There are 169 dust-bins. This number is quite inadequate. There are 24 public latrines. Some of them are not freely resorted to, people preferring to resort to streets, fields, &c., for purposes of nature. The night-soil from public and private latrines is burnt at the rubbish depot. The pukka latrines require repairing and improvement.	Tanks were dug (Rs. 332); wells repaired (Rs. 294); dust-bins constructed (Rs. 36); and drains required (Rs. 12). Rs. 68 were spent on some minor improvements to water-supply.	Rs. 1,609-5-6	Rs. 6,754-8-3
29	Nellore.		10,832	24.3	By side-cuttings. Masonry drains exist in seven streets. No system of house drainage. House sewage flows into street drains here and there. No public cess-pools.	From a tank and 10 wells which are reserved for drinking. Quality fair on the whole. The tank is guarded by a watchman.	The town refuse is collected in dust-bins and removed in carts to 2 depots, where, after storage it is sold by auction. There are 7 public latrines in fair condition. The latrines are not much resorted to, but their locality is.	Improvements of water-supply (Rs. 295); construction and repair of latrines (Rs. 540); repairs to market and slaughter-house (Rs. 65). Rs. 20,617 were spent on the drainage scheme now completed.	Rs. 434-10-3	Rs. 2,559-1-9
30	Coimbatore.		5,586	37.4	The new drainage scheme has been completed. No cess-pools.	Obtained from 2 streams and a channel from the Aravughat river. These are open and subject to pollution. There are also 2 wells in the lower part of the town, but no tanks.	The street sweepings and contents of latrines are taken to a depot, where they are mixed and the compost sold by auction. There are 47 dust-bins and 10 latrines. The latrines are freely resorted to, but the number is insufficient for the requirements of the town.	Improvements of water-supply (Rs. 295); construction and repair of latrines (Rs. 540); repairs to market and slaughter-house (Rs. 65). Rs. 20,617 were spent on the drainage scheme now completed.	Rs. 2,353-13-0	Rs. 6,151-3-11
31	Nilgiri.	Ootacamund.	13,991	23.1	Natural. Ootacamund bazaar and the village of Kandal are provided with good stone-lined and cement drains. Elsewhere no artificial drains. No cess-pools. House sewage flows into the nearest drains, natural or artificial, as the case may be.	From 2 reservoirs at Marlinund and Dodabetta. The water from both is brought into the town in pipes. There are also wells, some of which contain good drinking water.	Fairly well attended to. The town refuse is deposited at a village 3 miles to the south-west of the town. There are 44 latrines, which are freely used. The night-soil for the greater portion of the year was taken to a farm to the east of the town.	Conservancy of drinking sources and other improvements to water-supply (Rs. 38,616) and construction and repair of drains (Rs. 13,100); improvement and repair of markets (Rs. 681); and repairs to slaughterhouses (Rs. 66). The south water-supply scheme was completed during the year. New conservancy carts were purchased during the year and the nuisance caused by the old carts thus removed. The Kandal drainage scheme was also completed.	Rs. 4,503-8-0	Rs. 13,546-9-10

MUNICIPALITIES.

Number.	Districts.	Municipalities.	Population.	Death-rate.	Drainage.	Water.	Domestic cleansing and conservancy.	Measures taken to remedy the evils in each Municipality.	Net receipts from conservancy, 1892-93.	Net expenditure on conservancy, 1892-93.
32	North Arcot.	Gudiyalam.	18,745	30.1	The main street on the Chittoor road is provided with V-shaped drains. Elsewhere drainage is by side-cuttings. The drains in the northern part of the town flow into a channel, while those in the southern find their way into the fields. The V-shaped drain is flushed daily. House drains in some instances flow into street drains. Some cess-pools exist.	Sources same as last reported. Springs in the river bed, a tank and private wells. Sufficient and fair in quality. The springs and the tank are reserved for drinking and guarded by watchmen, but the watching, as stated in last report, requires stricter supervision.	The town refuse and night-soil are removed daily in carts outside the town and sold as manure. There are 12 public latrines which are fairly well used.	Improvements to water-supply (Rs. 434); removal of prickly-pear and rank vegetation (Rs. 88); other sanitary works, such as the construction of dust-bins and drains and sanitary arrangements during fairs and festivals (Rs. 64). A site has been selected for the construction of a hospital in the town.	Rs. 164-12-0	Rs. 3,308-1-9
33		Tirupatt.	14,238	29.6	No system. A few streets have rough stone drains. House drains flow into street drains or into cess-pools. Cess-pools are cleaned when full. The drainage scheme sanctioned by Government will be put in hand shortly.	From tanks and wells. Good. Two tanks are set apart for drinking purposes and guarded by watchmen. The tanks are mainly spring-fed.	The streets are swept twice daily and the rubbish, &c., deposited in the several rubbish depots and sold when a fair demand arises. There are 11 public latrines in fair condition and freely used. Private scavenging is in force.	Nothing exceptional. A well was repaired and drinking sources conserved (Rs. 145) and a market was repaired (Rs. 21).	Rs. 572-7-0	Rs. 3,405-6-0
34		Vellore.	44,724	25.4	Same as last reported. Defective. Masonry and stone drains exist in some streets. The house sewage flows into the main drains or into the street, where it stagnates or soaks into the soil. Cess-pools exist. The drains and cess-pools are cleaned with difficulty. A drainage scheme was drawn up some years ago for this town, but it has not yet been sanctioned.	Chiefly from tanks, wells and springs in the bed of the river Palar. Quality fair. The Surigunta, which is much used as a drinking-water source, is subject to pollution. Both the tank and its feeder channel are guarded by watchmen. A scheme for the water-supply of the town is now before Government.	The street sweepings, &c., are collected in dust-bins and removed by contractors outside town limits, where they are disposed of as manure. The night soil mixed with dry-earth is carted off to the fields for manure. There are 597 dust-bins, of which 387 are masonry fixture and 210 are zinc moveable ones. Seventeen public latrines exist in the dry-earth system and they are kept fairly cleaned. The system of conservancy requires overhauling.	Improvements to water-supply, such as the repair of tanks and a well and the conservancy of drinking sources (Rs. 392); and other sanitary works, such as the repair of latrines, drains and markets, (Rs. 490).	Rs. 1,257-0-9	Rs. 2,544-0-8
35	Walajapet.		10,485	27.0	The main streets are provided with rough stone drains. Elsewhere no system. Mere side channels existing in some streets. Sewage from some of the houses flows into street drains. No cess-pools.	Good and sufficient. Obtained from 6 tanks and 6 wells, reserved for drinking and guarded by watchmen. All wells have parapet walls. Three wells have platforms and 1 a drain.	The rubbish and night-soil are accumulated in heaps outside town limits and sold by public auction. There are 7 public latrines and 2 urinals, and except the market latrine, others are not much used by the people.	Wells were sunk and repaired, drinking sources conserved and other minor improvements to water-supply effected (Rs. 427); markets constructed and repaired (Rs. 461); a drain repaired (Rs. 41); and prickly-pear and rank vegetation removed (Rs. 116).	Rs. 1,257-0-9	Rs. 2,544-0-8

36	Salem.	Salem.	67,640	18.2	Unsatisfactory and without system. Masonry drains exist in a few places. Elsewhere drainage is by side-cuttings. Much sewage soaks into the soil. Cess-pools abound and they are not systematically cleaned.	Obtained from a river. Numerous draw and step wells and 2 tanks. Scarcity was felt during the first half of the year. Forty-one wells and 2 tanks or reservoirs containing water of good quality are set apart for drinking. The tanks are watched over.	System much the same as last report. Rubbish is collected in dust-bins and removed in carts to depots. The night-soil is removed in covered carts to selected depots. There is very little demand for rubbish and night-soil as manure. There are 48 public latrines, but the number is insufficient.	Sinking and repair of wells (Rs. 1,162); repairs to a tank (Rs. 37); conservancy of drinking sources (Rs. 110). Twelve iron night-soil carts were purchased. Some latrines were constructed and others repaired (Rs. 707). Other sanitary improvements effected (Rs. 15).	Rs. 705-14-0	Rs. 18,180-6-5
37	Tirupattur.	Tirupattur.	16,463	19.2	No system. Side-cuttings exist to carry off storm water. House drains are connected with street side-cuttings and much sewage soaks into the soil. Cess-pools abound and they are seldom, if ever, cleaned.	Sources same as last reported. A Teppucolam, irrigation tank and wells, five public draw-wells, 2 step wells and the Chetti Teppucolam are the chief sources of drinking. Quality indifferent. Scarcity was felt during the early part of the year. The Teppucolam is guarded by a watchman. The water in most private wells is brackish.	The streets are swept daily and the rubbish is collected in dust-bins and taken in hand-carts to selected depots. There are 7 public latrines which are freely used by the people, but they are small and in indifferent condition. The night-soil is removed twice daily and buried in trenches at some distance from the town. Latrine accommodation insufficient.	Nothing of importance. Rs. 68 were spent in the construction of a well and conservancy of drinking sources and Rs. 355 in purchasing material for a double iron latrine. One iron night-soil cart was purchased.	Rs. 81-14-5	Rs. 2,480-5-11
38	Vaniyambadi.	Vaniyambadi.	15,838	30.2	By side-cuttings. No system. Here and there masonry drains exist. House sewage flows into cess-pools or into street drains. Cess-pools abound and they are seldom cleaned. Much sewage soaks into the soil owing to defective drainage.	From wells and the river. The river water and that from 4 of the public wells is good, but the former is subject to pollution. Most of the private wells, which are situated in close proximity to cess-pools, contain brackish water. In the dry weather springs dug in the bed of the river are also used and they are guarded by watchmen.	The rubbish is collected in dust-bins and removed in carts to selected depots outside town limits. There are 11 public latrines, and they are kept in fair condition and freely used. The latrines are cleaned twice daily and the contents carted away to the depots. There is no sale for the town sweepings. More latrines are required.	Rs. 217 were spent on repairs to latrines and a slaughter-house, and Rs. 252 on conservancy, drinking sources. A public latrine is under construction.	Rs. 29-14-0	Rs. 2,778-1-8
39	Chidambaram.	Chidambaram.	18,634	24.5	No system. House sewage flows into backyards or into cess-pools in the streets. There are 140 cess-pools, 1 of which is on a standard plan. They are said to be cleaned twice a week.	From temple wells and tanks. Four tanks are said to be set apart for drinking and guarded by watchmen. The tanks are river-fed.	Fairly well attended to. The town refuse is carted to 2 depots and sold from time to time by auction to cultivators. There are 9 public latrines, which are freely used by the people.	Rs. 301 were spent on conservancy of drinking sources and other improvements to water-supply and Rs. 84 in repairing a market and making arrangements during fairs and festivals. A large pond near the paracherri was acquired to provide the people of the large paracherri with a wholesome supply of drinking-water. A double latrine (brick-wall enclosure) was constructed. An additional night-soil and sewage carts were employed.	Rs. 454-2-0	Rs. 3,711-2-4
40	South Arcot.	Cuddalore.	47,025	15.8	No regular system. Side-cuttings carry off storm water. Masonry drains exist in Old Town and Pudukuliyam. House sewage flows into street drains or cess-pools.	The supply of Old Town is brought from the Mount Capper lake, the water of which is good. The water is brought into the town in an open channel, over which watchmen are placed. Some wells, which supplied New Town, have been abandoned, the water having become brackish. Others are to be sunk in their stead. One already sunk contains good water.	Same as last reported. The refuse is sold by auction and carted to the fields for use as manure. The number of latrines is the same as last reported, viz., 12 pukka-built and 9 leaf latrines. They are freely used.	A well was sunk (Rs. 60); latrines were repaired (Rs. 242), and Rs. 366 spent on minor improvements to water-supply. A site for the construction of a new slaughter-house has been acquired and the work put in hand. The delivery fountain at Old Town has been provided with a flight of steps, and a drain and the covering over the fountain replaced by a tiled roofing.	Rs. 2,220-15-8	Rs. 9,352-10-2

Number.	Districts.	Municipalities.	Death-rate.	Drainage.	Water.	Domestic cleansing and conservancy.	Measures taken to remedy the evils in each Municipality.	Net receipts from conservancy, 1892-93.	Net expenditure on conservancy, 1892-93.
41	South Canara.	Mangalore.	30.8	No system. The public drains and water courses are maintained in good order. No cess-pools. A preliminary survey of the town has been arranged for preparatory to remedying the defects in drainage.	From numerous wells and tanks which is set apart for drinking and guarded by a watchman. The quality of water in most wells is suspicious, but there are 5 public wells, which contain good water.	The night-soil and sweepings are removed daily in carts to the depot, where the latter are incinerated and the ashes mixed with night-soil in the manufacture of pondrette. The compost is stored and sold to cultivators. There are 12 public latrines which are freely used by the people. The refuse is carted to a depot outside and is sold for filling up pits and holes in low places and as manure for fields. There are 20 public latrines which are freely used, but most of them are too small and the number also is insufficient. The night-soil is taken in covered carts to the rubbish depot and buried in trenches. There was some improvement in conservancy, but a great deal yet remains to be done.	A well was sunk (Rs. 299); some drains constructed (Rs. 1,017) and latrines, dust-bins, drains, a market and a slaughter-house repaired (Rs. 427).	Rs. 1,865-0-0	Rs. 7,370-0-0
42		Kumbakonam.	29.1	No system. Natural and by side-cuttings. Storm water finds its way into fields and irrigation channels. Many houses are provided with masonry drains, and sewage finds its way into masonry cisterns or into streets, where it soaks into the soil. In some instances it flows into backyards forming filthy puddles. A drainage scheme is under execution.	Sources same as last reported. The Cauvery and the Arsalu, wells and a tank. During the hot months holes dug or wells sunk in the bed of rivers are also used. The tank is set apart for drinking and watched. All the sources are fairly conserved and watchmen are appointed over the rivers when the water in them is low. The drinking-water tank should be so protected as to prevent drainage water from finding its way into it.	Fairly well attended to. The town is divided into 3 divisions for conservancy purposes. The refuse from streets and backyards is collected in dust-bins and removed daily in carts to the 2 rubbish depots outside the town, where it is disposed of as manure. There are 12 latrines on the dry-earth system, but they are not much resorted to, as the people prefer fields and topes for purposes of nature. The site of the temporary latrines should be changed.	Sinking and repair of wells (Rs. 286); conservancy of drinking sources and other minor improvements to water-supply (Rs. 162); improvement of town-sites, such as filling up hollows, &c. (Rs. 1,172); construction of dust-bins and the improvement of a market (Rs. 341); repairs to latrines and a slaughter-house (Rs. 396) and Rs. 17,391 were devoted to the drainage scheme.	Rs. 1,950-10-9	Rs. 13,360-5-2
43	Tanjore.	Māvaram.	31.2	Natural. House sewage flows into backyards and into streets. Cess-pools exist and they are cleaned daily.	Obtained from the river, tanks and wells. Tank and river water is not very good. Five tanks and 5 wells are set apart for drinking and watchmen are appointed to the reserved tanks. The surroundings of tanks and wells are clean.	The town refuse is removed in carts outside town limits and burnt in cinerators, the residue being sold as manure. There are 20 public latrines, but they are not freely used, the people preferring to resort to fields for purposes of nature. The night-soil of part of the town is removed in carts outside the town and buried in trenches.	Nothing of importance. Rs. 334 were spent in sinking a well and conserving drinking sources. Rs. 693 in the construction of a market, repair of a slaughter-house, and other sanitary objects. Rs. 132 were spent on sanitary arrangements during fairs and festivals.	Rs. 369-2-8	Rs. 6,024-10-2
44		Mannargudi.	24.2	Natural. House sewage flows into backyards and into streets. Cess-pools exist and they are cleaned daily.	Obtained from the river, tanks and wells. Tank and river water is not very good. Five tanks and 5 wells are set apart for drinking and watchmen are appointed to the reserved tanks. The surroundings of tanks and wells are clean.	The town refuse is removed in carts outside town limits and burnt in cinerators, the residue being sold as manure. There are 20 public latrines, but they are not freely used, the people preferring to resort to fields for purposes of nature. The night-soil of part of the town is removed in carts outside the town and buried in trenches.	A well was sunk and another repaired (Rs. 52); tanks conserved and other improvements to water-supply effected (Rs. 664); latrines constructed and repaired (Rs. 164). Dust-bins constructed (Rs. 285).	Rs. 30-4-0	Rs. 4,456-1-3

45	Tanjore—cont.	Nagapattinam.	27.1	No system of drainage. Cess-pools are numerous and some are emptied daily. House sewage is taken away to the rubbish depot.	Sources same as last reported. Tanks wells and river Uppamar. Five tanks are set apart for drinking purposes and guarded by watchmen. Water from a large well in the Jubilee park is pumped and conducted to an iron tank near the market for public use.	The roads, streets and lanes are swept and the rubbish taken to the depots. The elevator near Hathway's park is not in use. The rubbish depots are too close to habitations. There are 18 public latrines, each served by a tot, but the people generally prefer open fields and the beach. The night-soil is carted to the rubbish depots and buried in trenches.	A well was sunk and others repaired (Rs. 310); a tank was repaired and other improvements to water-supply effected (Rs. 2,222); latrines constructed and markets and slaughter-houses repaired. (Rs. 1,586); and Rs. 99 spent on fairs and festivals.	Rs. 2,152-11-0	Rs. 20,831-15-1
46		Tanjore.	29.3	Same as last reported. Except in the fort, where there is an elaborate system of masonry drains, there is no system elsewhere. The fort drainage system empties into the Vadavir. A few cess-pools exist where there are no drains.	One part of the town derives its supply from the Sivagunga tank and private wells and another part from the rivers Vadavir and Venner in the rainy season and from wells, tanks and springs dug in the river bed in the hot season. The water from the Sivagunga tank is brought into the town in covered masonry channels. The tanks reserved for drinking are guarded by watchmen. The new water works sanctioned by Government will shortly be proceeded with.	The rubbish and street sweepings are removed by contractors and deposited at the depots, the contractors being paid according to the quantity removed, and the collection is sold annually by auction. There are 28 public latrines in good condition and freely resorted to. The night-soil is removed daily in carts to a depot. Private scavenging is in force, but its extension is desirable.	A well was sunk (Rs. 462); drinking sources conserved and other improvements to water-supply effected (Rs. 801); a latrine and a market constructed (Rs. 420); drains, dust-bins and a market repaired (Rs. 1,110); and town-sites improved (Rs. 460); Rs. 79,000 were set apart for the new water-works.	Rs. 2,950-4-5	Rs. 14,021-3-2
47		Palamcottah.	28.2	Same as last reported. No system. A few masonry drains and side-cuttings carry off the town sewage. House sewage flows into street drains or cess-pools. Many cess-pools exist and many are in an unsatisfactory condition.	Obtained chiefly from Pollian channel, a branch of the Tambraparni, and during the hot weather from tanks fed by the channel and wells. The channel is subject to pollution in its course, but efforts are made to prevent contamination within municipal limits. The wells are watched over and boards also put up warning people against polluting the wells. Quantity sufficient.	Fairly well attended to. The street sweepings and contents of dust-bins are incinerated and the ashes used to mix with the night-soil. There are 8 latrines—6 pukka built and 2 brick-wall enclosures—on the dry earth-system. They are cleaned twice daily and their contents removed to a depot outside town limits and buried in pits. Private scavenging exists on a small scale, but the system is to be extended.	Rs. 100 were devoted to conservancy of water-supply and Rs. 390 to repairs to latrines, dust-bins, drains, markets and slaughter-houses.	Rs. 259-4-0	Rs. 3,090-6-9
48	Tinnevely.	Tinnevely.	24.756	Defective. Masonry drains are provided to many streets, but for a great portion of the town there are only side-cuttings. The drains have not a sufficient gradient. House drains flow into street drains or cess-pools. There are numerous cess-pools which are imperfectly cleaned.	From channels and tanks, and when these fail from the river and wells. The channels and a large tank are open to contamination. The temple tank and another on the eastern side are less contaminated.	Indifferent. The town rubbish is collected in dust-bins, whence it is removed to the night-soil depot and burnt in a cinerator, the ashes being used to mix with the night-soil. There are 20 latrines and their contents mixed with ashes are sold as manure. The sanitary condition of the town is on the whole unsatisfactory, and the system of conservancy, though somewhat improved, still leaves much to be desired.	Rs. 204 were devoted towards the improvement of water-supply, Rs. 956 towards the construction of latrines and dust-bins, Rs. 736 for repairs to latrines, a drain, markets and a slaughter-house, and Rs. 50 were spent in sanitary arrangements during fairs and festivals.	Rs. 786-2-0	Rs. 6,060-0-4

ABSTRACTS OF SANITARY REPORTS OF MUNICIPALITIES—continued.

Number.	District.	Municipality.	Population.	Death-rate.	Drainage.	Water.	Domestic cleansing and conservancy.	Measures taken to remedy the evils in each Municipality.	Net receipts from conservancy, 1892-93.	Net expenditure on conservancy, 1892-93.
49	Tinnevely—cont.	Tuticorin.	24,964	28.3	No system. Generally by side-cuttings. Masonry drains are provided to a few streets. These discharge into the sea, but they are not flushed. House sewage flows into the streets, street drains or into cess-pools. The cess-pools do not appear to be well looked after.	Obtained chiefly from a tank fed by the Tambraparni and a stream. Water from the tank is brought in an open channel to a reservoir, where it is filtered and then distributed in covered conduits. This source is not constant and is subject to much contamination. Wells are used when the ordinary supply fails. The reservoir is guarded by a watchman. The ordinary supply was inadequate.	The sweepings are generally carted to the rubbish depot outside town limits and incinerated, the ashes being used to cover the night-soil. There are 15 public latrines which are freely used and their contents are buried in pits.	Repairs to wells (Rs. 75); conservancy of drinking sources and other improvements to water-supply (Rs. 1,307); removal of prickly-pear and improvements to town-sites, such as filling up hollows, &c. (Rs. 162); construction of new iron latrines (Rs. 367) and dust-bins (Rs. 120); repairs to latrines and drains (Rs. 99). A water-supply scheme is under investigation.	Rs. 573-8-0	Rs. 6,095-6-4
50	Trichinopoly.	Strungam.	21,632	29.6	No system. Surface drains carry off storm water. Cess-pools exist. Some objectionable cess-pools were closed during the year.	Sources same as last reported, viz., the Cauvery Coleroon, Nattavakkal and wells. Six wells were set apart for drinking purposes, but Chemical Analysts having condemned the quality of 3 of them, the use of their water has been prohibited. These 6 wells are provided with platforms. There are no tanks.	Fairly well attended to. The town refuse is collected in dust-bins and removed in carts to the rubbish depot, where it is incinerated, the ashes being sold to ryots as manure. There are 50 public latrines which are in fair order and freely used by the people. The solid and liquid contents of latrines are removed daily to the "French Rocks," where they are buried for some time and eventually sold as manure. Private scavenging is in force.	Rs. 117 were spent in the conservancy of drinking sources and other improvements to water-supply, Rs. 462 in the construction and repair of latrines, and Rs. 14 in repairs to a dust-bin and markets.	Rs. 915-1-6	Rs. 6,556-13-0
51	Trichinopoly.	Trichinopoly.	89,666	25.7	No system for the town generally. One or two main roads are provided with masonry drain, but these are in bad condition, being choked with rubbish and covered over in places. A good system of drainage for the town is much required.	Bad, being open to all kinds of pollution. The chief sources are tanks and the Wayacandan channel, a branch of the Cauvery. The supply channels to the tanks are open to contamination. The Wayacandan channel is not reserved for drinking purposes. The new water scheme is now under execution.	The town refuse is collected in dust-bins and removed in carts to the rubbish depot, where it is incinerated, the ashes being sold to ryots as manure. There are 50 public latrines which are in fair order and freely used by the people. The solid and liquid contents of latrines are removed daily to the "French Rocks," where they are buried for some time and eventually sold as manure. Private scavenging is in force.	Improvement of water-supply (Rs. 4,324); construction of latrines, urinals, dust-bins, a drain and a market, (Rs. 1,352); and repairs to latrines, a drain, markets and slaughter-houses (Rs. 961).	Rs. 6,669-6-0	Rs. 31,723-10-7
52	Anakapalle.		17,001	34.2	Same as last reported. No system. A few streets have U and V shaped drains. Houses as a rule have no drains. A few cess-pools exist and they are said to be emptied daily.	Sources same as last reported, viz., the river, 2 tanks and public and private wells. One tank is reserved for drinking and watched by a peon. The tanks are rain-fed.	The town rubbish is carted outside town limits and burnt. There are 19 public latrines, 3 on the trench system. The night-soil is removed and buried at some distance from the town. The latrines are freely used, but neither they, nor their surroundings, are kept clean.	Rs. 39 were spent on improvement of water-supply, such as the sinking and repair of wells and tanks, and Rs. 533 on other sanitary works, such as the construction of drains and a slaughter-house and repairs to latrines and drains.	Rs. 58-2-0	Rs. 2,850-0-5

53	Vizagapatnam.	Vizagapatnam.	9,696	40.7	No change since last report. V, U and L shaped drains exist to carry off storm water. They are in good order and flushed daily. The street drainage flows into the sea. Two cess-pools exist and they are cleaned daily.	Good and ample. Chiefly from wells, all of which are set apart for drinking purposes, and provided with parapet walls, platforms and drains. There are 3 tanks, 1 of which is reserved for drinking. The conservancy overseers are supposed to see that the neighbourhood of wells are kept clean.	The street sweepings are partly incinerated and partly thrown into the sea. There are 3 pukka-built public latrines in good condition. They are freely used by the people.	Rs. 852 were spent in improvements to water-supply, such as the sinking and repair of wells and tanks, Rs. 57 in the construction and repair of drains, and Rs. 17 in improvements to town-sites, such as the removal of prickly-pear and rank vegetation and the filling up of hollows, &c.	Rs. 2,631-1-1	Rs. 11,158-2-4
54	Vizagapatnam.	Vizagapatnam.	53,961	33.3	V shaped drains are provided to the streets. There are about 20 cess-pools.	From tanks and wells. Three tanks and 48 public wells are used for drinking, but only 1 tank is guarded. The wells have parapet walls. Scarcity was felt during the year owing to failure of rains.	Refuse is collected and burnt in chertors. The night-soil is taken to depots and buried in shallow trenches. There are 73 latrines which are freely used. Private scavenging is in force.	Improvements to water-supply, (Rs. 929); construction and repair of latrines and drains (Rs. 1,465); construction of dust-bins (Rs. 27); repairs to a market and slaughter-house, (Rs. 144); and hire of conservancy carts, &c., and removal of prickly-pear (Rs. 1,204). Estimates for a water-supply scheme are under preparation.	Rs. 501-0-0	Rs. 779-11-10
55	Vizagapatnam.	Vizagapatnam.	80,735	22.2	No system. By stone drains and side-cuttings. House sewage flows into side drains. Cess-pools exist and two carts are employed in emptying them.	From tanks and wells. Four tanks are reserved for drinking purposes and guarded by watchmen.	The town refuse is removed, stored in pits and sold to ryots. There are 24 latrines which are freely used by the people. The night-soil is buried in pits outside the town.	Construction of tanks and wells and conservancy of drinking sources (Rs. 492); construction of dust-bins, (Rs. 71); repairs to latrines and drains (Rs. 441).	Rs. 1,501-14-3	Rs. 10,617-12-7
56	Madras.	Madras.	436,375	40.5	For the greater part of the town there is no system. Masonry surface drains exist in many parts. Some of the town sewage is utilized on grass farms and some finds its way into the river Cooum, which forms a sort of main sewer, and into the sea. Under-ground sewers exist in Black Town and the sewage is pumped to a grass farm some way off. Cess-pools exist, where there are no drains and they are in bad condition.	Chiefly from the Red Hills reservoir. The water reaches the town limits in an open channel and is distributed to the town in pipes. Quality moderately good. Wells are not much in request. There are a few private wells containing good water. Existing wells are provided with parapet walls and in some cases with platforms.	The rubbish is removed in carts to the depots and there covered with earth. There are 220 public latrines which are mostly in good condition and freely used. No information is given as to the disposal of night-soil, but probably the system is the same as last reported. The general sanitary condition of the town is unsatisfactory.	Conservancy to drinking sources and other improvements to water-supply (Rs. 13,582); construction and repair of latrines, dust-bins and drains (Rs. 18,385); repairs to slaughter-houses (Rs. 1,679); Rs. 536 removal of prickly-pear and rank vegetation and other improvements to town-sites and Rs. 34 on sanitary arrangements during fairs and festivals.	Rs. 9,695	Rs. 2,10,266

DISTRICT BOARDS.

75. The Madras Local Boards Act V of 1884 was in force in all the districts of the Presidency except Madras, which has an Act of its own (Act I of 1884 as amended by Acts VII of 1884 and II of 1892). The number of districts administered under the above Act was the same as in the previous year, viz., twenty-one, each being conterminous with the corresponding revenue district. The affairs of each district were managed by a Board, designated the District Board, consisting of not less than 24 members presided over by the Collector who, for purposes of the Act, was styled the President. Each District Board had subordinate to it a number of Taluk Boards and Union Panchayats.

Sanitary Works.—As usual the works undertaken and carried out during the year under report consisted in sinking and repairing wells, construction and repair of tanks, latrines, drains, dust-bins, &c., and improvement of village-sites and water-supply generally. The annexed statement describes the works executed in addition to showing the condition of each district in respect of its water-supply, drainage and conservancy and the death-rate per mille of population.

Water-supply, Drainage and Conservancy.—The sources from whence people had their supply of water were as usual either tanks, wells, ponds, rivers, springs or canals. Over a great many of these sources watchmen were placed to guard them from pollution, and a number of tanks and wells were cleaned and deepened. As regards drainage there had been no change in the system pursued. Side-cuttings, chiefly intended to carry off rain water, were the only means whereby villages were drained. Out of an aggregate of 44,622 villages, 910 were conserved against 862 in 1891. Of these, 330 were unions and 580 other villages, the corresponding numbers of the previous year being 272 and 590. As in the previous year Godavari took the lead, the number of villages conserved being 118, and the Nilgiris brought up the rear. In the annexed statement the number of villages conserved in each district is given distinguishing the unions from other villages.

76. The total estimated income of the districts for 1892-93 was Rs. 79,04,903 against Rs. 83,04,637 in 1891-92, and of this sum Rs. 6,31,741 or 8 per cent. was allotted for sanitary purposes. During the last nine months of the year 57.4 per cent. of the allotment was utilized. In no less than fourteen districts the assignment for sanitation was not fairly worked up to.

77. In the table appended are given in detail the amounts sanctioned under the several items of sanitation for 1892-93 and the amounts expended during the nine months ending with December 1892, an abstract of which is given below as well as that of the transactions for 1891-92:—

	1891-92 (for the full year).		1892-93.	
	Amount sanctioned.	Amount expended.	Amount sanctioned.	Amount spent in 9 months ending with December 1892.
	RS.	RS.	RS.	RS.
For conservancy	2,69,101	2,46,262	2,91,390	2,00,837
For improvement of village or town sites	53,129	39,386	43,637	20,456
For improvement of water-supply, cleansing, repairing and construction of tanks and wells	2,10,981	2,00,829	1,67,421	1,03,272
For sanitary arrangements during fairs and festivals	14,731	12,293	14,788	7,083
For construction and repair of markets and slaughter-houses	95,221	52,094	90,433	18,280
For other sanitary objects	40,951	30,908	24,072	12,807
Total	6,84,114	5,81,772	6,31,741	3,62,735

Statement showing the estimated Income and Allotment for Sanitation during the year 1892-93 in the District Boards of the Madras Presidency.

District Boards.	Population as per census of 1891.	Area in square miles.	Number of villages in the circles.	Number of villages conserved.		Estimated income of 1892-93.	Rate per cent. of allotment to estimated income.	Rate per cent. of sanitary expenditure to allotment.	1892-93.			
				Number of unions.	Number of other villages.				Sanitary allotment.		Conservancy.	
									Allotment.	Expenditure for 9 months ending December 1892.	Allotment.	Expenditure.
Anantapur ...	701,170	5,275	940	11	6	Rs. 1,15,630	14.0	52.3	Rs. 16,210	Rs. 8,472	Rs. 8,860	Rs. 6,070
Arcoot, North ...	2,091,393	7,616	4,461	15	24	3,94,650	9.4	61.0	37,094	24,717	21,218	16,087
Arcoot, South ...	2,096,677	5,217	2,895	10	20	3,41,985	13.8	57.9	47,067	27,259	16,228	10,075
Bellary ...	825,665	6,136	817	19	27	2,09,990	14.3	51.8	29,956	15,521	17,886	9,440
Canara, South ...	1,011,382	3,902	1,276	20	20	2,16,320	2.6	71.1	5,689	4,045	3,005	2,179
Chingleput ...	1,091,358	2,842	1,996	15	5	2,34,790	7.3	76.4	17,354	12,555	10,293	7,605
Coimbatore ...	1,934,926	7,860	1,475	23	31	3,29,920	9.5	52.7	31,271	15,479	13,967	10,496
Cuddapah ...	1,254,510	8,722	1,275	17	54	2,21,230	11.9	50.0	26,284	13,141	13,490	10,311
Ganjam ...	1,836,324	8,370	6,034	14	24	2,64,630	4.8	115.2	12,577	14,492	9,120	7,054
Godavari ...	1,980,215	7,857	2,600	14	104	6,28,905	12.4	47.1	77,828	36,554	18,682	10,804
Kistna ...	1,772,479	8,397	1,845	22	25	4,37,520	8.6	51.6	42,490	21,922	19,690	13,998
Kurnool ...	793,354	7,514	801	22	10	1,68,310	9.7	59.6	16,407	9,777	10,336	7,566
Madura ...	1,432,779	5,024	1,074	35	17	4,71,020	15.1	37.6	71,320	26,813	26,620	17,292
Malabar ...	2,463,078	5,585	2,240	38	38	4,66,980	2.3	72.3	10,885	7,873	5,800	4,410
Nellore ...	1,423,397	8,765	1,791	14	19	2,71,803	7.2	96.8	19,622	18,994	5,267	3,791
Nilgiris ...	77,188	957	50	7	1	1,32,620	1.6	91.1	2,190	1,996	1,190	984
Salem ...	1,861,843	7,529	3,808	29	* 21	3,34,150	10.8	60.7	36,007	21,872	20,860	13,162
Tanjore ...	2,015,850	3,709	3,545	18	20	15,89,170	2.9	59.6	33,200	19,797	24,450	16,921
Tinnevely ...	1,847,370	5,387	1,535	26	68	4,24,060	10.8	62.1	45,638	28,321	22,053	16,392
Trichinopoly ...	1,260,428	3,631	1,500	12	29	2,22,250	12.9	47.0	23,632	13,345	10,455	7,741
Vizagapatam ...	1,850,802	4,619	2,664	14	+ 11	3,68,970	6.8	71.1	24,020	17,990	11,920	8,459
Total ...	31,622,188	124,914	44,622	330	580	79,04,903	8.0	57.4	6,31,741	3,62,735	2,91,390	2,00,837

District Boards.	1892-93—continued.											
	Improvement of village-sites.		Improvement of water-supply, including cleaning, repairing and construction of tanks and wells.		Sanitary arrangements at fairs and festivals.		Construction and repair of markets and slaughter-houses.		Other sanitary objects, including construction and repair of latrines, dust-bins, drains, &c.			
	Allotment.	Expenditure.	Allotment.	Expenditure.	Allotment.	Expenditure.	Allotment.	Expenditure.	Allotment.	Expenditure.		
Anantapur ...	Rs. 910	Rs. 167	Rs. 1,820	Rs. 1,053	Rs. 320	Rs. 111	Rs. 3,000	Rs. 206	Rs. 1,300	Rs. 865		
North Arcot ...	895	2,016	6,398	5,326	798	266	6,742	644	1,043	378		
South Arcot ...	1,506	1,863	28,090	15,048	835	439	133	133	275	201		
Bellary ...	1,010	170	3,460	3,428	1,220	467	4,620	623	1,760	1,393		
South Canara ...	...	...	720	547	1,029	717	93	61	842	541		
Chingleput ...	2,904	2,188	2,401	1,795	1,341	1,040	...	...	415	627		
Coimbatore ...	1,441	648	9,313	3,613	765	206	4,828	1,136	957	380		
Cuddapah ...	1,150	519	* 6,686	1,348	310	169	4,010	680	638	114		
Ganjam ...	1,010	462	1,437	6,882	196	6	...	...	814	88		
Godavari ...	5,125	2,610	32,618	19,004	1,110	616	18,050	3,197	2,243	423		
Kistna ...	8,920	730	17,270	6,567	1,320	311	...	...	290	316		
Kurnool ...	2,295	450	2,741	1,618	745	75	...	...	290	68		
Madura ...	4,940	1,884	5,030	2,159	600	223	32,300	4,800	1,830	455		
Malabar ...	62	62	2,092	4,261	350	235	1,539	1,402	1,042	503		
Nellore ...	949	224	12,494	14,325	564	849	...	...	348	305		
Nilgiris ...	300	492	500	306	...	...	...	...	200	304		
Salem ...	2,365	1,243	8,848	4,863	417	181	2,574	1,709	943	714		
Tanjore ...	1,950	357	5,470	1,661	1,010	731	...	...	320	127		
Tinnevely ...	6,351	2,658	9,506	4,726	1,198	761	†	†	6,520	8,784		
Trichinopoly ...	1,254	378	4,037	1,883	120	50	11,844	2,818	922	475		
Vizagapatam ...	3,290	1,925	6,490	5,859	540	130	700	871	1,080	746		
Total ...	43,637	20,456	1,67,421	1,03,272	14,788	7,093	90,433	18,280	24,072	12,807		

1892-93—continued.

District Boards.	Improvement of village-sites.		Improvement of water-supply, including cleansing, repairing, and construction of tanks and wells.		Sanitary arrangements at fairs and festivals.		Construction and repair of markets and slaughter-houses.		Other sanitary objects, including construction and repair of latrines, dust-bins, drains, &c.	
	Allotment.	Expenditure.	Allotment.	Expenditure.	Allotment.	Expenditure.	Allotment.	Expenditure.	Allotment.	Expenditure.
Anantapur	Rs. 910	Rs. 167	Rs. 1,820	Rs. 1,053	Rs. 320	Rs. 111	Rs. 3,000	Rs. 206	Rs. 1,300	Rs. 865
North Arcot	895	2,016	6,398	5,326	798	266	6,742	644	1,043	378
South Arcot	1,506	1,363	28,090	15,048	835	439	133	133	275	201
Bellary	1,010	170	3,460	3,423	1,220	467	4,620	623	1,760	1,393
South Canara	...	...	720	547	1,029	717	93	61	842	541
Chingleput	2,904	2,188	2,401	1,795	1,341	1,040	...	...	415	627
Coimbatore	1,441	643	9,313	3,613	765	206	4,828	1,136	957	380
Cuddapah	1,150	519	* 6,686	1,348	310	169	4,010	680	638	114
Ganjam	1,010	462	1,437	6,882	196	6	...	...	814	88
Godavari	5,125	2,610	32,618	19,004	1,110	616	18,050	3,197	2,243	423
Kistna	3,920	730	17,270	6,567	1,320	311	...	...	290	316
Kurnool	2,295	450	2,741	1,618	745	75	...	...	290	68
Madura	4,940	1,884	5,030	2,159	600	223	32,300	4,800	1,830	455
Malabar	62	62	2,092	1,261	350	235	1,539	1,402	1,042	503
Nellore	949	224	12,494	14,325	564	349	...	...	348	305
Nilgiris	300	402	500	306	...	...	...	...	200	304
Salem	2,365	1,243	8,848	4,863	417	181	2,574	1,709	943	714
Tanjore	1,950	357	5,470	1,661	1,010	731	...	...	320	127
Tinnevely	6,361	2,658	9,506	4,726	1,198	761	...	...	6,520	3,784
Trichinopoly	1,254	378	4,037	1,883	120	50	11,844	2,818	922	475
Vizagapatam	3,290	1,925	6,490	5,859	540	130	700	871	1,080	746
Total	43,637	20,456	1,67,421	1,03,272	14,788	7,093	90,433	18,280	24,072	12,807

* This is exclusive of seven sanitary associations.

+ In addition to this five itinerating gangs were employed.

† Rs. 4,372 and Rs. 893, the allotment and expenditure on constructing and repairing markets, are respectively shown under miscellaneous public improvements, instead of under sanitation.

Number.	District.	Population.	Death-rate.	Drainage.	Water.	Domestic cleansing and conservancy.	Sanitary works.	General health.
1	Anantapur.	701,170	20.2	No system. By side-cuttings. Houses have no drains. Cess-pools exist.	Obtained from tanks, wells and rivers. Good and abundant. Wells are set apart for drinking and guarded by watchmen. Most wells are provided with parapet walls.	Refuse is collected in carts and deposited at some distance from the town, or sold by auction once a year. In some places they are removed by rickshas, but they are not much used, the people resorting to fields for purposes of nature. Sanitary condition unsatisfactory.	Nothing exceptional. Rs. 1,053 were spent on improvement to water-supply. Rs. 787 on the construction and repair of latrines and markets; and Rs. 522 on other improvements to village-sites, such as the filling up of hollows, &c. Sanitary arrangements during fairs and festivals valued and caused an increase in the deaths under "fevers."	The death-rate was 20.2 against 24.7 in 1891. Cholera was less severe than in the previous year. During the beginning of the year influenza prevailed and caused an increase in the deaths under "fevers."
2	Bellary.	825,665	26.7	No change since last report. No system. Surface drains exist to carry off storm water. House sewage flows into cess-pools. The cleaning of existing drains and cess-pools is attended to.	Same as last reported. Obtained from 2 rivers, tanks and wells. Certain tanks and wells are set apart for drinking purposes and are guarded by watchmen.	System same as last reported. The rubbish is removed outside village limits and periodically sold by auction or otherwise. There are 43 public latrines which are freely used, but in some tanks difficulty is experienced in getting scavengers.	A tank was dug for Rs. 1,873; 2 wells were sunk and 20 others repaired (Rs. 1,355); drinking sources conserved (Rs. 200); latrines, dust-bins, a drain market and slaughter-house constructed (Rs. 2,016); village-sites improved and sanitary arrangements made during fairs and festivals (Rs. 637).	The death-rate was 26.7 against 25.0 in 1891. Cholera prevailed in 1892 and influenza caused many deaths in the beginning of the year.
3	Chingleput.	1,091,858	22.9	Defective. Solely by side-cuttings. House sewage flows into streets and lanes thus contaminating the sub-soil. There are no cess-pools worth mentioning except the few in Pulicat and a large one at Sembium.	Lakes, tanks, wells, rivers and their channels are the chief sources. It was insufficient in quantity owing to drought. Wells and tanks are set apart for drinking purposes, but in some places they are not guarded against pollution. The surroundings of tanks and wells are on the whole in good condition and fairly free from pollution.	In most towns and villages the refuse is deposited in places some distance from the town and used as manure, but where conservancy establishments are maintained it is removed daily in conservancy carts and sold by auction from time to time. Latrines exist in only 3 unions and they are freely used and kept in good condition.	Several wells were sunk and others repaired (Rs. 1,000); many tanks were repaired, conserved and other improvements to water-supply effected (Rs. 381); and sanitary arrangements made during fairs and festivals. A sum of Rs. 637 was spent during the cholera epidemic.	The death-rate was 22.9 in 1892 against 28.1 in 1891. Cholera was prevalent throughout the year.
4	Cumbalure.	1,931,926	18.0	No regular system. The existing drains or side-cuttings are in an unsatisfactory condition with sewage stagnant in them. Cess-pools exist in some villages, but they are never cleaned.	From rivers, wells and tanks. The rivers and tanks are dry for several months of the year. Wells are largely used, but the quality of the water in them is not as a rule, wholesome. Some of the wells are provided with parapet walls and platforms. Several old wells were improved and new ones sunk.	The rubbish is removed daily in hand-carts by the conservancy establishment to depôts, where it is partly burnt and partly sold as manure. The main thoroughfares are kept fairly clean, but the vacant spaces skirting them are in unsatisfactory condition.	Sinking and repair of wells (Rs. 3,280); conservancy of drinking sources and other improvements to water-supply (Rs. 338); removal of prickly-pear and rank vegetation (Rs. 648). Construction of dust-bins (Rs. 200); repairs to markets and a latrine (Rs. 1,148); and sanitary arrangements during fairs and festivals, (Rs. 206).	The death-rate in 1892 was only 18.0 against 21.2 in 1891. Cholera prevailed during the first half of the year.

5	Cuddapah.	1,254,510	24.0	No system. By side-cuttings. V and U shaped drains exist in Madanapalle. Drainage water flows into fields. House sewage flows into cess-pools which are said to be emptied by house-owners when full.	From wells, rivers and tanks. Good and abundant. In almost all towns and villages wells or tanks are set apart for drinking purposes. In some villages wells are guarded against pollution.	Sweepings, &c., from streets and latrines are deposited outside the town or village and sold annually by auction. There are 116 latrines kept in good condition and freely used.	Improvement of water-supply. (Rs. 1,348); removal of prickly-pear and other improvements to village-sites, such as filling up of hollows, &c. (Rs. 331); sanitary arrangements during fairs and festivals, (Rs. 169); construction of a dust-bin and markets (Rs. 543); and repairs to latrines, dust-bins, drain, markets and a slaughter-house (Rs. 251).	The death-rate was 24.0 in 1892 against 22.3 in 1891. Fever was very prevalent in 1892 and caused many deaths. Cholera also prevailed.
6	Ganjam.	1,886,324	13.9	No system. By side-cuttings. Cess-pools exist and they are not always kept in a good condition.	From tanks, wells and rivers. Fair in quality and abundant in quantity. Twenty-eight wells and 6 tanks are reserved for drinking; some of which are guarded by watchmen.	In conserved villages the refuse is removed outside village limits and sold by auction. Sixteen temporary latrines were provided for the use of the people.	Wells were sunk and repaired (Rs. 2,544); tanks were repaired (Rs. 3,598); drinking sources conserved and other improvements to water-supply effected (Rs. 740); prickly-pear removed and other improvements to village-sites effected (Rs. 322); dust-bins were constructed and repaired and sanitary arrangements made during fairs and festivals (Rs. 94).	The death-rate was 13.9 in 1892 against 9.5 in 1891. Cholera prevailed in 1892 and many deaths were registered from fevers.
7	Goddavari.	1,980,215	26.8	Natural. The main roads in some of the unions have side-cuttings to carry off storm water, but they are often choked with rubbish.	From the Godavari and its canals, wells and tanks. A few wells and tanks in the unions are reserved for drinking purposes. The river and canals in some places are subject to pollution by burning and burying dead bodies on their banks.	Same as last report. The village refuse and sweepings are thrown in the fields. Latrines are provided in some of the unions, but most of the latrines are in bad repair and require looking after. Fields and waste lands are used in the villages for purposes of nature. More scavengers are required in some places.	Ra. 19,004 were spent on improvements to water-supply, such as the construction and repair of tanks and wells, conservancy of drinking sources and other minor improvements; Rs. 533 on improvements to village-sites, such as removal of prickly-pear and filling up of hollow places, &c.; Rs. 3,284 on the construction of latrines, drains, and markets; and Rs. 75 on repairs to latrines, drains, a dust-bin and a slaughter-house; Rs. 616 were devoted to sanitary arrangements during fairs and festivals.	The health was unsatisfactory. Cholera and small-pox prevailed and proved fatal in many cases.
8	Kistna.	1,772,479	27.8	Natural, and in places where the ground is hilly, very good. Drainage of houses fair. No cess-pools.	The chief source is the river Kistna, and the quality of the water is said to be fairly good. Surface wells and tanks, some of which are reserved for drinking, are also used. Divisional officers and village heads see that drinking sources are not polluted.	In conserved villages and unions the rubbish is removed outside the village or town and sold as manure or burnt. Public latrines exist, most of them for females only as the men prefer the open fields. The night-soil is buried in pits outside the town or village. As a rule the latrines are in bad state of repair.	Some wells were sunk and others repaired (Rs. 3,639); tanks were repaired (Rs. 970); drinking sources were conserved and other improvements to water-supply effected (Rs. 1,958); prickly-pear was removed and other improvements to village-sites, such as the filling up of hollows, &c., effected (Rs. 539); (Rs. 311) were spent on sanitary arrangements during fairs and festivals.	Unsatisfactory, owing chiefly to the prevalence of small-pox, cholera and fevers.
9	Kurnool.	793,354	34.5	Except in a part of Nandyal there is no system. In some places drainage is natural. Drainage water finds its way into adjoining nullahs and streams or stagnates in the streets. House sewage finds its way into streets. Some houses have cess-pools.	Obtained from rivers, springs, tanks and wells. Good and abundant. River water is generally used for washing and that from the other sources for drinking and cooking. Precautions are taken to protect wells used for domestic purposes from pollution. Some of the wells have parapet walls and platforms.	The street and house sweepings are collected in depôt outside the town or village and used as manure or burnt. Public latrines exist, most of them for females only as the men prefer the open fields. The night-soil is buried in pits outside the town or village. As a rule the latrines are in bad state of repair.	Improvement of water-supply (Rs. 1,618); repairs to latrines and a drain (Rs. 68) and sanitary arrangements during fairs and festivals (Rs. 75).	Unsatisfactory, mainly owing to the prevalence of cholera and fevers.

ABSTRACT OF SANITARY REPORTS OF LOCAL FUND CIRCLES—continued.

Number.	District.	Population.	Death-rate.	Drainage.	Water.	Domestic cleansing and conservancy.	Sanitary works.	General health.
10	Madura.	1,432,779	18.6	Almost natural. Cess-pools exist, but their number is diminishing yearly.	Obtained from rivers, tanks and wells, but chiefly from tanks. Wells in the southern part of the town are mostly brackish. There is generally a good tank and 2 or 3 wells nominally set apart for drinking in each town. The tanks are usually guarded by watchmen and the drinking-water wells are provided with parapet walls and platforms.	The refuse and sweepings are either first deposited in dust-bins and removed outside the town and sold or deposited in pits outside the town or carried to adjacent waste lands to be eventually used as manure. Latrines exist in some places. In large towns they are freely used, but in small towns and villages people prefer the fields.	Improvement of water-supply, such as the repair of tanks and wells, conservancy of drinking sources, &c. (Rs. 2,159); removal of prickly-pear and other improvements to village-sites (Rs. 176); construction and purchase of dust-bins (Rs. 199); repairs to latrines and markets (Rs. 4,881) and sanitary arrangements during fairs and festivals (Rs. 228).	The death-rate in 1892 was 18.6 against 23.0 in 1891. General health on the whole good, with the exception of cholera, which was prevalent in all taluks in the early part of the year.
11	Malabar.	2,463,078	22.5	No regular system. Temporary drains are cut on either side of the road to carry off storm water. Drainage of houses flows into backyards where they either soak into the ground or empty into cess-pools from pollution.	Is obtained as usual from wells, tanks and river. Water for drinking purposes is obtained from wells, of which there is one in each house, but they undergo pollution, being unprotected. There are 68 public wells and a tank set apart for drinking purposes which are guarded from pollution.	The sweepings of the conserved villages are collected and carried to some selected spots, where they are either burnt or buried to be eventually sold as manure. In non-conserved villages they are stored in backyards by the ryots themselves and removed to fields when required.	A few wells were sunk (Rs. 760); a tank and some wells repaired (Rs. 72); and other improvements to water-supply effected. Rs. 68 were spent in the removal of prickly-pear and rank vegetation. A few latrines and markets were constructed (Rs. 748). Some latrines and dust-bins and markets also were repaired at a cost of Rs. 1,027.	Unsatisfactory, owing to the prevalence of small-pox, cholera and fevers.
12	Nellore.	1,423,397	19.9	No system. Side-cuttings exist in large villages. House sewage flows into streets or side-cuttings where it is allowed to remain. Cess-pools exist, but they are not on approved plans and contain much filth.	From rivers, tanks, irrigation channels and wells. Quantity abundant.	In union villages the rubbish is carried to convenient places on the outskirts and sold as manure after some time. In other villages it is stored in backyards and taken to the fields when required. Sweepers are employed in unions, but owing to lax supervision their work is very perfunctorily done. Elsewhere street conservancy is left to take care of itself. Latrines exist in only two places, but they are not popular and open fields are resorted to.	Wells were sunk and repaired. (Rs. 5,859); tanks repaired (Rs. 3,440); drinking sources conserved and other improvements to water-supply effected (Rs. 5,026); prickly-pear removed (Rs. 224); latrines constructed and repaired (Rs. 257) and dust-bins constructed and sanitary arrangements made during fairs and festivals (Rs. 397).	The death-rate was 19.9 in 1892 against 16.7 in 1891. Cholera and fevers were prevalent in 1892.

CIVIL.

LOCAL FUND CIRCLES.

Number.	District.	Population.	Death-rate.	Drainage.	Water.	Domestic cleansing and conservancy.	Sanitary works.	General health.
13	Nalgonda.	77,188	25.1	Natural. No cess-pools	From streams, springs and wells. Quality indifferent on the whole. A spring at Gúdālār supplies good water, but the quantity is insufficient. The springs and streams which supply Kōttāgiri and the villages in its neighbourhood contain good water, but the other sources in the district are subject to pollution. Two wells in Gúdālār are provided with parapet walls.	In Kōttāgiri the sweepings are mixed with the night-soil and the compost disposed of by sale. In Gúdālār, Pundālār and Devala they are sold. In Gúdālār the night-soil is buried in pits. Latrines exist only in Kōttāgiri and Gúdālār.	A well was repaired and other improvements to water-supply effected (Rs. 306); a drain and dust-bins were constructed (Rs. 195), and latrines repaired and other improvements to village sites, such as filling up of hollows, &c., carried out (Rs. 421). Rs. 250 were allotted for the sinking of a new well.	The death-rate was 25.1 in 1892 against 23.4 in 1891. Fever was prevalent.
14	North Arcot.	2,091,393	18.1	Same as last reported. No system. The main streets are fairly drained. House drains are connected with street drains and the sewage flows into fields, open spaces or into cess-pools. Cess-pools exist, which, in some instances, are said to be cleaned when full and in others but rarely.	From river springs, tanks and wells. Of variable quality, being good in some places and bad in others. In the larger towns tanks and wells are set apart for drinking purposes and guarded against pollution.	In the larger towns the rubbish is carted away to the outskirts and sold as manure, but in the smaller villages it is stored in backyards or on the outskirts and the accumulation carried to the fields. There are 40 public latrines, but the number is insufficient. The latrines are not freely used, as people prefer defecating in fields, open spaces and prickly-pear bushes. Only large towns and unions are provided with regular conservancy establishments.	Construction and repair of tanks and wells (Rs. 1,902); conservancy of drinking sources and other improvements to water-supply (3,424); removal of prickly-pear and rank vegetation and other improvements to village sites (Rs. 834); construction of latrines, dust-bins and markets (Rs. 705); repairs to latrines, markets and a slaughter-house (Rs. 317); and sanitary arrangements during fairs and festivals (Rs. 269).	Satisfactory with the exception of cholera and small-pox which prevailed.
15	Salem.	1,861,843	18.4	No system. Mere surface drains exist in most streets and these are much neglected, being choked with silt and rubbish. House drains flow into street drains or into cess-pools. Cess-pools abound and they are never cleaned out.	Sources same as last reported, viz., from step and draw wells, tanks and rivers. Quantity was sufficient in some places and insufficient in others. In some places tanks and wells are set apart for drinking purposes and guarded by watchmen.	The rubbish is collected in dust-bins and removed to selected sites, where it is stored and sold annually or as demand arises. In some places it is unsaleable. There are 28 public latrines which are kept in fairly good order and freely used by the people. Pigs do a great deal of the scavenging.	Construction and repair of tanks and wells (Rs. 4,199); conservancy of drinking sources, &c., (Rs. 664); construction of latrines, a drain and markets (Rs. 1,681); repairs to drains and markets (Rs. 439); and removal of prickly-pear and sanitary arrangements during fairs and festivals (Rs. 700).	Was on the whole fairly satisfactory, with the exception of cholera which prevailed in the first half of the year.
16	South Canara.	1,011,892	21.9	Natural. No cess-pools	From wells and a few tanks. In the hot season streams and rivers are also used. The public wells are provided with parapet walls and platforms and are generally well situated, but the surroundings of private wells are very unsatisfactory, and in many cases there are no walls or platforms.	Fairly well attended to where conservancy establishments are employed. The rubbish is removed to depots and burnt and sold in some cases, while in others it is sold before burning. Latrines are provided in seven places, but they are not much used in some places. The night-soil is buried. The latrines should be more conveniently situated to be popular.	Nothing important. Wells were sunk and repaired (Rs. 647) and latrines, dust-bins and markets repaired (Rs. 85). Rs. 1,234 were spent on arrangements during fairs and festivals and other sanitary objects.	Unsatisfactory. Cholera and fevers were prevalent and caused many deaths.

Number.	District.	Population.	Death-rate.	Drainage.	Water-supply.	Domestic cleansing and conservancy.	Sanitary works.	General health.
17	South Arcot.	2,096,677	18.7	House drains for the most part discharge into back-yards. In some cases they discharge into street channels also. In the unions drainage is by side channels.	The chief sources of supply are rivers, wells, rain-fed tanks, ponds, channels, and springs. Some of the sources are reserved for drinking purposes.	Same as last reported. The rubbish is generally removed to convenient places outside the villages and sold. Conservancy establishments are maintained in ten unions and twenty villages. There are 10 latrines in the Paurati union and 4 in the Tirukkyildar union. They are freely used by the people, but the night-soil is not sold as manure.	A few tanks dug (Rs. 1,069) and others repaired (Rs. 12,347). Rs. 355 were spent in the sinking and repair of certain wells. Some other improvements also were made (Rs. 1,277) and prickly-pear and rank vegetation removed (Rs. 294). Rs. 334 were spent in the construction of a few dust-bins and a market and in the repair of certain latrines.	On the whole satisfactory.
18	Tanjore.	2,015,850	25.4	No system. By side-cuttings. In some places drainage appears to be satisfactory to some extent. House sewage flows into back-yards.	From the river Canvey and its branches and tanks and wells. Springs dug in the river bed are used when the rivers run dry. Thirty-four tanks and 25 wells were reserved for drinking and guarded by watchmen; supply was adequate on the whole.	In all important towns and villages the sweepings are removed to selected sites and sold either before or after burning as manure. In other places the sweepings, &c., are given to scavenging cart contractors. Latrines exist in three places, and most of them are freely used. The night-soil is removed in carts to appointed places and buried. The want of latrines in other places is not felt, the people resorting to fields and open ground for purposes of nature.	Improvement of water-supply (Rs. 1,681); purchase of dust-bins (Rs. 85); sanitary arrangements during fairs and festivals (Rs. 768); and filling up of hollows, &c. (Rs. 228).	Was unsatisfactory, as cholera prevailed in a severe form.
19	Tinnevely.	1,847,370	21.8	Defective and without system. Some towns and villages possess pukka drains and some mere side-cuttings. House slops flow into streets and backyards, where it soaks into the soil or into street drains or cess-pools, which latter abound in many of the larger towns.	From rivers, tanks, channels and wells. All but the last source are subject to pollution. A few tanks in larger towns are reserved for drinking purposes in the hot weather. In a few cases watchmen are employed, but bathing and washing are allowed.	In unions and conserved villages the sweepings, &c., are collected in dust-bins and removed in carts or wheelbarrows to depots outside towns or village limits, where they are sold by auction either before or after incineration; and in some villages they are stored in open spaces and hollow places within village limits. In non-conserved villages the refuse is stored in backyards or near habitation and eventually removed by the	Construction and repair of wells and tanks (Rs. 4,318); conservancy of drinking sources and other improvements to water-supply (Rs. 408); improvement of village-sites, such as the removal of prickly-pear and filling up of hollows, &c. (Rs. 1,000); construction and repair of latrines, dust-bins and drains (Rs. 1,265). Rs. 3,280 were spent on sanitary arrangements during fairs and festivals and construction and repair of conservancy and sewage carts, &c.	On the whole fairly satisfactory, with the exception of cholera which was prevalent for nine months.

20	Tiruchinopoly.	1,260,428	19.4	Generally natural. Side-cuttings exist in some villages to carry off storm water.	Obtained from the Cauvery and its channels, tanks and wells. In some places tanks and wells are reserved for drinking purposes and guarded by watchmen. Some of the tanks are subject to pollution.	villagers to fields as manure. There are about 30 latrines, most of which are in good order; the night-soil is buried in pits outside town limits.	Improvements to water-supply, such as the sinking and repair of wells and tanks, conservancy of drinking sources and other minor improvements (Rs. 1,383); removal of prickly-pear and sanitary arrangements during fairs and festivals (Rs. 155); construction of dust-bins, markets and a drain (Rs. 2,827); and repairs to drains, markets and a latrine (Rs. 144).	Fairly good.
21	Vizagapatam.	1,850,802	21.2	No system. By side-cuttings generally. Some of the union streets are partly provided with U and V shaped drains; other drains are being constructed; cess-pools exist, and they are cleaned occasionally.	From rivers, tanks and wells. Tanks and wells are set apart for drinking and said to be guarded by watchmen.	The sweepings are partly incinerated and partly stored and sold periodically. Latrines exist in all the unions, but many of them are inconveniently situated and not freely used. The night-soil is removed and buried.	Improvements to water-supply (Rs. 5,859); construction and repair of latrines and markets (Rs. 144); construction of drains (Rs. 237); and removal of prickly-pear and rank vegetation and other improvements to village sites, such as the filling up of hollow, &c. (Rs. 1,415). Rs. 130 were spent on sanitary arrangements during fairs and festivals.	Unsatisfactory. Cholera prevailed and many deaths were registered from fevers.

ABSTRACT OF THE SANITARY ESTIMATE OF VILLAGES IN EACH OF THE REGISTRATION CIRCLES FROM WHICH REPORTS WERE RECEIVED.

Districts.	Taluk or Registration Circle.	Water-supply.	Drainage.	Conservancy and Domestic Cleansing.
Anantapur.	Anantapur ..	The majority of the villages obtain their water-supply from wells and tanks. The river Chitravathi is used by villages adjoining it. Scarcity was felt in some villages in the early part of the year. All the wells are draw-wells, and many of them are not provided with parapet walls or platforms.	No system	No change since last report. In five villages sweepers are employed to clean the streets. In the others, houses and streets adjoining them are cleaned by the owners themselves. House refuse is stored in pits outside the village and carted to fields once or twice a year.
	Gooty and Tadipatri ..	From rivers, irrigation channels, wells, springs dug in the beds of rivers and tanks. Quality and quantity fair on the whole, though a slight difficulty was felt in the beginning of the year before the setting in of the south-west monsoon. In some places watchmen are employed to guard drinking sources.	Defective, except in the main streets of three villages. Drainage water flows into streams, channels or ponds. Cess-pools exist in large towns.	Conservancy establishments were maintained in seven villages. The sweepings from those, with three exceptions where the rubbish was allowed to be taken gratis by the ryots, were removed to a distance and sold by auction. In the other villages the refuse from houses and backyards were either removed by owners at intervals to the fields or deposited till fit for use as manure. Public latrines exist in eleven villages, and in six of them the night-soil is removed by Taluk Board scavengers and buried, while in the others the villagers keep the latrines clean at their own expense.
	Pennakonda, Dharmavarum, Huddipuri and Madakshera.	From tanks and wells. Abundant, except in a few villages. No special steps are taken to conserve drinking wells. Many of the draw-wells have parapets, but the step wells are unprotected. Proposals to permanently reserve a tank in Pennakonda for drinking have been submitted.	No system. A few drains exist in cubsas.	Scavenging establishments were maintained in six towns where there are unions. Public latrines exist only in head-quarters. Where there are no latrines people resort to open places, &c., for purposes of nature, and pigs do the scavenging. Private latrines are cleaned at the expense of the owners.
	Belhary ..	Information meagre. Some people use step wells for drinking and washing also. In black-cotton-soil villages the water is brackish. Steps were taken to prevent washing in the drinking-water wells.	No information	The union villages are kept clean. In the villages people collect manure heaps in the vicinity of dwelling houses and feed pigs.
	Alur ..	From wells. Supply generally not good	In some villages all waste water from houses is collected and given to cattle.	Information meagre. Sanitary arrangements in the cubsas and some other villages good.
	Hospet ..	From wells, river and tanks	There are no drainage works. Water used for bathing and culinary purposes is allowed to stagnate in pits covered with stone slabs, and in some cesses flows into the street.	No system. The union villages are kept clean, but the other villages are in an insanitary condition. Dung and manure heaps exist in close proximity to human dwellings, and cattle are picketted in side houses. People resort to fields for purposes of nature. Some private privies exist in Hospet.
	Adoni ..	Information vague. Probably from wells and river	No information	Where sweepers are employed the places are kept clean. In the other villages sanitation unsatisfactory.
	Kadlgi ..	Chiefly from tanks. Quality unwholesome. Scarcity was felt till April owing to drought.	....	Sweepers are employed and latrines constructed in the two union villages. In the other villages people resort to fields, &c., for purposes of nature. Sites for latrines have been selected in villages having a population of more than 500.

Bellary.	Harpanahalli ..	The chief sources are tanks, wells and ponds. The river Tungabhadra is used by villages bordering on it. The tanks and ponds afford sufficient water throughout the year. Sources are set apart for drinking and looked after by village officers.	No change. Natural. Side drains exist in Harpanahalli, and in the bazaar road where market is held slab-drains were constructed during the year from market funds.	Sweepers are employed in five (2) villages. In Harpanahalli town the sweepings are collected in dust-bins and removed daily in carts and sold as manure. There are five latrines in Harpanahalli which are freely used. In rural tracts the streets, &c., are kept clean by the village madigas, pigs and buffaloes doing the scavenging.
	Hadagally ..	No information. Steps are being taken for the improvement of water-supply.	No information	Sanitary arrangements exist in two unions, and conservancy is said to be conducted satisfactorily.
	Sandur State ..	No change. From wells, river and jungle streams. When wells run dry pits dug in the beds of streams are used; generally wells have no parapet walls, and very few have stone platforms and drains. Draw-wells are set apart for drinking purposes.	No change. Natural and good. Rain and bathing water from houses flow into streets or into cess-pools. There are 688 cess-pools spread over fourteen villages, and they are emptied once or twice a year.	Same as last reported. Conservancy arrangements exist only in Sandur. There are no public latrines, as people prefer resorting to fields for purposes of nature. Twelve private latrines are cleaned by scavengers in Sandur. Cess privies also exist in Sandur and another village. Stable droppings, cow-dung, &c., are carefully stored and used as manure. The state, on the whole, is reported to be fairly clean.
Chingleput.	Tiruvallur ..	Tanks, ponds, wells and river-channels. Quality generally good, but quantity proved insufficient in most of the villages for want of rains; sources not reserved for drinking purposes. The wells in towns have parapet walls, platforms and drains. All the tanks are surface-fed and are surrounded by cultivated lands.	Sewage from houses flows into streets and backyards. During the monsoon side channels are cut by the villagers. In Tiruvallur there are cess-pools which are emptied twice or thrice a week.	Three villages were conserved. The sweepings and rubbish are stored outside the villages and sold. The streets and houses of other villages are cleaned by the inhabitants themselves, and the sweepings used as manure to their fields. There are public latrines in the town of Tiruvallur.
	Ponnéri ..	Rivers, tanks, ponds and wells. Quality indifferent and quantity in most parts insufficient from want of rains; sources are not reserved for drinking purposes alone. Most of the wells have parapet walls and some of them platforms and drains. The tanks and ponds are all surface-fed and surrounded by cultivated lands.	Mostly natural. House-drainage flows into either streets or backyards. Cess-pools exist in a few places, and they are cleaned out as often as necessary.	Three villages were conserved. The sweepings are deposited outside the villages and sold. The inhabitants of other villages clean their houses and streets and utilize the sweepings in manuring their fields. Private privies exist in Ponnéri and Pulicat, which are kept clean.
	Saidapet ..	Tanks, springs, wells, rivers and channels. Quality good. Most of these sources failed in several places during the year owing to the want of rains. In several places the sources of water used for drinking purposes are protected by the villagers from pollution. At Avdi one tank has a watchman. In most places the wells have parapet walls, and in important places they are provided with platforms and drains also. The ponds are generally surface-fed and are surrounded by cultivated lands.	In the villages of Saidapet, Sembiem, Tiruvotiyur, Poonamallee, Red Hills and Kunnathur side-channels have been cut at public expense, while in some others the villagers themselves are having them cut. In the Cantonments of St. Thomas' Mount, Pallavaram and Poonamallee masonry drains have been built.	In six villages conservancy establishments were maintained. The street sweepings and the contents of latrines were deposited outside the towns and sold. There are public latrines at Saidapet.
	Chingleput ..	The Palar and its channels, tanks, ponds and wells. Quality generally good and the quantity sufficient. In the towns of Chingleput and Tiruppur the ponds and wells reserved for drinking purposes are guarded by watchmen, while in other important villages they were looked after by the village servants. In Chingleput and other important villages the wells have parapet walls, platforms and drains. In some of the important villages ponds are masonry built and are cleaned at convenient times. The ponds are generally surface-fed, and are surrounded by cultivated lands.	Some of the streets in the town of Chingleput have masonry drains, while in others and in the streets of Tiruppur side-channels are cut. In other villages natural. The house-drainage flows into backyards. There is a cess-pool near the Local Fund chattram in Chingleput, which is emptied daily.	Three villages were conserved, and the sweepings deposited outside the villages and sold by public auction. The others were kept clean by the villagers themselves, the sweepings, &c., being used as manure. There are public latrines in the town of Chingleput.

ABSTRACT OF THE SANITARY ESTIMATE OF VILLAGES IN EACH OF THE REGISTRATION CIRCLES FROM WHICH REPORTS WERE RECEIVED—continued.

Districts.	Towns or Registration Circles.	Water-supply.	Drainage.	Conservancy and Domestic Cleansing.
Chingleput—cont.	Madurāntakam ..	Pār with its channels, Kullar, tanks, ponds and wells. Quality generally good, but quantity insufficient in some parts during the summer. Many wells have parapet walls, while a few of them are provided with platforms and drains. The ponds are rain-fed and are surrounded by cultivated lands. The tanks are mostly provided with stone revetments. Tanks, wells and ponds were the chief sources of water-supply. The quality is not particularly good. Quantity is insufficient during the summer. Only wells are set apart for drinking purposes, and they are generally protected with parapet walls and provided with platforms, but drains are rare. Some of the tanks are spring-fed and some rain-fed, but most of them surrounded by cultivated lands.	Natural. The side-channels of Madurāntakam, Oothramallur and Karungudi have masonry revetments.	Four villages were conserved and the sweepings of these villages were sold by public auction. The rubbish and refuse of streets and houses in other villages were used as manure by the inhabitants. No public latrines.
	Conjeevaram ..	Tanks, wells and ponds were the chief sources of water-supply. The quality is not particularly good. Quantity is insufficient during the summer. Only wells are set apart for drinking purposes, and they are generally protected with parapet walls and provided with platforms, but drains are rare. Some of the tanks are spring-fed and some rain-fed, but most of them surrounded by cultivated lands.	Natural. In a few low-lying villages pits are dug instead of cess-pools and are not emptied.	Two villages were conserved. The streets and houses are daily swept by the inhabitants. The sweepings are used as manure. Dust-bins are provided in the streets of Saperumbudūr and Walajabad. People resort to fields for purposes of nature.
	Coimbatore ..	Same as last report. From wells, tanks, ponds, rivers, channels, &c., and jungle streams. Wells in certain villages are set apart for drinking. Parapet walls, platforms and pulleys are provided to some of the draw-wells.	No change. Side-drains exist in some places, which lead to adjacent jungle streams or ditches. House sewage flows into backyards, low places, &c., where it soaks into the soil.	No change. Sweepings, cow-dung, &c., are stored in backyards and other places and used as manure. Scavenging establishments exist in big villages. There are no cess-pools, but pits here and there in which sewage water collects. Public latrines exist in Mettupālaiyam, but in other villages people resort to waste lands, &c., for purposes of nature.
	Erode ..	Sources same as last reported, viz., rivers, wells, tanks, channels and jungle streams. With one exception the water from the other sources is wholesome. Wells only are set apart for drinking. Wells are protected by parapet walls or hedges.	Natural	In the conserved villages, of which there are four, sweepers clean the streets and remove the street and house refuse. In the other villages the people themselves keep their houses clean and the Munsif and Monégars attend to street conservancy. The sweepings are used as manure.
	Satyamangulam ..	From wells, the Bhavāni river and its channels. Tanks and streams are used on the hills. Good and sufficient.	No system	Conservancy establishments are maintained in the unions and some of the villages. The refuse, manure, &c., are stored on the village site. There are no latrines or dust-bins.
Pottore.	Pollachi ..	From wells and jungle streams. Except in some parts where scarcity was felt, the supply was generally sufficient.	Same as last reported. Natural. Artificial drains exist in some places, but they are not properly looked after.	Same as last reported. Five villages are conserved and the sweepings taken to a distance and burnt or sold by auction. In these villages the refuse from houses is thrown in the streets to be removed by the Local Board servants. In the other villages the sweepings are stored in backyards to be used as manure. The contents of public and private latrines at Pollachi are taken to a distance and buried.
	Palladam ..	From wells chiefly. The river Noyel and its channels, tanks and jungle streams are used in some villages. In several villages one or two wells are set apart for drinking purposes.	Natural	Seven villages are conserved, and the house and street sweepings in these are removed by the Local Board scavengers. In most other villages the refuse is stored and utilized as manure. Public latrines exist in two villages and they are cleaned by the union scavengers. People generally resort to the village common, &c., for purposes of nature.

Coimbatore.	Bhavāni ..	From rivers, jungle streams, tanks and wells. No law is in force to guard them against pollution.	No system. House sewage soaks into the soil. There are no cess-pools, but pits formed by removing earth for houses, &c., exist in some villages in which rain water collects.	Bhavāni town has a conservancy staff, and in Audiūr a sweeper is employed. The other villages are kept clean by the village officers and the Tahsildar. There are twelve public latrines and also private ones in Bhavāni.
	Kollegal ..	From wells, tanks, rivers and jungle streams. Sufficient on the whole. Generally no systematic measures are adopted to keep the sources from pollution. A tank at Kollegal is set apart for drinking and guarded. Except water from the Cauvery and some wells the water of the taluk is not good.	Natural. Cess-pools exist, and they are seldom or never cleaned.	The public streets and latrines are cleaned by the sanitary establishment employed by the union. The street sweepings are carried to a distance and burnt, while the night-soil is buried.
	Udamalpet ..	From the river Amarāvati and its channels and wells. The sources are generally kept pure and free from contamination. In Udamalpet town the well and a tank are guarded by union servants. The tank is subject to pollution.	No system. Side-cuttings exist in some villages.	Sanitary establishments are employed in Udamalpet town and two other villages. In Udamalpet the refuse is stored in a selected spot and sold annually. Public latrines exist in Udamalpet, and their contents are removed by sweepers to a distance and buried.
	Karūr ..	From rivers, streams, tanks and wells	No system. House sewage flows into backyards and is absorbed. No cess-pools.	No change. The houses and their compounds are frequently cleaned, the sweepings are thrown at a distance from houses or taken to the fields for use as manure. There are no dust-bins or latrines except in the unions.
	Dhārāpuram ..	From the river Amarāvati and its channels and wells. Most wells are Local Fund wells, and are protected by walls or fences. The village officers are strictly enjoined to see that they are not contaminated.	No system. Side-cuttings exist in the bazaar streets.	Sanitary establishments are employed in unions to clean the streets, &c. The sweepings are removed daily to the six aerators. Domestic cleansing is attended by the people themselves.
Cuddalore.	Badvel ..	No sources set apart for drinking purposes. As usual tanks, wells, rivers and channels are resorted to. No arrangements are made to protect drinking water from pollution.	No proper system. Drainage of houses and backyards either flows into streets or empties into cess-pools, which are scarcely emptied.	Scavenging establishment is entertained only in a few villages by the Local Fund Board, and the sweepings, &c., of houses, as well as streets, are removed to a distance from the village and there deposited to be ultimately sold by auction.
	Proddatur ..	Obtained as usual from Pennar river channels and Kundu river, wells and reservoirs. River channels are not protected from pollution, and wells in a few villages are provided with parapet walls and platforms.	No system. Drainage of streets and lanes run into adjacent fields and channels. Side-channels constructed at the expense of owners exist in Proddatur town, but they get silted up, and consequently free flow of drainage is prevented. There are cess-pools in every house, which are emptied as often as are necessary.	In the union village of Proddatur and two others comprised in the house sweepings generally are thrown into dust-bins, which are daily cleaned by scavengers and stored outside the town and annually sold, while in others the sweeping of houses, especially of cattle owners, are allowed to accumulate in one corner of the house until it becomes sufficiently large when they are carried to fields. Public latrines exist in Proddatur town and in a few villages. In the former their cleansing is attended to by paid scavengers, while in the latter cattle perform the duty. Females use the public latrines, males resorting to fields and open spaces to answer calls of nature.
	Sidhant ..	Rivers Pennair and Seyilar and wells form the sources of supply. Wells in most cases have parapet walls. There are no sources set apart for drinking, hence no watchman employed.	Side-channels exist to carry off storm water. There are no cess-pools. Drainage of houses flows into backyard where they saturate and send forth most offensive odour.	Street sweepings collected by each house owner, and carried to a place close by and stored and eventually removed to fields for manure. House sweepings are heaped up in streets, which the scavengers remove. The system of scavenging is carried on by contract. The contents of public and private privies in all the villages, except Sidhant, are removed once a week to a distant place and there stored and sold annually. Seven villages have conservancy establishment.

ABSTRACT OF THE SANITARY ESTIMATE OF VILLAGES IN EACH OF THE REGISTRATION CIRCLES FROM WHICH REPORTS WERE RECEIVED—continued.

District.	Taluka or Registration Circle.	Water-supply.	Drainage.	Conservancy and Domestic Cleansing.
Kistna—cont.	Guntūr ..	From wells and tanks chiefly. The Kistna river and its channels are used in a few villages. Good and sufficient on the whole. In most villages wells and tanks are reserved for drinking purposes, and the village officers see that they are not polluted. Some wells have parapet walls and platforms and some drains.	Natural. Artificial drains exist in the Mangalagiri union. Of houses also natural. Drainage of the northern and western portions flows into hill streams. No cess-pools.	Streets and houses are kept generally clean, and the sweepings carted by the ryots to the fields and used as manure. No public latrines. Conservancy establishments are maintained in two villages.
	Palnad ..	Tanks, wells, streams and channels. Sources are reserved for drinking purposes and guarded from pollution. Wells have parapet walls, but not platforms or drains. One well has parapet wall and platform.	Natural. Cess-pools exist in the back-yards and in front of houses.	No change. Four villages were conserved and the sweepings, &c., removed to a distance or used as manure. Private houses are kept clean by the people themselves.
	Narasaraopet ..	No change. From tanks, wells and streams. The water of all tanks and most streams is good in quality. Some wells also contain good water. Sources not reserved for drinking, but they are protected from pollution by village officers. Wells have no parapet walls, platforms or drains. Tanks are not masonry-built. They are surface and canal-fed.	Natural. Both of streets and houses. Drainage flows into low places outside villages. A few cess-pools exist and they are emptied when full.	Two villages are conserved and the street and house refuse is removed by scavengers and sold annually as manure. No system elsewhere. Private dwellings and streets are cleaned by the villagers themselves. No public latrines, but private privies exist, and they are cleaned by private loties at the expense of the owners, their contents being removed outside the village.
	Guduvāda ..	Wells and tanks. Sources are reserved for drinking purposes and protected from pollution by village servants and people. One tank in Guduvāda is guarded by a watchman employed by the Local Board solely for the purpose. Four wells are provided with parapet walls, platforms and drains. Others are not. Tanks are not masonry-built. Obtained from the river Kistna, wells, tanks and streams. Quality generally good. Tanks are not used for drinking purposes. Some wells have mud parapet walls, but not platforms, or drains.	No change. Natural. Artificial to some extent in two villages. No cess-pools.	Three villages are conserved, and the street sweepings sold by auction. Public latrines exist at Guduvāda.
	Sattampalle ..		Natural. Artificial drains exist in three villages. No cess-pools.	Four villages are conserved, and the sweepings used to fill up low places outside. Private dwellings are kept clean by the owners themselves and refuse used as manure. A few private latrines in Sattampalle are cleaned by Local Board scavengers. Sanitary arrangements on the whole unsatisfactory.
	Bandar ..	From the Kistna river, wells, tanks and channels. Quantity in channels scanty during summer. Sources not set apart for drinking only, but they are protected from pollution on pain of criminal prosecution. All Local Board wells are provided with parapet walls but not drains.	Chiefly natural. Artificial drains exist in two villages and they discharge into the swamps near the sea. Waste water from houses is let into streets. No cess-pools.	Four villages are conserved, and the sweepings, &c., from them are collected and thrown in some low places outside. Night-soil from public and private latrines are removed and thrown in pits outside the villages. Private dwellings are cleaned by the owners and their servants.
	Nandigāma ..	From rivers, tanks, wells and hill streams. Sources are not set apart for drinking, but are protected from pollution by village officers, revenue inspectors, &c. Almost all rivers dry up in hot seasons when springs dug in the river-bed are used. Most wells have parapet walls and some parapet walls, platforms and drains. Tanks are not masonry-built. Scarcity is much felt in some villages in the hot season.	No change. Artificial in two villages and natural in the rest. House sewage flows into streets or backyards. The artificial drains discharge into streams close by. Cess-pools exist in almost every house in one village, and they are cleaned once a week.	Two villages are conserved, and the sweepings in one are collected and sold by auction, while in the other they are used for filling up low places. Private dwellings are kept clean by owners, and the streets in the non-conserved villages are generally cleaned by the village vetties, the rubbish being used as manure. Public latrines exist in the travellers' bungalows and private privies in some villages.

Beavada ..	From the Kistna river and its canals, tanks, wells and a hill stream. Sources are not set apart for drinking, but protected from pollution by village officers. Some wells have parapet walls, but not platforms or drains. Tanks are not masonry-built.	Natural. Artificial drains exist in two villages. Of houses natural and artificial.	Three villages are conserved. The sweepings are carted to a distance and sold as manure. Public and private latrines exist in unions.
Venukonda ..	From wells, tanks, streams and rivulets. Wells are the chief source. Good and sufficient. Wells are set apart for drinking and protected from pollution by village officers and sanitary maistries. Some wells have parapet walls.	Generally natural. Rain water from houses is let into streets. A few cess-pools exist and they are emptied twice or thrice a week.	No change. Vinukonda alone is conserved, and the sweepings are thrown outside and sold annually as manure. Private dwellings are cleaned by house-owners and their servants.
Nuzvid ..	From tanks, wells and canals. Sources not set apart for drinking but protected from pollution. Some wells have parapet walls, a few platforms, but none drains.	Except in Nuzvid, where artificial stone drains exist, drainage elsewhere is natural. Artificial drains empty into fields. No cess-pools.	No change. In the conserved villages, of which there are four, the sweepings and other rubbish are collected and sold by auction. There are no public or private latrines except at Nuzvid.
Vissannapet Division.	Obtained from tanks and wells. Good and sufficient. Sources are protected from pollution by the police and the village authorities. A few wells have parapet walls and some platforms.	Generally natural. Artificial drains exist in some villages. Condition of the few drains existing is good and they discharge into low places. No cess-pools.	Two villages are conserved, and the refuse from streets and houses are removed to fields as manure. Private dwellings are cleaned by owners and their servants.
Pattikonda ..	Same as last reported. From wells generally. In some villages from the Hindri river and its channels, and in one village from a tank. Generally good and sufficient except in some villages, where scarcity is felt during the hot season. Wells used for drinking purposes only are guarded against pollution by village watchmen. Most wells have no platforms or drains. Mamm's well water in Pattikonda was found, on analysis, to be bad.	No change since last report ..	In the conserved villages, of which there are four, the streets are swept by the Local Board scavenging staff, and the rubbish and contents of latrines are either burnt in chimneys or sold by auction for use as manure. In the other villages conservancy of houses and streets adjoining them is attended to by the people themselves, and the sweepings are stored and utilized as manure.
Ramallakot ..	Obtained from wells, streams, rivers, spring channels and the Kurnool-Cuddapah canal. Sufficient. During the hot months some of the streams run dry. Drinking-water wells are guarded by villagers against pollution, but have no platforms.	No change. Natural. Storm water flows into adjoining streams and nullahs. House sewage flows into streets and soaks into the soil. Cess-pools exist in some villages, and they are emptied when full occasionally.	Conservancy establishments are employed in four villages, and in these the street rubbish is removed outside village limits, stored and sold as manure, while the night-soil from the public latrines is buried in pits outside the town. In other villages the people themselves look to the cleansing of houses and streets adjoining them and use the sweepings, &c., as manure. There are no latrines in the non-conserved villages, the people resorting to fields, &c., for purposes of nature.
Nandikotkur ..	From wells, tanks, rivers and the Kurnool-Cuddapah canal. Good and sufficient. The tanks are surface-fed. About 150 wells are provided with parapet walls, but not with platforms or drains. Some of the wells used for drinking purposes are guarded by villagers or village servants.	Except in Nandikotkur, where artificial drains in good order exist, the drainage elsewhere is natural, and surface water flows into adjoining streams or low grounds. Drainage of houses flows into cess-pools or into streets.	In the conserved villages, of which there are four, the streets and public latrines are cleaned by the Local Board conservancy establishments, the sweepings being stored outside the village and sold as manure. In the non-conserved villages the houses and streets are cleaned by the villagers and the rubbish is utilized as manure. Fields and waste lands are used for purposes of nature in these villages.
Nandyl ..	Sources same as last reported, viz., a river, streams, wells, tanks, spring channels and the Kurnool-Cuddapah canal. Sufficient, except in some villages, where the supply runs short in the hot season. Except in one or two villages tanks are not specially reserved for drinking purposes. The wells are guarded against pollution by the villagers. Some of the wells in Nandyl have parapet walls and platforms.	Natural. In two villages artificial drains exist. Surface water drains into rivers, pools or manure pits. House sewage flows into cess-pools or into streets.	Six villages are conserved, and in these the streets and public latrines are cleaned by sweepers and scavengers employed by the Local Board. The rubbish is deposited at a distance and sold by auction, while the night-soil is buried in trenches. In the other villages house-owners clean the streets and houses and utilize the refuse as manure. In the non-conserved villages people resort to plains and waste lands for purposes of nature.

Districts.	Taluka or Registration Circles.	Water-supply.	Drainage.	Conservancy and Domestic Cleansing.
Kurnool—cont.	Koilkuntla ..	Same as last reported. From wells, tanks and rivers. Good and sufficient on the whole. The river-supply is unfailing, but the tank-supply runs short in the hot months, when distant rivers and wells are resorted to. Wells are guarded against pollution by village watchmen. A few recently repaired wells have parapet walls, platforms and drains. In some villages wells have parapet walls only. The surroundings of tanks are generally bad.	Natural. Artificial drains exist in two villages. House sewage is disposed of as in other talukas.	Two villages are conserved, and the system of street and domestic conservancy in these and in the non-conserved villages is the same as that pursued in other talukas of the district.
	Sirvel ..	Obtained from wells, rivers, tanks and channel. Good and sufficient. The wells are for the most part draw-wells, and have no parapet walls or drains. The drinking wells are guarded against pollution by the villagers. The tanks are very rarely used for drinking purposes.	No change since last report. Entirely natural. In respect of house sewage, &c., same as in other talukas.	Four villages were conserved and the street sweepings, &c., sold. In two of the conserved villages public latrines exist and their contents are removed by tories employed by the Local Board and buried in pits with earth. In the non-conserved villages house and street conservancy is carried out as in other talukas.
	Cumbum ..	From wells, streams, and channels from the Cumbum tank and the tank itself. Generally good and sufficient except in seasons of short rainfall. The Cumbum tank water is bad. Wells set apart for drinking are guarded from pollution by the people. They have generally no platforms, but some have parapet walls.	Natural except in two villages, where side-cuttings exist. Drainage water finds its way into rivers and streams. Household sewage is let into streets or into cess-pools.	Sweepers and tories are employed in four villages to clean the streets and public latrines. The street sweepings and the night-soil are removed outside the village and sold. In the other villages the same practice holds as in other talukas of the district. There are 7 latrines in Cumbum and 2 in Ravipad.
	Markapur ..	Obtained from four streams and wells. Generally good, except in villages at the foot of Nallamalai hills. Many wells have no parapet walls, and those that are used for drinking purposes are guarded against pollution by the villagers. The supply in some of the wells runs short during the hot months.	Natural. Cess-pools exist in two villages, and they are cleaned when full. House sewage flows into and open places, where it soaks into the soil or dries up.	Conservancy establishments are employed in two villages. The sweepings are removed by the Local Board staff and disposed of by sale as manure. Public latrines exist in Markapur and the night-soil is removed to a distance and buried in pits. In the other villages street and domestic cleansing is attended to by the people themselves and rubbish is utilized as manure.
	Madura ..	From the river Vaigai chiefly; tanks and wells are also resorted to. Well-water is in most cases good and a few are reserved for drinking purposes. Most of the wells have parapet walls.	No system. In Sholavandan the drainage of streets is in a fair condition.	Six villages are conserved. Sweepings, &c., are deposited in the village commons and used as manure. A tatty latrine has been constructed in Sholavandan.
	Tirumangalam ..	Wells, tanks and rivers form the chief sources of water-supply. Well water is used for drinking and cooking purposes, and most of them are provided with parapet walls and platforms.	Side-trenches exist in all the unions and in three other villages. In Perur the Zemindar has constructed drains in important streets at his own cost. There is a masonry drain at Usilampatty. In the other villages rain water finds its way into adjoining fields or pools.	In the union villages and in two other villages conservancy establishments are employed. Street sweepings, &c., are utilized as manure. There are 3 latrines for females in Tirumangalam union. A tory is employed to remove the night-soil daily.
	Dindigul ..	Obtained from wells and rivers. Good in quality and sufficient in quantity. Some wells have parapet walls and platforms. In some unions the conservancy of drinking water receives the attention of local officials.	No system. In some villages and all the unions side-cuttings are made to carry off rain water.	The cleanliness of union villages are attended to by scavengers. In the other villages the people themselves keep them clean.

Madura.	Palni ..	From wells, a river and jungle streams. In unions kavallis are appointed over wells, in other villages the people themselves see that the wells are not polluted. Rivers, channels and wells. No tank or well is set apart for drinking purposes. At Bodinaikanur a watchman is employed to protect the channel water from contamination.	In two union villages side channels exist. In the other villages drainage water flows into streets and tanks. The union towns require attention regarding their drainage.	In the two unions rubbish and street sweepings are removed by scavengers. In the other villages the ryots store the rubbish and eventually remove them to fields as manure. Scavenging establishments are employed in the seven unions and the sanitary associations of Godeair and Thondigudi. In union villages the refuse and sweepings are removed to selected localities by sweepers and scavenging carts and there stored up till sold by auction. In other villages the villagers themselves remove them to the fields to be used as manure. People resort to fields and open ground around villages for purposes of nature.
	Kodaikanal Division.	From wells and springs. Well water good. In the Kodaikanal union 8 wells are set apart for drinking purposes which are protected by parapet walls.	Natural, except at Kodaikanal, where the drainage of streets and houses is good.	No conservancy establishment is maintained except in the union villages of Kodaikanal. In the other villages sweepings, &c., are accumulated and eventually used as manure. Four tatty latrines exist in Kodaikanal. A sanitary association also exists in Thaidikudi. Refuse is generally used to fill up pits. In smaller villages the refuse is generally heaped by the people near their habitations and removed to fields as manure. This is also the practice to some extent even in union villages. The demand for refuse and sweepings for manuring purposes in the villages, where there are unions and sanitary associations, is said to be almost nil. Eight latrines built by private individuals exist in Kilakarai.
	Head Assistant Collector's Division.	From tanks, wells, and springs and channels dug in the bed of the river Vaigai. In almost all big villages an urani is set apart for drinking and guarded by a watchman.	No change. Natural. In the more important union villages side drains or trenches are provided to streets. House sewage is allowed to flow into backyards and streets or into cess-pools.	Scavenging establishments to a limited extent are employed in some villages. People live in detached houses. There are no accumulations of filth and consequently public scavenging is both unnecessary and almost impossible. No public latrines; the people in the villages on the coast resort to the sea-beach for purposes of nature.
	.....	From wells. Good and abundant. Dearth for water is felt during the hot weather in exceptional localities.	Natural. The water is readily absorbed, the soil being porous.	Scavengers are employed in five villages to clean the streets. There are heaps of rubbish in front of houses. The streets and houses are generally dirty. Prickly-pear abounds.
Malabar.	Nellore ..	From the Pennér river, and ponds and wells ..	There are no side channels for rain water to pass through, except in a few cases.	Scavengers are employed in front of houses. The streets and houses are generally dirty. Prickly-pear abounds.
	Atmakur ..	From tanks, wells, rivers, ponds and irrigation channels. With a few exceptions, the supply was sufficient in the villages.	Natural. The drainage water flows freely. A few villages have drains.	Rubbish and dung are stored in backyards and cattle-sheds, which form a part of the houses. The houses do not look clean, as separate stables are not provided for cattle. Prickly-pear abounds.
	Gudur ..	From a river, wells, ponds, doruvus and tanks. Good. Sufficient on the whole.	There are drainage channels only in the main streets of Gudur. In other places there are no drains.	Scavengers are employed in the Gudur union. Refuse from houses and street sweepings are removed to fields to be used as manure. The streets look generally clean.
	Ongole ..	Rivers, ponds and wells. Generally good. Scarcity was felt in many of the villages this year for want of rain.	Drainage of streets flows through vagus, &c. No special arrangements are made to drain off water from houses and backyards, except in Ongole, where water is let out through side channels.	Scavengers are employed in four villages and two unions. The sweepings of houses and the dung of cattle are collected in pits adjoining the houses and removed to fields to be used as manure.
Nellore	Kanigiri ..	Rivers, wells and vagus ..	In most places natural. In Kanigiri there are side-cuttings, which are in good condition.	Houses are not generally clean. Heaps of cattle dung are stored by the side of houses.
	Rapur ..	Tanks, ponds, wells and vagus. Supply generally sufficient. In some of the villages the sources of water-supply get dry during the summer.	Natural. Neither regular drains nor cess-pools exist. House sewage sinks into the soil, but does not come out into the street. The rain water finds its way out into the low lands.	Scavengers are employed in only one village. Sweepings and manure are first stored in the backyards and compounds of houses and removed to fields subsequently. The streets are generally kept clean. No private or public latrines.

Districls.	Taluk or Registration Circles.	Water-supply.	Drainage.	Conservancy and Domestic Cleansing.
Nellore—cont.	Polar Division	Tanks, ponds and wells. Supply generally good	Generally good	Generally good.
	Venkatagiri Division.	From wells, tanks, ponds, channels and rivers, but tanks and wells seem to be the chief sources. The supply was sufficient.	In Venkatagiri the rain water runs through side channels. In all other places rain water runs by surface drainage to the fields. The house sewage flows into backyards and dries up.	At Venkatagiri scavengers are employed to remove the refuse, &c., from streets and dust-bins. The house-owners, who clean their houses, throw the rubbish into dust-bins. In other places there is no system. The daily rubbish is stored up either in their backyards or in selected spots outside the village, from which they are periodically removed to fields to be used as manure. The houses are generally kept clean.
	Podili Division	From wells, tanks, rivers and ponds. Supply not sufficient.	No system. Rain water is let out by means of sluices in the backyard walls to pass out of the village by natural drainage. House sewage is allowed to run into lanes and streets.	Rubbish with cow-dung is deposited in deep pits in front of houses and compounds and once a year carted away to fields as manure. Sweepers are employed in one union and one village. Houses are generally filthy.
	Darsi Division	From rivers, tanks, channels and wells	Natural. Side channels exist in the Gūdar division.	Houses are generally kept clean by the people themselves. There is no system of conservancy and sanitary arrangements are not satisfactory.
Nalgonda.	Chittoor	Obtained from wells, river springs and tanks. Sufficient and generally good. Watchmen are employed to guard sources in Chittoor town and large villages. Wells have generally parapet walls and platforms.	No change. Natural. Artificial drains exist in important streets in Chittoor town. Drainage of houses, as a rule, is artificial and natural. Cess-pools exist in the town of Chittoor and they are occasionally cleaned.	No system in the taluk generally. In Chittoor town the street sweepings and refuse from houses and backyards are removed in carts to be used as manure. The contents of public and private latrines are removed in carts to a distance and buried. In the villages the house refuse is removed to fields and used as manure. Three places were conserved.
	Chandragiri	From wells, tanks and channels. Good and sufficient. Watchmen are employed to guard sources in large villages. Wells generally have parapet walls, platforms and drains.	No change. Natural, except in Renigunta and Chandragiri. Side-cuttings exist in some villages. Drainage of houses as a rule artificial and that of houses natural. House sewage flows into pits dug in the streets or backyards.	Five villages are conserved, where scavengers employed by the Taluk Board attend to street conservancy. Elsewhere no regular system. The street sweepings, &c., are disposed of in the same manner as in Chittoor taluk. In Renigunta, however, the sweepings are sold. Private privies exist in Chandragiri town and the night-soil is removed at the cost of the owners and thrown away at a distance.
	Palmanūr	Obtained from wells, river springs and tanks or guntas. Good and sufficient. Watchmen are appointed to guard the principal guntas. In villages people make their own arrangements to protect water from pollution. Wells have generally parapet walls, platforms and drains. Vicinity of tanks clean.	Natural. Side drains have been constructed in two places. Masonry drains exist in some of the houses and backyards. Drains discharge into tanks. Cess-pools exist in some villages and they are emptied occasionally.	In Palmanūr private dwellings are conserved by sweepers employed by the people at their own cost and the streets by scavengers employed by the Local Board. Street sweepings, &c., are deposited at a distance and sold periodically, while the house refuse is removed to the fields by house-owners. Elsewhere no regular system and the sweepings of houses is removed to the fields and used as manure. One public latrine exists and the night-soil from it and the private privies is removed by paid agencies to a distance. One other place besides Palmanūr is conserved.

North Arcot.	Gudiyaṭram	Same as Chittoor, viz., wells, river springs and tanks or guntas. Good and sufficient. Watchmen are appointed over the principal guntas, and in villages people make their own arrangements to protect sources from pollution. Some wells have parapet walls and drains.	Natural except in four large villages, where side channels have been cut. Drainage of houses, as a rule, artificial and that of backyards natural. The drainage of houses and backyards in some cases discharge into streets. There are cess-pools in some places and they are emptied occasionally.	Three villages are conserved. The other villages are kept clean by the people themselves. The street sweepings and refuse from houses and backyards are removed in carts to be used as manure. In the villages the sweepings of houses are removed to fields for use as manure. No public or private latrines.
	Vellore	From river, river-channels, and wells and ponds. Good and sufficient. Some ponds and wells are reserved for drinking purposes and protected from pollution by the village officers. Some of the wells have parapet walls, platforms and drains. Some of the ponds are masonry-built.	No change. Natural except in large villages, where side-cuttings exist. Drainage of houses, as a rule, artificial and that of backyards natural. House sewage flows into pits dug for the purpose in streets or backyards. No cess-pools.	Conservancy establishments are maintained in four villages. In the other villages the people themselves attend to conservancy. The street sweepings and refuse from houses, and backyards are removed in carts to be used as manure. In villages the sweepings of houses are removed to the fields and used as manure. No public or private latrines.
	Polur	From river, ponds, wells and river channels. Good and sufficient. Sources are set apart for drinking, and in large villages watchmen are employed to guard them from pollution. In other villages, village servants see that water is not polluted. Some wells have parapet walls and platforms. Tanks are masonry-built and mostly surface-fed.	No change. Natural except in two villages, where cuttings exist. In some large villages, pits are dug in backyards to receive the drainage water from the drains. No cess-pools in the taluk.	Three villages are conserved. The other villages are kept clean by the people themselves. Some as Palmanūr so far as the disposal of the sweepings are concerned. No public latrines, but private privies exist in Polur town and their contents are removed by private agency to a distance and buried.
	Wandiwash	No change. From wells, tanks, rivers, channels and streams. Sufficient and generally good though brackish in some villages. In Wandiwash 3 ponds are reserved for drinking purposes and watchmen employed to guard them. In some of the important villages, village servants take care of drinking-water sources. Wells have parapet walls and drains, but not platforms. Most tanks are masonry-built and surface-fed.	No change. Natural except in Wandiwash town, where side-cuttings exist. Drainage of houses artificial and that of backyards generally natural. Drainage water generally flows into irrigation channels or streams. No cess-pools.	A conservancy establishment is employed in Wandiwash town. Elsewhere no system. Sweepings in Wandiwash are deposited at a distance and sold periodically by auction. A public latrine exists in Wandiwash town and the night-soil from it and the private privies are removed to a distance and sold by auction.
	Arcoṭ	From wells, river springs and tanks or guntas. Generally sufficient and good. Sources are set apart for drinking, and watchmen employed over them in Arcoṭ and in large villages. Some wells have parapet walls only.	No change. Natural except in four villages. House drains in large towns discharge into the streets and those in villages into backyards. The drains generally discharge into rivers, channels or streams. There are cess-pools which are occasionally cleaned by the owners.	No change. Three places are conserved. The street sweepings, &c., are deposited at a distance and sold periodically by auction. Public latrines exist in Arcoṭ and they are cleaned by the union sweepers.
	Walaṇḍa	From wells, river springs, tanks or guntas. Supply rather deficient in some parts owing to failure of the rains. Sources are set apart for drinking and watchmen employed to guard them in Walaṇḍa and in large villages. Wells have generally parapet walls, platforms and drains.	No change. Except in four places there are no regular street drains. House sewage in large towns flows into streets and that in villages into backyards. The drainage generally flows into rivers, channels or streams. A few cess-pools exist in two places and they are occasionally cleaned by the owners.	Four places are conserved. No arrangements elsewhere. Street sweepings, &c., are deposited at a distance and sold by auction. Public latrines exist in the four conserved towns and they are cleaned by the union sweepers.
	Puttur Division	From wells, river springs and tanks or guntas. Supply rather deficient in some parts. Sources are set apart for drinking and watchmen are employed to guard them in large villages. Wells have generally parapet walls, platforms and drains.	Natural. Drainage of houses artificial in most cases. In some places the drains lead into cess-pools, which are emptied when full. In many cases the contents are absorbed in the earth.	One town is conserved. Elsewhere no arrangements. The street sweepings, &c., are deposited at some distance from the town and sold periodically by auction.

District.	Taluk or Registration Circle.	Water-supply.	Drainage.	Conservancy and Domestic Cleansing.
North Arcot—cont.	Kalahasti Division ..	From wells, river springs, and tanks or guntas. Good and sufficient. Drinking sources in large villages are guarded by watchmen employed for the purpose. Wells have generally parapet walls and platforms but no drains.	Natural. Side channels exist in Kalahasti. Houses have no masonry drains. In towns, the drains discharge into cess-pools in the streets or backyards. Cess-pools exist only in towns and they are emptied when full.	Kalahasti alone is conserved. Elsewhere no system of conservancy. Same as Palamaner so far as the disposal of the sweepings is concerned. The contents of public latrines and some private privies are removed to a distance and burnt.
	Tirutani Division ..	From wells, river springs, and tanks or guntas. Good and sufficient except in the hot season when water in ponds gets scanty. Drinking sources in large villages are guarded by watchmen employed for the purpose. Most wells have parapet walls and a few have platforms and drains.	Natural. Of houses and backyards artificial in most cases. The drains generally discharge into pits. There are a few cess-pools in Tirutani. In the case of the cess-pools in streets, the contents are emptied twice or thrice a week by the Local Fund sweepers.	One town, Tirutani, is conserved. No arrangements elsewhere. Same as Palamaner as regards the disposal of sweepings, &c.
	Maderpak Division ..	From wells, river springs, tanks or guntas. Supply rather deficient in some parts owing to the failure of rains. Tanks are set apart for drinking in two places only and are guarded against pollution by watchmen. Most wells have no parapet walls, platforms and drains. Tanks are masonry-built and are spring or surface-fed. Vicinity of tanks clean.	Natural. Houses have no masonry drains. The drains discharge into pits which are cleaned when full. No cess-pools.	No place is conserved. Private dwellings are looked after by the people themselves. The street sweepings and refuse from houses and backyards are generally stored in backyards and removed occasionally to the fields. There are no public latrines, but there are some private ones, and their contents are not removed but covered with earth.
	Punganuru Division ..	From wells and small tanks chiefly, and in some places from streams, channels and rivers. Good and sufficient. Watchmen are employed in large villages to guard drinking sources. Most wells have parapet walls. Three wells at Punganuru have platforms and drains. Tanks are masonry-built and are spring or surface-fed.	Natural, except in Punganuru, where side drains have been constructed. Drainage of houses as a rule artificial, and that of backyards natural. Drains discharge into pits dug for the purpose in the streets or backyards. Cess-pools exist only in towns and they are emptied when full.	Four towns are conserved. Elsewhere no system, the people themselves looking after the cleanliness of houses and streets adjoining. As regards disposal of sweepings, &c., same as Palamaner. There are 2 public latrines, and their contents are removed to a distance and burnt.
North Arcot—cont.	Venkatagirikota Division ..	From wells chiefly. Sufficient, except for two months in the hot season. Watchmen are appointed in large places to guard drinking sources. Wells have parapet walls but not platforms or drains.	Natural. Side channels are constructed in Venkatagirikota. House drains discharge into backyards or streets. No cess-pools.	Venkatagirikota alone is conserved. Elsewhere no arrangements. The sweepings are removed to a distance from the town.
	Kangandi Division ..	From wells generally. Tanks and rivers are used in some places. Good and sufficient. Walls and tanks are set apart for drinking purposes and they are guarded by watchmen in some places. Wells have parapet walls without platforms or drains. Tanks are masonry-built and spring-fed.	Natural. Side-channels exist in one place. House sewage flows into backyards or streets. A few cess-pools exist and they are emptied when full.	One town is conserved. Elsewhere no system, the people looking to the conservancy of private dwellings. As regards the disposal of sweepings, &c., same as Palamaner. No public latrines.

Arni Division ..	From ponds, tanks and rivers. Good and sufficient. Watchmen are employed to guard drinking sources in large villages. Wells have parapet walls generally, and in isolated cases they are provided with platforms.	*Natural, except in Arni, where artificial drains exist. Drainage of houses as a rule artificial and that of backyards natural. In the town of Arni the drains discharge generally into a tank or in the rivers. Cess-pools exist in some places and they are cleaned occasionally.	A conservancy establishment is maintained in Arni town. Elsewhere no arrangements exist. There are 5 latrines and 1 urinal and their contents are removed to a distance and buried.
Salem ..	Same as last reported. From river, tanks and wells, the two latter being the chief sources.	No system. Side-cuttings exist in Razipur union, which discharge into fields. Cess-pools exist in some places and they are emptied once a year.	Nine villages were conserved during the year. System same as last reported, the sweepings, &c., being stored and sold periodically.
Atur ..	From wells, tanks, rivers, streams and channels. Sufficient in quantity. In some places wells are set apart for drinking, but they are not protected against pollution. Two ponds are also reserved for drinking, one of which is provided with parapet walls.	No system. By side ditches, which discharge into streams, rivers, &c. Channels also answer the purpose of drains. In some places the side-cuttings are in good condition. House sewage flows through gutters. Cess-pools exist but they are seldom, if ever, cleaned.	Conservancy establishments were employed in eight of the union villages. Elsewhere there is no system. All rubbish is used as manure, but in four villages it is sold. House conservancy is looked after by the people themselves.
Namakkal Division ..	Same as last reported. From the Cauvery and its channels, tanks and wells. The river-water is generally pure, but that of the channels is subject to pollution. Tanks are set apart in some villages for drinking and are guarded by watchmen. In some villages wells are provided with parapet walls, platforms and drains. Supply is limited, except in villages along the Cauvery and its channels, and considerable difficulty is experienced.	Generally natural and good. Side-cuttings exist in some villages. There are cess-pools in some villages which are emptied once or twice a year.	Fourteen villages were conserved during the year. The rubbish, &c., is generally deposited at some distance from the village and the accumulation is either sold or removed by ryots to fields. Domestic cleansing is attended to by the people and satisfactorily so far as the well-to-do and the caste people are concerned.
Hostr Sub-Division ..	From tanks and wells chiefly. River water is used in villages bordering on the river. Sufficient, except in a few villages. Tanks and wells are reserved for drinking purposes in some villages and guarded by watchmen. Many of the wells have parapet walls, but only a few, platforms and drains. The tanks are surface-fed.	Natural. Artificial side drains exist in some places. In conserved villages the drains are cleaned by the sanitary establishment and are generally kept in good condition. House sewage stagnates in backyards and in front of houses or flows into street drains. Cess-pools exist.	Conservancy establishments are maintained in seven unions and ten villages, and in these conservancy is attended to by the sanitary establishments. In other villages the house-owners or village toties sweep the streets. The street sweepings, &c., are stored in a selected spot and sold. The contents of public and private latrines are removed by scavengers to a place outside the town and sold with the street sweepings. Domestic cleansing is fairly well attended to by house-owners and the sweepings, &c., are stored outside the village and used as manure.
Tirupattur ..	Sources same as last reported, viz., wells, tanks and rivers. Generally good and sufficient. Some wells have parapet walls. Surroundings of wells not kept clean, hence well-supply is subject to pollution.	No change since last report. Natural.	No change. Three villages are conserved and the sweepings, &c., sold as manure. No system in the other villages. The refuse from streets and houses are used as manure by the ryots.
Uttangudi ..	From wells, tanks and rivers. Tank and well water is not considered wholesome. A tank is set apart for drinking and guarded by a watchman against pollution, but the water is very unhealthy and steps are being taken to close it from public use. Atkinson's well contains good water. It has a parapet wall and drain, but the former is in a dilapidated condition.	No system. Side drains exist in Uttangudi town. Storm water runs into pits and adjoining fields. Cess-pools exist in Uttangudi town.	In Uttangudi and four other villages, sanitary establishments are maintained to sweep the streets, &c. The rubbish from the dust-bins, &c., is heaped up at a distance from the village, but in Uttangudi the rubbish is sold.

ABSTRACT OF THE SANITARY ESTIMATE OF VILLAGES IN EACH OF THE REGISTRATION CIRCLES FROM WHICH REPORTS WERE RECEIVED—continued.

District.	Taluk or Registration Circle.	Water-supply.	Drainage.	Conservancy and Domestic Cleansing.
South Arcot	Ouddalore ..	From wells, ponds, tanks, river channels and springs. Sufficient generally, but scarcity is felt during the hot months in the south and eastern portions of the taluk when the tanks and ponds run dry.	No regular system. A few cess-pools exist in Panruti union. Drains of houses generally run into backyards in front of houses.	In villages generally the refuse from streets and houses is stored in backyards and in front of houses and removed once or twice a year to fields. In Panruti union it is removed beyond the village limits and sold. Scavenging establishments are maintained in four places. The people are being taught the benefits and advantages of a satisfactory disposal of rubbish, &c.
	Chindambaram and Vriddhachalam.	From wells, tanks, rivers and canals. When the river runs dry, springs dug in its bed are used. The tanks and rivers are used by both men and cattle. Where watchmen are employed the water is generally kept free from pollution.	No system. In Vriddhachalam taluk natural drainage is fair. Drainage of houses flows into backyards or into streets.	No system. Much improvement is not perceptible in the conservancy of private dwellings and of streets, but still steps are being taken to improve matters in this respect.
	Tindivanam, Villupuram and Tiravannamalai.	From ponds, wells, and in a few cases from rivers and river channels. Generally good and sufficient. A pond is reserved in each union for drinking purposes.	Houses drains flow into backyards or into streets. Cess-pools exist in some places.	Scavenging establishments are employed in the three unions and in five other important villages. These sweep the streets daily and keep them clean. The main streets in the unions are provided with dust-bins to throw the sweepings in. Where there are no dust-bins the refuse is thrown in the street. Domestic cleansing is attended to by house-owners, and the rubbish is stored in backyards or adjacent natham lands and finally taken to the fields. Where there are dust-bins the refuse is thrown into them.
Cannara	....	Mostly from wells. Rivers and streams are used when the wells dry up in the hot season. Quantity rather scanty.	Natural. Singularly good. Artificial drains not required.	Same as last reported.
	Tanjore ..	Obtained from the Canvey and its branches, springs dug in the river-beds, and tanks and wells. In some villages tanks are reserved for drinking purposes and guarded by watchmen employed by the inhabitants themselves.	No system. House sewage generally flows into the backyards, where it is absorbed.	No system. In villages not provided with scavenging establishments, the streets are swept and kept clean by the inhabitants themselves. There are no latrines, the people resorting to fields and open grounds for purposes of nature. Every effort is made to induce the people to realize the importance of sanitation.
Májavaram ..	Kumbakonam ..	Obtained from rivers and tanks. When these run dry, springs dug in the river-beds and wells are used.	No system. Natural and by side-cuttings. Drainage of houses flows into backyards and gets absorbed.	Except in the union villages the street sweepings are stored in backyards of houses or in some open place adjoining houses and used as manure.
	Májavaram ..	From rivers, tanks and wells. Tank water is subject to pollution, as surface water flows into them. Three tanks are reserved for drinking and guarded by watchmen. Wells are used both for drinking and bathing, and they are provided with parapet walls and platforms. The tanks have no parapets or high bunds.	No system. Natural and by side-cuttings. House sewage flows into trenches dug in the backyards. Cess-pools are not frequently cleared.	In conserved villages the sweepings are removed outside the village-site and sold as manure. In other villages the street and house sweepings are thrown in backyards or near houses and finally removed to the fields.
				

Tanjore.	Shiyali ..	....	No system, except where there are side-cuttings. Drainage is natural, and storm water finds its way to adjoining fields, &c. House sewage flows into backyards, where it soaks into the soil.	No system. The streets and houses are cleaned by the villagers themselves, and the rubbish is stored and used as manure.
	Nannilam ..	Three tanks are reserved for drinking and guarded by watchmen. The tanks are river-fed.	No system. By side channels. House drainage flows into backyards, where it soaks into the soil or into street side channels.	Conservancy establishments were maintained in two villages and the sweepings sold periodically. No public latrines.
	Tiratturappundi ..	Obtained from rivers, wells and tanks. Insufficient. Tanks are set apart exclusively for drinking in union villages.	Natural, except in union villages. House sewage flows into backyards, where it soaks into the soil.	The sweepings of houses and streets are removed daily to convenient places and stored for use as manure. There are no latrines, the people preferring to resort to fields for purposes of nature.
Tinnevely.	Negapatam ..	No change. From rivers, channels and tanks. Wells are used in villages along the sea coast. In the hot weather tank water supplies most of the villages.	Natural, except in union villages. House sewage flows into backyards, where it soaks into the soil.	In non-conserved villages the houses and streets are cleaned by the house-owners and rubbish stored in backyards or thrown in an open place outside the village and used as manure.
	Pattukkottai ..	From jungle streams, tanks and wells. On the whole, water from wells is not very good. A few tanks are set apart for drinking purposes and watchmen are employed to guard some of them. Scarcity was felt in many villages owing to the failure of rains.	Natural. Side-cuttings exist in some villages. Storm water flows into tanks, &c. Drainage of streets generally good, but that of houses unsatisfactory.	In the conserved villages, of which there are five, the sweepings are carted away daily outside the village and sold as manure. People are made to remove the rubbish that may accumulate in their houses and backyards then and there to the fields. There are no public latrines, as the people generally resort to fields, &c., for purposes of nature.
	Mannargudi ..	From tanks fed by rivers and jungle streams and wells. Insufficient on the whole. There are no tanks set apart for drinking. Thirty wells, however, are reserved, but they are not guarded by watchmen. The village officers have orders to guard tanks and wells from pollution.	No system. Natural and by side-cuttings. Storm water flows into fields and streams. The drainage of houses flows into backyards. No cess-pools.	In villages, where there are no conservancy establishments, the sweepings are stored by the people themselves and used as manure. There are no latrines, the people preferring open fields and gardens.
Tanjore.	Ottappidaram ..	From wells, tanks and a river. Good and sufficient, except in a few instances. Many wells and some tanks are set apart for drinking purposes and protected from pollution. Almost all wells have parapet walls, platforms and drains. When the river runs dry, springs dug in its bed are used. In Ottappidaram and Ettiyapuram there are masonry-built tanks.	No change, except in three villages, where side-cuttings exist. The drainage elsewhere is natural. House sewage flows into backyards and streets. The condition of drains is bad. A few cess-pools exist and they are emptied when full.	In most villages, houses and streets in front of them are cleaned by house-owners in the morning, but in eight villages, where conservancy establishments are employed, the streets are cleaned by these establishments. Refuse, &c., from streets and houses are preserved in heaps or in pits and used as manure. No latrines.
	Tenkarai ..	No change. From rivers, channels, tanks and wells. Sufficient, except in a few villages in the hot season. Some wells are set apart for drinking in villages, where there is no supply from tank or river channel and protected from pollution. Most wells have parapet walls, platforms and drains. Well water is purer than any other water.	No change. Natural. House drains run into backyards or into the streets. A few private cess-pools exist and they are cleaned occasionally.	In the conserved villages the street sweepings are stored away from houses and sold as burnt or unburnt manure. The private sweepings are used by house-owners on their fields or sold to those who have fields. No use is made of the contents of public and private latrines.
	Sankaravayinakkóvil.	From wells, tanks, pools, rivers, channels and mania. Of fair quality, but insufficient. Sources are set apart for drinking purposes. Many wells and all square tanks have parapet walls and platforms. Some wells have platforms and drains also.	No change. Natural. Some streets have artificial drains. Some houses have drains and some have not. Sewage flows into irrigation tanks and wet lands. No cess-pools.	In some places sweepers are employed by the Local Boards to clean the streets and the sweepings are removed and sold. In the other villages the people themselves attend to street and domestic conservancy, the rubbish, &c., being stored in backyards and garden and removed to fields for agricultural purposes. The contents of latrines in Sankaravayinakkóvil are removed to a distance and buried in deep pits.

ABSTRACT OF THE SANITARY ESTIMATE OF VILLAGES IN EACH OF THE REGISTRATION CIRCLES FROM WHICH REPORTS WERE RECEIVED—continued.

Districts.	Taluk or Registration Circles.	Water-supply.	Drainage.	Conservancy and Domestic Cleansing.
Tinnevely—cont.	Tinnevely ..	From rivers, river channels, tanks and wells. Good and sufficient. Most wells have parapet walls, platforms and drains, except in one union where the Tambirapatti is protected by a watchman. Sources are not conserved for drinking.	No change. Natural. Some masonry drains exist in one of the unions. In many of the villages drains are constructed within the house compounds and the sewage is generally allowed to flow into the backyards. Street drainage flows into rivers and channels.	Where sweepers are employed in the Tinnevely taluk the streets are cleaned by sweepers and the rubbish is stored in pits outside the village and sold as manure when there is a demand. In the unions the sweepings are either given on contract or stored, burnt and sold as manure. Private scavenging is in force in one of the unions, and in the other house refuse and contents from public and private latrines are removed in covered tins and buried in porous pots. In the other villages houses are cleaned by the owners themselves and the sweepings are stored in manure pits and removed to the fields once or twice a year. Conservancy establishments are employed in the unions to clean the streets. An itinerant staff in addition to the two scavengers at Sethur is also employed. In the unions the street sweepings are either burnt and used as manure or sold by auction. In the other villages the street sweepings are not put to good purpose, but house sweepings are used as manure by the owners. Private scavenging is in force in Srivilliputtur and the contents of latrines are removed to a distance, buried in pits and disposed of after a time.
	Srivilliputtur ..	From tanks, wells and streams. Quality fair and quantity sufficient. Wells are set apart for drinking and guarded from pollution. In Srivilliputtur union 2 tanks are also used for drinking purposes and are guarded by union servants. Most wells have parapet walls, platforms and drains.	Except in Srivilliputtur union where there are artificial drains. Elsewhere natural. House sewage flows into streets and in Srivilliputtur into side streams or channels.	In villages where sweepers are employed, the street sweepings and rubbish are generally taken outside the village limits and either sold as manure or burnt. Conservancy in the other villages is not properly attended to. Private dwellings are cleaned by the owners themselves and the refuse and the contents of private privies are stored in backyards or adjoining vacant places and used by the house-owners as manure. No public latrines.
	Nanguneri ..	From wells chiefly; streams, channels and tanks are also used. On the whole, good and sufficient. A square tank is set apart for drinking in the Cuddeh town when there is no water in the big tank. About half the number of wells have parapet walls and some platforms and drains.	Generally natural. A few streets have side-cuttings. A masonry drain is provided to the Brahman street. Gutters exist in some houses, but the backyards are undrained. The gutters discharge into street or backyards or into the street side drains.	In villages where sweepers are employed, the street sweepings and rubbish are generally taken outside the village limits and either sold as manure or burnt. Conservancy in the other villages is not properly attended to. Private dwellings are cleaned by the owners themselves and the refuse and the contents of private privies are stored in backyards or adjoining vacant places and used by the house-owners as manure. No public latrines.
	Amisamundram ..	No change. From rivers, channels, tanks and wells. Generally good and sufficient. Tanks are set apart for drinking purposes in the hot season in some of the large villages and guarded by watchmen employed by the unions concerned. In other villages people make their own arrangements to keep drinking water clean. Many of the wells have parapet walls, platforms and drains.	Artificial in the large villages and natural in the others. Drainage of houses is both artificial and natural, and the sewage flows into street drains. The drainage of streets flows into channels, rivers or tanks.	No change. Street villages are conserved and the sweepings stored in pits and sold as manure. Rubbish from houses and backyards, and contents of private latrines are used for a like purpose. Private dwellings are cleaned by the people themselves. Backyards are generally filthy, being stored with rubbish, &c., for manure. A public latrine exists in Amisamundram which is cleaned by Local Fund scavengers.
	Satūr ..	From wells, tanks and rivers. Fair on the whole. Wells and a tank are set apart for drinking purposes in the unions. Most wells have parapet walls, platforms and drains. With one exception tanks are not used for drinking.	Natural. Artificial drains exist in some places. Cess-pools exist.	The streets are daily swept in unions and occasionally in villages. Sweepings and refuse in streets are heaped at a distance from the town. Contents of latrines are buried. In villages the sweepings are heaped outside the village and used as manure.
	Tenkāi ..	No change. From wells, tanks, river, streams, and channels. No special arrangements are made to prevent pollution except in Tenkai union, where watchmen are employed, but even here the watching is not effective. Most wells have parapet walls, but generally no platforms.	No change. Side-cuttings exist in some villages. Masonry drains exist to a very limited extent in Cuddeh, Tenkai and in portions of streets in two other villages. In the Cuddeh	No change. Where sweepers employed by the Local Board, street conservancy is attended to by them. In the other villages, house and streets adjoining houses are cleaned by the owners themselves. Street sweepings and rubbish are used to fill up hollow places or allowed to rot in out-of-the-way places. House refuse and cow-dung, which

Tinnevely—cont.	Trichinopoly ..	From rivers, channels branching from them, tanks and wells. Good and sufficient on the whole. Some of the sources are reserved for drinking and guarded by watchmen. Drinking water wells generally have parapet walls and platforms. The tanks are all surface-fed and the surroundings of some filthy.	the sewage from houses and backyards finds its way generally into the street drains, while in the other villages it finds its way into streets or backyards, tanks and channels.	are highly valued as manures are stored in backyards and used as manure.
	Muziri ..	Sources same as last reported, viz, rivers, channels branching from them, tanks and wells. Good and sufficient on the whole. Tanks in two villages are set apart for drinking and guarded by watchmen. Most wells have no parapet walls and platforms.	Natural. In Lalgudi the streets are sectioned and provided with tunnels to drain them. The streets of three other villages are also sectioned. There is no system of drainage. Sewage from houses flows into backyards where it soaks into the soil or into streets and low-lying places. No cess-pools.	In the conserved villages, of which there are 18, the streets are swept daily by Local Board conservancy establishment. In the other villages streets and houses are cleaned by the villagers themselves. In five of the conserved villages the street sweepings are cutted and deposited at a distance and used as manure. In other villages the rubbish, &c., is stored in backyards, &c., and used as manure by the owners. The public latrines in Lalgudi are scavenged by the Local Board toties and the night-soil is buried.
	Kulittalai ..	Same as last reported. From the Cauvery and its branches, wells, tanks and streams. Good and sufficient on the whole. Tanks and wells are set apart for drinking, but no watchmen are employed, except in the hot weather when the village taluqari is ordered to see that they are not polluted. A tank in Manappuram is guarded by a watchman, paid from Local Funds. The Cauvery and its channels are not guarded, though these sources are largely used for drinking purposes. Only Local Fund wells have parapet walls, platforms and drains.	Generally natural. Side-cuttings exist in some of the villages. House sewage flows into backyards, where it is absorbed or into adjacent pits, channels or tanks. Surface drainage into the Cuddeh or jungle streams.	Three villages are conserved and the sweepings in two of them are heaped up at a distance and sold periodically. Where no conservancy establishments are employed, the conservancy of houses and streets is attended to by the people themselves, and the sweepings are heaped up near dwellings or in open places some distance from them and utilized as manure.
	Perambalur ..	From the Vellar and its branch channels, jungle streams, wells and tanks. Generally good and sufficient. Supply became scanty in some parts of the taluk during the hot season. In some places sources are set apart for drinking purposes and guarded by watchmen employed by the Taluk Board or by the village taluqaris and toties. Most wells have no parapet walls.	Mostly natural. Side drains exist in towns and surface drainage flows into jungle streams or river-channels. In important union villages or towns house sewage flows into backyards and is absorbed or flows into streets.	In conserved villages the rubbish, &c., is removed by Local Fund servants to a distance from habitations and either burnt or sold as manure. In other villages house and streets adjoining them are kept clean by the people themselves. The night-soil from public latrines are removed by Local Fund toties and buried.
	Udaiyarpalayam ..	Tanks and wells are the chief sources. The Coleroon and its branches are used in the southern portion of the taluk. Good but the quantity was insufficient in some parts. A few tanks and wells are set apart for drinking and guarded by watchmen. Some of the wells have parapet walls, platforms and drains.	No change. Natural. House sewage flows into backyards or into streets.	Seavenging establishments are maintained in three villages, and in these the rubbish is removed in carts to a distance and sold by auction. In the other villages house and street conservancy is looked after by the people themselves and the refuse stored in backyards or in vacant sites and used as manure. Public latrines exist in two villages and the night-soil is removed by toties and buried in trenches.
Vizagapatnam.	Vizianagaram Taluk Board.	From wells, tanks, rivers, streams and channels. Scarcity of water was much felt. Quality generally good. Many big tanks are set apart for drinking purposes only and watchmen employed to see they are not defiled. Many wells have parapet walls, platforms and drains.	Natural. Side drains exist in towns. Surface drainage is satisfactory on the whole and flows into tanks, oadis or rivers. House sewage, as a rule, flows into backyards and is absorbed.	No change since last report. The street sweepings in the towns are sold by auction. House refuse is stored and used as manure. The private dwellings and streets in front of them are swept and kept clean by the people themselves. Public latrines exist in the four conserved towns, and the night-soil is removed by Taluk Board scavengers to a distance.

Districts.	Taluk or Registration Circles.	Water-supply.	Drainage.	Conservancy and Domestic Cleansing.
Vizagapatnam—cont.	Vizagapatnam Board.	Principally from tanks and wells. In a few villages also from river and streams. In dry weather, pits are dug in rivers and streams. Quality generally good. Most tanks are set apart for drinking purposes only and some are guarded by village servants. A large number of wells are provided with parapet walls and many of them also have platforms and drains.	No system. In five villages side-channels exist. Drainage water find its way into low lands, irrigation tanks and nullahs. In one union masonry drains are being built. Refuse water from houses flows into backyards and streets and thence into low grounds.	Three villages were conserved. There is also an itinerating conservancy staff for the other villages. Sweepings, rubbish, &c., are accumulated near houses and eventually used as manure. Public latrines exist in two villages, night-soil is burnt. Private latrines exist in one village and private arrangements made to clean them. People generally resort to fields for purposes of nature.
	Narasipatnam Taluk Board.	From rivers, tanks and wells. Owing to the failure in the rains, water was scarce for some months. In the big villages tanks are set apart for drinking purposes and notices put up to prevent the water being polluted. Watchmen are appointed on the tanks in three villages in the Gidavari trunk road. All the chief wells in big villages are provided with parapet walls and platforms.	No system. Side drains exist in four unions. There are four cess-pools in Narasipatnam which are generally emptied once a month.	Conservancy establishments exist in the four unions and two other villages. There are also two itinerating conservancy establishments—one for the whole Local Fund taluk and the other for Narasipatnam taluk. Street sweepings are collected by ryots and used as manure. There are public latrines in three unions.
	Parratipuz Board.	From rivers, tanks and wells. Generally sufficient and good. In three unions tanks are set apart for drinking purposes only and notices put up to prevent pollution. Watchmen are also employed for these tanks. Many wells have parapet walls.	Natural. In taluk head-quarters and unions side-channels exist. Rain-water flows into fields and vacant places. Sewage water from houses flows into street drains, streets, or is allowed to soak in backyards. Ten cess-pools exist in one village, Sálur. They are emptied once a day.	The streets in the unions are kept clean by conservancy establishments employed. The sweepings are deposited outside the villages and generally burnt. An itinerating staff is also employed (which moves from village to village) to attend to the cleanliness of the other villages and the sweepings used as manure. Public latrines exist in two places.

SECTION X.

GENERAL REMARKS AND PERSONAL PROCEEDINGS.

78. I carried on the duties of Sanitary Commissioner and Surgeon-Major Dymott, those of Inspector of Vaccination and Deputy Sanitary Commissioner throughout the year.

79. I inspected twenty-seven municipal towns and fifty-five smaller towns and villages during the year, and Surgeon-Major Dymott twenty-four municipal towns and seventy-three smaller towns and villages. Reports on all the municipal towns inspected were submitted to Government and also to the Chairmen of Municipal Councils. In the appendix will be found two tables, one showing the names of the municipalities inspected during the year with dates of inspection, &c., and the other the names of the smaller towns and villages visited. The time I spent on inspection duty was about five months and by the Deputy Sanitary Commissioner five months.

80. As has been the practice in this Presidency for many years now—since 1879 intimation of my intended visit to municipalities is given, and during my inspections I am accompanied by the Chairmen and generally also by some of the Municipal Councillors. All matters of sanitary interest are then discussed and all defects observed during my inspection are pointed out on the spot and the manner in which they could most easily be remedied is explained. At the same time the birth and death registers are examined and the importance of exercising a careful and strict supervision over this work is explained. Although in places the returns are still inaccurate, yet steady improvement on the whole is being made in the work of registration of births and deaths.

81. There is no doubt that progress in sanitary matters is being made in most municipalities and that many Chairmen and Municipal Councillors are thoroughly aware of the close relation that exists between the sickness and mortality from which the people annually suffer and the insanitary conditions among which they live, and as far as lies in their power do all that is possible with the means at their disposal to remove existing defects and adopt measures to protect the public health. Many insanitary defects, however, still exist in all towns and their removal must be a work of time and require a large expenditure of money.

82. In most municipal towns a supply of good drinking water is much required, and there is also urgent need for comprehensive schemes of drainage. Projects, however, for supplying some towns with wholesome drinking water have been sanctioned and the works are now in progress, while for other municipalities water-supply schemes are being prepared. The drainage of towns is still in a very defective condition and efficient sewerage systems for the quick removal to safe distances outside the towns of the foul matters which now pollute the soil, air and water are urgently required for many places. The percolation of sewage through the soil is one of the most active causes in Indian towns of the impurity of the well water, and in towns which depend on local wells for their supply of drinking water, the purification of the ground which efficient works of drainage are capable of doing will result in the purification of the water of wells also. The removal of burial grounds from the midst of inhabited areas has engaged the attention of many Municipal Councils, but in places it has been met by great opposition, and it is found difficult to alter old established customs (which by many are thought harmless) in the interests of hygiene. The necessity for such a step is evident, for not only do grave-yards cause pollution of the soil, but also of the air and water in their neighbourhood.

83. With regard to sewage farming it is still carried on in very few places, and, as before remarked, there are no proper drainage systems for towns, and the sewage either sinks into the ground or finds its way into any depression or nullah. The only changes during the year have been the following. The small sewage farm which was started at Salem two years ago has now been abolished, as the owner of the land declined to lease it out. There is a farm in Tanjore adjoining the fort ramparts which is irrigated with sewage. It is 65 acres in extent and is leased out to a contractor for Rs. 1,950 per annum.

84. In a few municipalities (10) the plan of burying night-soil in shallow trenches and then utilizing the land for cultivation has been introduced and is likely to become popular and prove a success. In Vizagapatam cholum, cumbu, horse gram and vegetables have been grown on land which had been trenched with night-soil with good results.

85. The question of disposing of refuse unfit for agricultural purposes is one which has been engaging the attention of many councils. As towns increase and grow in density, the safe disposal of street sweepings and other rubbish of small or no manurial value is a matter which requires the careful attention of Municipal Councils, and it is very necessary that this refuse should be so dealt with that what remains of it after treatment shall be innocuous whatever may be its ultimate destination. On no account should this refuse be used to raise ground or fill up pits, &c., in the midst of inhabited areas or in places where the ground may likely be used for building purposes, and undoubtedly the best way of disposing of this refuse is by fire.

86. With regard to the progress sanitation is making in villages it is evident from the numerous inspection reports received from the District Medical and Sanitary officers that sanitary matters are engaging the attention of the district authorities, and that an improvement in the sanitary condition of smaller towns and villages has been and is being effected in all districts. Nearly everywhere efforts are being made to ensure greater surface cleanliness and in many parts the drinking water supplies have been improved. Wells and tanks have been cleansed, repaired and put in a more satisfactory condition and new wells have been constructed.

87. The following statement shows the number of places visited by District Medical and Sanitary officers during the year:—

Districts.	Number of towns and villages inspected and reports received.	Number of towns and villages inspected, but no reports received.	Total number of towns and villages inspected.	Remarks.
Anantapur	28	..	28	1 place twice inspected.
Bellary	39	4	43	1 do. do.
Chingleput	45	23	68	7 places twice inspected.
Coimbatore	64	17	81	8 do. do.
Cuddapah	19	127	146	4 do. do.
Ganjam	12	19	31	
Gōdāvari	18	41	59	
Kistna	..	40	40	
Kurnool	53	..	53	16 places twice inspected.
Madura	49	..	49	
Malabar	28	..	28	2 places twice inspected.
Nellore	39	25	64	15 do. do.
Nilgiris	5	4	9	
North Arcot	45	7	52	
Salem	34	27	61	
South Arcot	48	..	48	8 places twice inspected.
South Canara	54	3	57	
Tanjore	46	9	55	7 places twice inspected.
Tinnevely	42	1	43	1 place twice inspected.
Trichinopoly	47	..	47	12 places twice inspected.
Vizagapatam	..	6	6	
Total	715	353	1,068	

There were 1,068 places inspected in 1892 against 454 in 1891. Eighty-two places were inspected more than once during the year.

88. Surgeon-Major Dymott, the Inspector of Vaccination and Deputy Sanitary Commissioner, was indefatigable in the discharge of his arduous duties and showed much zeal and tact in his inspection work.

89. The service registers have been maintained and brought up to date.

J. A. LAING, Surgeon-Lieut.-Col.,
Sanitary Commissioner, Madras.

9th May 1893.

APPENDICES

TO

GENERAL SANITATION REPORT.

APPENDIX I.

Tables showing places visited by Sanitary Commissioner and Deputy Sanitary Commissioner.

MUNICIPAL TOWNS INSPECTED BY						
Sanitary Commissioner.				Deputy Sanitary Commissioner.		
District.	Municipalities.	Date of inspection.	Date of report.	G.O. on report.	District.	Municipalities.
Anantapur ...	Anantapur ...	23rd and 24th Dec. 1892.	1st Feb. 1893.	No. 418-M., dated 23rd March 1893.	Chingleput ...	Conjeeveram ...
Bellary ...	Adoni ...	21st and 22nd Dec. 1892.	31st Jan. 1893.	No. 399-M., dated 21st March 1893.	Gólkavari ...	Cocanada ...
	Bellary ...	16th, 17th, 18th, 19th and 20th Dec. 1892.	6th Feb. 1893.	.....		Ellore ...
Coimbatore ...	Coimbatore ...	10th to 14th July 1892.	23rd Sept. 1892.	No. 171-M., dated 11th Feb. 1893.	Madura ...	Rajahmundry ...
	Erode ...	8th and 9th July 1892.	30th Aug. 1892.	No. 2022-M., dated 10th Dec. 1892.		Dindigul ...
	Karur ...	7th and 8th July 1892.	11th Sept. 1892.	No. 115-M., dated 27th Jan. 1893.		Madura ...
Cuddapah ...	Cuddapah ...	26th, 27th and 28th Dec. 1892.	17th Feb. 1893.	.....	Periyakulam ...	Palni ...
Ganjam ...	Berhampur ...	4th to 7th March 1892.	31st May 1892.	No. 1161-M., dated 4th July 1892.	Calicut ...	Periyakulam ...
	Chencole ...	15th and 16th March 1892.	31st May 1892.	.....	Cannanore ...	Calicut ...
	Parakkimedi ...	12th and 13th March 1892.	31st May 1892.	.....	Malabar ...	Cannanore ...
Kistna ...	Bezwada ...	4th and 5th Dec. 1892.	30th Jan. 1893.	No. 622-M., dated 8th May 1893.	Nilgris ...	Palghat ...
	Guntur ...	6th, 7th, 8th and 9th Dec. 1892.	2nd Feb. 1893.	No. 545-M., dated 24th April 1893.		Tellicherry ...
Kurnool ...	Masulipatam ...	20th Nov. and 1st to 3rd Dec. 1892.	27th Jan. 1893.	.....	South Canara ...	Ootacamund ...
	Kurnool ...	12th, 13th and 14th Dec. 1892.	13th Feb. 1893.	No. 435-M., dated 27th March 1893.		Mangalore ...

District.	Municipalities.	Date of inspection.	Date of report.	G.O. on report.
Chingleput ...	Conjeeveram ...	23rd and 24th Aug. 1892.	30th Aug. 1892.	No. 1741-M., dated 24th Oct. 1892.
Gólkavari ...	Cocanada ...	5th to 7th Feb. 1892.	19th March 1892.	No. 916-M., dated 25th May 1892.
	Ellore ...	18th, 19th and 20th Feb. 1892.	19th March 1892.	.....
Madura ...	Rajahmundry ...	8th, 9th and 11th Feb. 1892.	15th Aug. 1892.	No. 1828-M., dated 7th Nov. 1892.
	Dindigul ...	28th, 29th and 30th July 1892.	15th Aug. 1892.	.....
	Madura ...	11th, 12th, 13th and 14th July 1892.	15th Aug. 1892.	No. 1845-M., dated 10th Nov. 1892.
Periyakulam ...	Palni ...	23rd, 24th and 26th July 1892.	15th Aug. 1892.	No. 1827-M., dated 7th Nov. 1892.
	Periyakulam ...	18th and 19th July 1892.	15th Aug. 1892.	.....
Calicut ...	Calicut ...	5th, 24th to 26th Oct. 1892.	3rd Nov. 1892.	No. 217-M., dated 18th Feb. 1893.
Cannanore ...	Cannanore ...	17th, 18th and 19th Oct. 1892.	31st Oct. 1892.	.....
Palghat ...	Palghat ...	27th, 28th and 29th Oct. 1892.	3rd Nov. 1892.	No. 1-M., dated 9th Jan. 1893.
Tellicherry ...	Tellicherry ...	21st and 22nd Oct. 1892.	1st Nov. 1892.	No. 312-M., dated 6th March 1893.
Ootacamund ...	Ootacamund ...	22nd to 24th and 26th Sept. 1892.	11th Nov. 1892.	No. 114-M., dated 27th Jan. 1893.
Mangalore ...	Mangalore ...	8th and 10th to 12th Oct. 1892.	31st Oct. 1892.	No. 354-M., dated 15th March 1893.

Places visited (not Municipalities)—continued.

By Sanitary Commissioner.			By Deputy Sanitary Commissioner.		
District.	Names of places.	Date of inspection.	District.	Names of places.	Date of inspection.
Gujarat—cont.	Sallavampetia	...	Malabar	Mopatti	2nd Oct. 1892
	Narasampetia	...		Vayittiri	3rd Oct. 1892
	Cothepetia	...		Tamracheri	4th Oct. 1892
	Singapooram	...		Kavayi	16th Oct. 1892
	Moonsippetia	...		Madayi	Do.
Vizagapatnam.	Pedapadu	...	South Canara	Belihapatam	Do.
	Boodumoor	...		Manjeshwar	13th Oct. 1892
	Soolothrumpetah	...		Bungra Manjeshwar	Do.
	Rannathalam	...		Uppala	Do.
	Kosta	...		Kharagod	13th Oct. 1892
South Arcot	Yallankke	...	Trichinopoly	Beikal	14th Do.
	Chendrammopetam	...		Hosdrug	15th Oct. 1892
	Salapudipulam	...		Kundur	Do.
	Ammapett	...		Trivallyaputti	...
	Sooramungalam	...		Sembacoo	...
Salem	...	...	Godavari	Dowlaisheram	...
	...	...		Oloof's Gardens	...
	...	...		Rajahmuggam	...
	...	...		Fuzerampetia	...
	...	...		Gonagadiem	...
	...	...		Juggampeta	...
	...	...		Rajampetia	...
	...	...		Taloor	...
	...	...		Mullipulley	...
	...	...		Gundapilli	...
					No reports were sent, as these places were visited before the receipt of G.O., No. 1596/L, dated 9th July 1892.
					No reports were sent, as these places were visited before the receipt of G.O., No. 1596/L, dated 9th July 1892.

APPENDIX II.

VITAL STATISTICS OF THE GENERAL POPULATION.

No. I.—Showing the Births registered in the districts of the Madras Presidency during the year 1892.

Number.	2		3		4		5		6		7		8		9		10	
	Population (exclusive of Europeans and Eurasians) as per census of 1891.		Districts and Town and Rural Circles.		Population (exclusive of Europeans and Eurasians) for which returns were received.		Number of births registered (exclusive of Europeans and Eurasians and still births).		Rate of births per 1,000 of population.		Excess of births over females born.		Excess of deaths over births per 1,000 of population.		Mean ratio of births per 1,000 during previous five years.			
	Males.	Females.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Total.
1	3,473	3,500	ANANTAPUR.		6,973	110	123	233	15.8	17.6	33.4	90.0	...	...	2.9	15.5	14.8	30.3
2	5,125	5,150	Anantapur	M. T. C.	10,275	55	45	100	5.3	4.4	9.7	182.2	...	...	5.9	4.7	5.1	9.8
3	50,963	46,333	Tadipatri	R. C.	97,296	1,316	1,314	2,630	13.5	13.5	27.0	100.1	...	...	...	14.4	13.4	26.8
4	72,693	69,884	Annasapur	R. C.	142,577	2,019	2,003	4,022	14.2	14.0	28.2	100.8	...	...	...	14.4	16.4	30.8
5	51,976	50,397	Goory	R. C.	102,373	1,324	1,392	2,716	12.9	13.0	25.9	96.4	...	...	...	13.6	15.1	30.7
6	39,262	38,269	Pennakonda	R. C.	77,531	1,256	1,108	2,364	15.6	14.6	30.2	107.5	...	...	...	15.8	15.6	31.4
7	57,463	57,463	Dharmavaram	R. C.	114,926	1,740	1,773	3,513	14.7	14.9	29.6	107.1	...	...	...	14.8	14.5	29.3
8	61,251	61,251	Hindupur	R. C.	122,502	1,087	1,094	2,181	13.3	13.4	26.7	99.4	...	...	...	13.0	15.0	28.0
9	34,231	33,761	Madakasira	R. C.	67,992	892	885	1,777	13.1	13.0	26.1	100.8	...	...	...	13.9	12.9	26.8
9	362,062	346,081	Total District ...		708,143	28,799	9,737	38,536	13.8	13.8	27.6	100.6	7.2	...	...	14.9	14.6	29.5
10	29,130	28,650	BELLARY.		57,780	751	787	1,538	13.0	13.6	26.6	95.4	...	...	...	13.2	14.8	31.0
11	13,231	12,985	Bellary	M. T. C.	26,216	508	499	1,007	19.4	19.0	38.4	101.8	...	...	...	15.7	14.7	30.4
12	6,263	6,066	Adoni	M. T. C.	12,329	199	171	370	13.5	13.3	26.8	111.7	...	...	...	13.5	12.1	25.6
13	5,406	5,122	Hospet	T. C.	10,528	152	117	269	14.4	14.0	28.4	103.4	...	...	...	14.4	14.0	28.4
14	5,209	5,169	Kampeli	T. C.	10,378	183	183	366	15.9	17.5	33.4	90.7	...	...	...	17.6	16.8	34.5
15	61,444	59,856	Rayadurg	R. C.	121,300	2,080	1,974	4,054	17.2	16.3	33.5	105.4	...	...	...	21.1	20.3	41.3
16	35,231	33,672	Dellary	R. C.	68,903	1,483	1,563	3,046	18.0	17.4	35.4	103.6	...	...	...	18.9	18.2	37.1
17	47,281	47,014	Kindli	R. C.	94,295	1,445	1,429	2,874	13.9	13.7	27.6	101.1	...	...	...	17.4	16.9	34.3
18	54,811	49,224	Harpanaballi	R. C.	104,035	1,445	1,429	2,874	13.9	13.7	27.6	101.1	...	...	...	15.9	14.9	30.8
19	41,370	40,870	Alur	R. C.	82,240	1,382	1,372	2,754	16.8	16.7	33.5	100.7	...	...	...	18.1	16.9	35.0
20	44,685	43,391	...	R. C.	88,076	1,475	1,475	2,950	16.5	16.5	33.0	100.7	...	...	...	21.5	21.3	42.8
21	68,982	66,569	...	R. C.	135,551	2,524	2,454	4,978	18.8	18.2	37.0	102.8	...	...	...	19.6	19.0	38.6
22	44,754	42,665	Adoni	R. C.	87,419	1,297	1,350	2,647	14.8	15.4	30.2	96.1	...	...	...	18.6	18.2	36.8
23	5,712	5,659	Rayadurg	R. C.	11,371	171	136	307	15.0	12.0	27.0	125.7	...	...	...	15.6	15.9	31.5
14	463,509	446,152	Total District ...		909,661	14,855	14,733	29,588	16.3	16.2	32.5	100.8	5.0	...	...	18.4	17.6	36.0

Average for three years ending 1891.

No. 1.—Showing the Births registered in the districts of the Madras Presidency during the year 1892—continued.

Number.	2		3	4		5		6		7	8	9	10				
	Males.	Females.		Total.	Males.	Females.	Total.	Males.	Females.				Total.	Excess of deaths over births per 1,000 of population.	Excess of births over deaths per 1,000 of population.	Mean ratio of births per 1,000 during previous five years.	
Population (exclusive of Europeans and Eurasians) as per census of 1891.																	
Districts and Town and Rural Circles.																	
CHINGLEPUT.																	
24	20,611	21,932	42,543	20,611	21,932	42,543	772	741	1,513	18.1	17.4	35.5	104.2	3.0	18.1	16.7	34.8
25	5,781	6,359	12,140	5,781	6,359	12,140	12	15	27	1.0	1.2	2.2	30.0	...	1.2	1.1	2.3
26	105,580	103,897	209,477	105,580	103,897	209,477	2,416	2,428	4,844	11.5	11.6	23.1	99.5	...	14.8	14.5	29.3
27	69,175	68,001	137,176	69,175	68,001	137,176	2,080	2,087	4,167	15.2	15.2	30.4	96.7	...	19.3	18.6	37.9
28	132,784	130,396	263,180	132,784	130,396	263,180	3,351	3,217	6,568	12.7	12.2	24.9	104.2	...	18.6	17.9	36.5
29	87,931	88,190	176,121	87,931	88,190	176,121	2,533	2,503	5,036	14.7	14.2	28.9	103.2	...	18.3	17.5	35.7
30	86,972	83,944	170,916	86,972	83,944	170,916	2,361	2,276	4,637	13.8	13.3	27.1	103.7	...	18.1	17.5	35.7
31	62,221	60,177	122,398	62,221	60,177	122,398	1,575	1,462	3,037	12.9	11.9	24.8	107.7	...	16.3	15.6	31.9
8	571,005	562,896	1,133,901	571,005	562,896	1,133,901	15,150	14,729	29,879	13.4	13.0	26.4	102.8	...	17.4	16.8	34.9
Total District																	
COIMBATORE.																	
32	22,079	23,928	46,007	22,079	23,928	46,007	802	779	1,581	17.4	16.9	34.3	102.9	...	18.3	17.5	35.8
33	6,074	6,164	12,238	6,074	6,164	12,238	149	163	312	12.2	12.3	25.5	91.4	...	17.2	16.3	33.5
34	5,157	5,583	10,740	5,157	5,583	10,740	190	212	402	17.7	17.7	37.4	89.6	...	20.0	18.0	38.0
35	127,828	132,568	260,396	127,828	132,568	260,396	3,496	3,349	6,845	13.4	12.9	26.3	90.4	...	14.5	14.1	28.6
36	116,150	118,527	234,677	116,150	118,527	234,677	2,772	2,695	5,467	11.8	11.5	23.3	102.9	...	14.5	14.1	28.6
37	89,279	93,809	183,088	89,279	93,809	183,088	2,568	2,451	5,019	14.0	13.3	27.8	104.7	...	13.6	12.9	26.5
38	89,240	94,401	183,641	89,240	94,401	183,641	2,255	2,329	4,584	12.2	12.7	24.9	96.8	...	13.7	12.7	26.5
39	132,332	138,052	270,384	132,332	138,052	270,384	3,643	3,588	7,231	13.3	13.3	26.8	101.7	...	13.1	12.4	25.3
40	59,092	60,835	119,927	59,092	60,835	119,927	1,329	1,153	2,482	14.2	14.0	27.0	106.6	...	12.8	12.4	25.3
41	43,575	44,949	88,524	43,575	44,949	88,524	2,038	1,998	4,036	14.2	14.0	28.2	102.0	...	14.5	13.7	28.2
42	69,345	73,710	143,055	69,345	73,710	143,055	2,301	2,301	4,602	11.9	11.4	23.3	104.0	...	14.3	14.0	28.3
43	97,405	103,638	201,043	97,405	103,638	201,043	2,937	2,937	5,874	11.9	11.8	23.7	101.0	...	15.9	15.3	31.2
44	122,727	126,489	249,216	122,727	126,489	249,216	2,937	2,937	5,874	11.9	11.8	23.7	101.0	...	15.9	15.3	31.2
13	981,233	1,022,678	2,003,911	981,233	1,022,678	2,003,911	25,864	25,105	51,069	12.9	12.6	25.6	102.8	...	14.2	13.5	27.7
Total District																	
CUDDAPAH.																	
45	8,597	8,613	17,211	8,597	8,613	17,211	283	281	564	16.4	16.3	82.7	100.7	...	12.4	10.4	22.8
46	40,792	46,358	87,150	40,792	46,358	87,150	1,219	1,174	2,393	13.1	12.6	25.7	103.8	...	15.3	15.4	30.7
47	49,572	48,845	98,417	49,572	48,845	98,417	1,205	1,206	2,411	12.2	12.3	24.5	99.9	...	11.5	12.8	25.9
48	33,080	33,129	66,209	33,080	33,129	66,209	879	831	1,710	13.2	12.4	25.6	105.7	...	13.7	13.5	27.2
49	75,537	73,436	148,973	75,537	73,436	148,973	1,387	1,427	2,814	9.3	9.6	25.6	97.2	...	12.1	11.5	23.6

50	69,744	67,711	137,455	Cuddapah	...	R. C.	69,744	67,711	137,455	1,783	1,693	3,476	13.0	12.3	25.3	105.3	3.3	10.9	10.6	21.6
51	51,393	49,850	101,273	Jammalamadugu	...	R. C.	51,393	49,850	101,273	1,531	1,496	3,027	15.1	14.8	29.9	102.3	7.2	14.7	14.6	29.3
52	52,808	52,034	105,842	Pulivendla	...	R. C.	53,808	52,034	105,842	1,568	1,542	3,110	14.8	14.6	29.4	101.7	7.4	14.7	14.1	28.8
53	57,770	55,464	113,234	Ravachoddi	...	R. C.	57,770	55,464	113,234	1,719	1,686	3,405	17.1	17.5	34.6	98.2	11.7	14.6	14.1	28.8
54	69,718	65,174	134,892	Kadiri	...	R. C.	69,718	65,174	134,892	1,755	1,719	3,474	13.9	13.7	33.6	102.1	9.8	13.9	13.6	27.5
55	64,217	62,086	127,095	Vayalpad	...	R. C.	64,217	62,086	127,095	977	1,017	1,994	7.7	8.0	15.7	96.1	15.3	12.0	11.6	23.6
56	65,214	62,096	127,310	Madanapalle	...	R. C.	65,214	62,096	127,310	1,439	1,469	2,908	11.3	11.5	22.8	97.9	...	15.4	14.7	30.1
12	646,132	625,589	1,271,721	Total District	...		646,132	625,589	1,271,721	15,133	14,941	30,074	11.9	11.7	23.6	101.3	0.6	13.2	12.9	26.1
GANNAM.																				
57	8,451	9,753	18,204	Chicacole	...	M. T. C.	8,451	9,753	18,204	254	245	499	13.9	13.5	27.4	103.7	3.6	12.7	12.0	24.7
58	12,292	13,201	25,493	Berhampur	...	M. T. C.	12,292	13,201	25,493	411	413	824	16.1	16.2	32.3	99.5	...	14.5	13.3	27.8
59	7,717	8,662	16,379	Parlakimedi	...	M. T. C.	7,717	8,662	16,379	281	286	567	17.1	17.5	34.6	98.2	11.7	12.6	11.5	24.1
60	92,940	101,390	194,330	Chicacole	...	R. C.	92,940	101,390	194,330	2,317	2,268	4,585	11.9	11.7	23.6	102.1	9.0	9.0	8.5	27.6
61	141,825	155,911	297,736	Berhampur	...	R. C.	141,825	155,911	297,736	3,746	3,391	7,137	12.6	11.4	24.0	110.4	6.2	8.8	8.0	16.8
62	89,283	96,548	185,831	Goomsur	...	R. C.	89,283	96,548	185,831	1,755	1,868	3,623	9.5	10.0	19.5	94.5	0.7	8.3	7.7	11.9
63	41,664	43,945	85,109	Zemindariaries	...		41,664	43,945	85,109	805	7,631	15,936	9.7	9.0	18.7	108.8	4.2	6.2	5.7	11.9
64	158,828	148,490	307,318	Agency Tracts	...		158,828	148,490	307,318	309	249	558	1.0	0.8	1.8	124.1	...	0.5	0.4	0.9
8	923,000	973,400	1,896,400	Total District	...		923,000	973,400	1,896,400	17,388	16,351	33,739	9.2	8.6	17.7	106.3	3.5	6.3	5.9	12.3
GONKAVAM.																				
65	20,066	20,002	40,068	Cocanada	...	M. T. C.	20,066	20,002	40,068	637	580	1,217	15.9	14.5	30.4	109.8	...	9.4	9.2	18.7
66	13,869	14,410	28,279	Rajahmundry	...	M. T. C.	13,869	14,410	28,279	553	451	1,004	19.6	15.9	35.5	122.6	2.7	12.8	11.9	24.7
67	14,242	15,054	29,296	Elore	...	M. T. C.	14,242	15,054	29,296	416	401	817	14.2	13.7	27.9	103.7	...	11.9	11.3	23.3
68	6,907	6,924	13,831	Pithapuram	...	T. C.	6,907	6,924	13,831	55	55	111	4.0	4.1	8.1	98.2	...	3.7	3.8	7.5
69	6,619	7,033	13,652	Peddapuram	...	T. C.	6,619	7,033	13,652	180	218	398	13.2	16.0	29.2	82.5	5.8	7.6	6.8	14.5
70	6,407	7,002	13,409	Sankulot	...	T. C.	6,407	7,002	13,409	97	102	199	7.2	7.0	14.8	95.1	...	7.1	5.9	6.2
71	4,818	5,636	10,454	Dowlaishwaram	...	T. C.	4,818	5,636	10,454	184	178	362	17.6	17.0	34.6	103.4	...	1.5	1.7	3.2
72	129,355	131,823	261,183	Rajahmundry	...	R. C.	129,355	131,823	261,183	3,177	3,046	6,223	12.2	11.6	23.8	104.3	...	8.3	11.3	22.4
73	110,178	120,137	230,315	Narsapur	...	R. C.	110,178	120,137	230,315	1,755	1,666	3,421	7.6	7.2	14.8	105.3	...	6.9	6.7	13.7
74	125,189	130,883	256,072	Amalapuram	...	R. C.	125,189	130,883	256,072	2,660	2,168	4,828	8.8	8.5	17.3	104.2	...	7.4	8.5	16.7
75	99,595	104,505	204,040	Tanuku	...	R. C.	99,595	104,505	204,040	2,340	2,320	4,660	11.5	11.3	22.8	100.9	...	8.3	10.8	21.3
76	59,624	62,366	121,990	Bhimavaram	...	R. C.	59,624	62,366	121,990	1,263	1,245	2,508	10.4	10.2	20.6	101.4	...	10.6	10.1	19.8
77	73,008	68,577	141,585	Elore	...	R. C.	73,008	68,577	141,585	1,641	1,576	3,217	11.6	11.1	22.6	104.1	...	9.6	9.6	19.2
78	68,355	67,549	135,904	Yerragudem	...	R. C.	68,355	67,549	135,904	1,477	1,428	2,905	12.3	11.8	24.1	101.1	...	12.0	11.8	23.9
79	53,693	53,173	106,866	Rajahmundry	...	R. C.	53,693	53,173	106,866	1,490	1,428	2,918	13.9	13.4	27.3	104.3	...	11.9	11.4	23.3
80	61,654	62,374	124,028	Peddapuram	...	R. C.	61,654	62,374	124,028	1,919	1,864	3,783	15.5	15.0	30.5	103.0	...	0.6	12.0	11.5
81	21,645	20,672	42,317	Bhadraclatnam	...	R. C.	21,645	20,672	42,317	629	562	1,191	14.8	13.3	28.1	112.0	...	10.6	10.7	21.0
82	151,568	151,801	303,369	Zemindariaries	...		151,568	151,801	303,369	3,162	2,989	6,151	10.4	9.8	20.2	105.8	...	3.2	6.7	6.4
18	1,026,632	1,051,236	2,077,858	Total District	...		1,026,632	1,051,236	2,077,858	23,435	22,461	45,896	11.3	10.8	22.1	104.3	...	5.0	9.6	9.2
KISTNA.																				
83	18,539	20,128	38,667	Masulipatam	...	M. T. C.	18,539	20,128	38,667	566	541	1,107	14.6	14.0	28.6	104.6	1.8	14.3	13.3	27.6
84	11,705	11,562	23,267	Guntur	...	M. T. C.	11,705	11,562	23,267	366	337	703	15.7	14.5	30.2	108.6	...	7.2	12.4	10.9
85	11,330	9,251	20,611	Bezwada	...	M. T. C.	11,330	9,251	20,611	299	301	600	14.5	14.6	29.1	99.3	...	11.8	11.6	11.4

No. I.—Showing the Births registered in the districts of the Madras Presidency during the year 1892—continued.

No. I.—Showing the Births registered in the districts of the Madras Presidency during the year 1891.															
Number.	2		3	4		5		6		7	8	9	10		
	Males.	Females.		Total.	Males.	Females.	Total.	Males.	Females.				Total.	Mean ratio of births per 1,000 during previous five years.	
Districts and Town and Rural Circles.															
Kistna—cont.															
86	5,241	5,340	10,581	T. C.	5,241	5,340	10,581	165	129	294	278	127.9	5.0	14.7	13.8
87	113,038	109,718	222,756	R. C.	113,038	109,718	222,756	8,454	3,618	6,972	313	98.2	7.2	15.8	15.4
88	87,104	84,241	171,345	R. C.	87,104	84,241	171,345	2,317	2,245	4,562	313	103.2	2.9	15.8	14.9
89	73,383	69,984	143,367	R. C.	73,383	69,984	143,367	2,070	2,046	4,116	288	90.6	13.6	17.4	17.0
90	71,814	71,814	143,628	R. C.	70,191	71,814	143,628	2,038	2,038	4,076	288	90.6	1.2	14.1	13.4
91	70,910	77,454	148,364	R. C.	78,010	77,454	155,464	2,003	1,824	3,827	288	109.8	...	14.1	13.4
92	70,088	68,577	138,665	R. C.	60,088	68,577	128,665	2,080	2,032	4,112	288	102.4	...	17.3	16.5
93	70,034	68,577	138,611	R. C.	70,034	68,577	138,611	2,079	2,032	4,111	288	103.0	...	16.8	16.2
94	68,254	63,376	131,630	R. C.	80,234	79,313	159,547	2,017	2,016	4,033	288	111.6	...	14.1	13.9
95	63,376	63,322	126,698	R. C.	63,376	63,322	126,698	2,429	2,429	4,858	288	111.6	...	17.9	17.4
96	43,318	42,413	85,731	R. C.	43,318	42,413	85,731	1,363	1,354	2,717	288	105.0	...	16.9	16.1
97	41,760	40,671	82,431	R. C.	41,760	40,671	82,431	1,346	1,281	2,627	288	105.0	...	17.3	16.8
98	109,806	104,929	214,735	R. C.	109,806	104,929	214,735	2,284	2,172	4,456	288	105.2	...	9.8	9.4
16	938,057	916,967	1,855,024	Total District ...	938,057	916,967	1,855,024	28,076	26,857	54,933	288	104.5	...	15.3	14.8
Kurnool.															
99	11,631	12,675	24,306	M. T. C.	11,631	12,675	24,306	379	451	830	198	78.8	1.8	13.5	13.5
100	5,350	5,374	10,724	M. T. C.	5,350	5,374	10,724	27	36	63	34	5.9	...	7.8	7.3
101	51,862	48,728	100,590	R. C.	51,862	48,728	100,590	1,757	1,728	3,485	177	103.4	...	19.2	18.9
102	71,576	67,127	138,703	R. C.	71,576	67,127	138,703	2,443	2,552	5,000	185	95.4	...	18.9	18.3
103	44,786	43,773	88,559	R. C.	44,786	43,773	88,559	1,485	1,520	3,005	168	97.7	...	7.2	20.0
104	43,307	42,335	85,642	R. C.	43,307	42,335	85,642	1,313	1,246	2,559	148	105.4	...	3.1	17.9
105	43,710	42,335	86,045	R. C.	43,710	42,335	86,045	1,432	1,413	2,845	171	104.9	...	16.6	16.7
106	32,915	32,240	65,155	R. C.	32,915	32,240	65,155	1,212	1,129	2,341	186	107.3	...	17.3	17.4
107	58,632	58,946	117,578	R. C.	58,632	58,946	117,578	1,345	1,262	2,607	178	106.6	...	20.8	12.7
108	50,286	49,685	99,971	R. C.	50,286	49,685	99,971	1,398	1,327	2,725	140	105.3	...	12.7	15.2
10	414,035	403,625	817,660	Total District ...	414,035	403,625	817,660	12,871	12,704	25,575	157	101.3	...	3.9	16.9
Madras.															
109	217,600	218,685	436,285	Madras ...	217,600	218,685	436,285	8,274	7,808	16,082	189	17.9	...	19.2	18.1
10	938,057	916,967	1,855,024	Total District ...	938,057	916,967	1,855,024	28,076	26,857	54,933	288	104.5	...	15.3	14.8

* Average for four years.

No. I.—Showing the Births registered in the districts of the Madras Presidency during the year 1902—continued.

No. I.—Showing the Births registered in the districts of the Madras Presidency during the year 1922—continued.														
1	2	3	4		5		6		7	8	9	10		
			Population (exclusive of Europeans and Eurasians) for which returns were received.		Number of births registered (exclusive of Europeans and Eurasians) (births).		Ratio of births per 1,000 of population.					Mean ratio of births per 1,000 during previous five years.		
			Males.	Females.	Total.	Males.	Females.	Total.				Males.	Females.	Total.
Districts and Town and Rural Circles.														
NELLORE—cont.														
146	41,322	41,780	83,102	41,780	83,102	782	10.8	9.4	20.2	11.4	3.3	11.8	11.2	23.0
147	50,727	49,492	100,219	50,727	100,219	821	8.2	8.1	16.3	10.7	1.4	7.7	7.4	16.1
148	74,231	74,232	148,463	74,231	148,463	1,400	10.0	9.2	19.2	10.4	0.3	10.9	10.4	21.3
149	66,337	64,884	131,221	66,337	131,221	765	5.8	5.7	11.5	10.1	0.8	5.9	5.5	20.8
150	107,274	107,087	214,361	107,274	214,361	2,287	10.6	10.4	21.0	10.1	...	10.5	10.2	20.4
151	141,308	137,737	279,045	141,308	279,045	4,526	16.3	16.2	32.5	10.5	2.0	17.3	16.7	34.0
12	736,394	726,963	1,463,357	736,394	1,463,357	16,324	11.1	10.8	21.9	10.8	1.9	11.5	11.0	22.5
NILGIRIS.														
152	7,450	6,541	13,991	7,450	13,991	199	15.2	14.2	29.4	10.5	6.3	14.0	12.0	26.0
153	3,005	2,581	5,586	3,005	5,586	92	16.5	16.1	32.6	10.2	...	13.2	10.2	23.4
154	28,027	24,141	52,168	28,027	52,168	657	13.3	12.6	26.9	10.6	...	11.3	11.0	22.4
155	16,003	9,017	25,020	16,003	25,020	161	6.2	6.4	12.6	9.6	...	5.6	5.0	10.6
4	54,485	42,280	96,765	54,485	96,765	1,107	12.0	11.4	23.4	10.1	...	10.4	9.4	19.9
NORTH ARCOT.														
156	21,188	23,596	44,724	21,188	44,724	745	16.7	16.8	33.5	9.9	8.1	15.8	14.7	30.5
157	4,943	5,512	10,455	4,943	10,455	181	17.3	16.3	33.8	10.8	6.6	20.6	19.5	40.1
158	9,224	9,521	18,745	9,224	18,745	337	18.0	16.1	34.1	11.6	4.0	14.1	12.6	26.7
159	6,872	7,966	14,838	6,872	14,838	158	11.1	11.3	23.4	9.8	...	9.2	8.3	17.5
160	5,518	6,197	11,715	5,518	11,715	57	6.4	6.8	11.2	13.6	...	4.8	4.7	9.5
161	5,269	5,659	10,928	5,269	10,928	151	13.8	12.2	26.0	11.5	2.8	12.7	11.6	24.3
162	4,973	5,610	10,583	4,973	10,583	36	3.4	2.3	5.7	15.0	...	1.8	1.6	3.4
163	101,098	98,248	199,346	101,098	199,346	2,080	10.4	10.2	20.6	10.6	2.7	10.2	9.8	20.0
164	51,507	48,523	100,030	51,507	100,030	775	7.7	7.3	15.0	10.7	...	9.9	9.3	18.2
165	24,271	23,800	48,071	24,271	48,071	386	8.2	7.3	15.5	11.3	...	10.0	9.7	19.7
166	78,547	70,316	148,863	78,547	148,863	1,615	10.4	10.1	20.5	10.3	5.0	12.2	11.7	23.9
167	68,729	68,038	136,767	68,729	136,767	1,729	12.6	10.9	23.5	11.4	7.2	14.3	13.3	28.6

168	65,065	66,303	131,368	1,640	1,589	3,228	12.5	12.1	24.6	10.3	7.8	16.5	15.9	32.4
169	88,932	88,787	177,719	1,906	1,796	3,702	10.7	10.1	20.8	10.8	11.9	15.9	15.6	31.5
170	82,190	82,190	164,380	2,006	2,044	4,140	12.6	12.3	24.9	10.5	4.4	15.9	15.8	31.7
171	114,741	113,889	228,630	2,903	2,710	5,613	12.7	11.8	24.5	10.7	4.2	15.0	14.1	29.1
172	360,177	350,748	710,925	8,326	8,101	16,427	11.7	11.4	23.1	10.8	4.7	13.9	13.5	27.4
17	1,094,084	1,085,501	2,179,585	25,188	24,063	49,251	11.6	11.0	22.6	10.7	4.1	13.7	13.2	26.9
173	32,898	34,812	67,710	949	884	1,733	14.0	12.3	26.3	11.8	8.1	16.7	15.1	31.8
174	8,506	8,850	17,356	15,838	15,838	31,676	21.5	19.8	41.3	10.8	11.1	17.2	15.5	32.7
175	7,721	8,742	16,463	16,463	16,463	32,926	17.7	14.1	31.8	12.4	12.6	14.9	13.5	28.4
176	6,416	6,988	13,404	7,572	7,572	15,044	8.9	5.7	14.6	15.6	5.0	8.3	6.9	15.2
177	5,119	5,420	10,539	6,416	6,416	12,832	14.0	13.5	27.5	10.2	8.1	15.0	15.0	30.0
178	163,336	172,421	335,757	4,171	3,895	8,066	12.3	11.5	23.8	10.7	8.1	15.7	15.3	31.0
179	89,241	93,991	183,232	183,232	183,232	366,464	14.1	14.0	28.1	10.3	11.0	16.1	15.7	32.0
180	135,693	147,988	283,681	3,923	3,761	7,684	13.7	13.0	26.8	10.4	8.9	16.3	15.7	31.7
181	155,693	172,421	328,114	2,592	2,592	5,184	12.9	12.0	24.8	10.6	4.5	18.3	17.5	35.8
182	75,954	76,717	152,671	1,671	1,711	3,382	14.5	13.4	27.9	10.8	7.8	15.2	14.8	30.0
183	75,399	76,717	152,116	1,671	1,711	3,382	14.5	13.4	27.9	10.8	7.8	14.8	14.2	29.0
184	75,399	76,717	152,116	1,671	1,711	3,382	14.5	13.4	27.9	10.8	7.8	14.8	14.2	29.0
185	75,399	76,717	152,116	1,671	1,711	3,382	14.5	13.4	27.9	10.8	7.8	14.8	14.2	29.0
186	75,399	76,717	152,116	1,671	1,711	3,382	14.5	13.4	27.9	10.8	7.8	14.8	14.2	29.0
14	961,199	1,000,585	1,961,784	25,978	24,090	50,068	13.2	12.6	25.8	10.5	7.3	16.0	15.4	31.4
187	23,026	23,999	47,025	812	741	1,553	17.3	15.7	33.0	10.6	14.2	10.4	10.2	20.6
188	9,077	9,557	18,634	18,634	18,634	37,268	12.8	12.4	24.8	10.5	11.1	12.5	12.3	24.8
189	6,179	6,179	12,358	6,179	6,179	12,358	6.1	6.1	12.3	10.5	2.3	8.6	8.2	16.8
190	5,970	5,970	11,940	5,970	5,970	11,940	5.4	5.4	10.8	10.5	2.3	8.0	7.9	16.9
191	145,706	144,202	289,908	3,890	3,890	7,780	11.8	11.6	23.4	10.8	4.2	11.4	10.9	22.3
192	151,872	149,818	301,690	3,812	3,812	7,624	13.8	12.6	26.4	10.9	6.1	15.5	14.8	30.3
193	123,014	126,555	249,569	3,105	3,105	6,210	14.1	12.4	26.5	11.2	4.1	13.1	12.1	25.2
194	159,076	156,918	315,994	3,627	3,627	7,254	11.6	10.6	22.1	10.7	4.5	16.2	15.6	31.8
195	119,209	120,970	240,179	2,601	2,601	5,202	10.8	10.3	21.1	10.4	5.3	11.3	10.7	22.0
196	128,831	128,831	257,662	3,488	3,488	6,976	13.0	13.4	26.4	10.5	6.5	15.9	15.4	31.4
197	97,284	95,954	193,238	1,792	1,792	3,584	9.8	8.4	17.7	10.0	3.2	14.1	13.5	27.6
198	109,611	113,180	222,791	2,694	2,694	5,388	12.1	12.0	24.1	10.6	5.2	13.5	13.1	26.6
12	1,078,855	1,083,481	2,162,336	26,524	25,013	51,537	12.3	11.6	23.9	10.6	5.1	13.8	13.2	27.0
199	21,158	19,452	40,610	641	675	1,316	15.8	15.8	31.6	10.7	1.6	15.6	14.3	29.9
200	115,802	122,172	237,974	8,259	8,259	16,518	13.8	13.7	27.5	10.7	8.5	13.7	13.0	26.7
201	137,596	143,059	280,655	4,154	4,010	8,164	15.1	14.0	29.1	10.6	10.0	14.4	13.9	28.4
202	60,612	58,192	118,804	2,199	2,141	4,340	18.5	18.0	36.5	10.2	10.2	15.4	14.8	30.2

No. I.—Showing the Births registered in the districts of the Madras Presidency during the year 1892—continued.

1	2		3	4			5			6			7	8	9	10		
	Population (exclusive of Europeans and Eurasians) as per census of 1891.			Population (exclusive of Europeans and Eurasians) for which returns were received.			Numbers of births registered (exclusive of Europeans and Eurasians and still-births).			Ratio of births per 1,000 of population.							Excess of births over 1,000 of population.		Mean ratio of births per 1,000 during previous five years.
Number.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Fe- males.	Total.	Number of males born to every 100 females born.	Excess of births over 1,000 of population.	Excess of deaths per 1,000 of population.			
DISTRICTS AND TOWN AND RURAL CIRCLES.																		
SOUTH CANARA—cont.																		
TANJORE.																		
203	118,714	134,985	253,699	118,714	134,985	253,699	4,444	4,357	8,801	17.5	17.2	34.7	102.0	12.0	...	16.1	15.5	31.7
204	55,078	65,172	120,250	55,078	65,172	120,250	2,235	2,160	4,395	18.6	17.9	36.5	103.0	8.0	...	16.1	15.8	31.6
6	508,970	543,032	1,052,002	508,970	543,032	1,052,002	16,962	16,608	33,570	16.1	15.8	31.9	102.1	9.6	...	15.0	14.4	29.4
Tinnevely.																		
220	11,752	13,004	24,756	11,752	13,004	24,756	445	440	885	17.9	17.9	35.9	101.0	3.6	...	12.3	12.0	24.3
221	8,808	9,804	18,612	8,808	9,804	18,612	305	272	577	16.4	14.6	31.0	113.1	2.8	...	15.9	15.0	31.0
222	13,624	11,340	24,964	13,624	11,340	24,964	354	332	686	14.2	13.3	27.5	105.6	...	0.8	12.2	11.8	24.0
223	10,448	11,000	21,448	10,448	11,000	21,448	242	281	523	11.3	13.1	24.4	86.1	5.3	...	8.7	8.4	17.1
244	7,012	8,898	15,910	7,012	8,898	15,910	236	200	436	14.8	12.6	27.4	118.0	...	1.1	12.2	10.7	23.9
225	6,547	7,528	14,075	6,547	7,528	14,075	101	94	195	7.2	6.7	13.9	107.4	4.7	...	8.8	8.5	17.8
15	1,085,450	1,161,631	2,247,081	1,085,450	1,161,631	2,247,081	30,835	29,316	60,151	13.8	13.2	27.0	105.2	1.3	...	14.2	13.5	27.7

* Average for two years (1890 and 1891).

226	7,447	6,504	13,951	Viravanallur	...	T. C.	6,504	7,447	13,951	113	131	244	81	9.4	17.5	8.7	7.5	16.8
227	6,007	6,007	12,014	Viravanallur	...	T. C.	6,007	6,007	12,014	113	131	244	81	9.4	17.5	8.7	7.5	16.8
228	6,151	6,151	12,301	Viravanallur	...	T. C.	6,151	6,151	12,301	294	255	549	231	19.2	41.3	115.3	12.5	33.5
229	6,710	6,710	13,420	Viravanallur	...	T. C.	6,710	6,710	13,420	290	270	560	225	21.0	43.5	107.4	21.7	20.7
230	6,788	6,788	13,576	Viravanallur	...	T. C.	6,788	6,788	13,576	232	279	511	229	22.9	43.5	107.4	16.4	15.8
231	7,060	7,060	14,120	Viravanallur	...	T. C.	7,060	7,060	14,120	162	155	317	141	13.5	27.6	104.5	4.8	5.0
232	5,865	5,865	11,730	Viravanallur	...	T. C.	5,865	5,865	11,730	172	105	277	155	9.4	24.9	103.8	7.4	10.2
233	155,941	161,649	316,990	Viravanallur	...	R. C.	155,941	161,649	316,990	3,893	3,472	7,365	121	11.0	23.1	110.2	2.6	25.1
234	125,496	135,000	260,496	Viravanallur	...	R. C.	125,496	135,000	260,496	3,792	3,572	7,364	146	13.7	28.3	106.1	5.3	25.5
235	68,436	72,810	141,246	Viravanallur	...	R. C.	68,436	72,810	141,246	1,977	1,867	3,844	140	13.2	27.2	106.0	3.2	26.5
236	76,937	78,824	155,761	Viravanallur	...	R. C.	76,937	78,824	155,761	2,399	2,155	4,554	150	13.8	28.8	108.5	9.0	28.5
237	107,511	107,511	215,022	Viravanallur	...	R. C.	107,511	107,511	215,022	4,363	4,363	8,726	117	11.0	22.7	105.9	5.9	23.5
238	84,402	90,008	174,410	Viravanallur	...	R. C.	84,402	90,008	174,410	2,762	2,724	5,486	158	15.6	31.4	101.4	10.1	29.0
239	82,776	82,776	165,552	Viravanallur	...	R. C.	82,776	82,776	165,552	2,507	2,405	4,912	158	15.5	31.3	101.7	2.1	28.2
240	77,688	80,358	158,046	Viravanallur	...	R. C.	77,688	80,358	158,046	1,898	1,648	3,546	118	10.4	22.2	113.3	3.2	10.8
241	71,791	71,791	143,582	Viravanallur	...	R. C.	71,791	71,791	143,582	2,157	2,034	4,191	152	14.3	29.5	106.0	5.5	28.9
242	982,480	982,480	1,964,960	Viravanallur	...	Total District	982,480	982,480	1,964,960	23,697	25,113	51,810	139	13.1	27.0	106.3	4.9	25.7
243	43,576	43,576	87,152	Viravanallur	...	M. T. C.	43,576	43,576	87,152	985	893	1,878	110	9.0	20.9	110.4	4.8	18.9
244	10,394	10,394	20,788	Viravanallur	...	M. T. C.	10,394	10,394	20,788	398	293	691	142	13.5	27.7	105.1	2.1	30.0
245	119,143	119,143	238,286	Viravanallur	...	R. C.	119,143	119,143	238,286	3,637	3,415	7,052	147	13.7	28.4	107.1	7.7	29.1
246	148,763	148,763	297,526	Viravanallur	...	R. C.	148,763	148,763	297,526	3,698	3,509	7,207	131	12.4	25.5	105.4	7.6	27.8
247	243,685	243,685	487,370	Viravanallur	...	R. C.	243,685	243,685	487,370	1,929	1,709	3,638	79	7.0	14.9	112.8	5.2	17.8
248	195,004	195,004	390,008	Viravanallur	...	R. C.	195,004	195,004	390,008	2,907	2,814	5,721	149	13.4	29.3	108.3	9.0	28.2
249	102,757	102,757	205,514	Viravanallur	...	R. C.	102,757	102,757	205,514	3,105	3,113	6,218	154	15.4	30.8	99.7	6.1	33.5
250	43,925	43,925	87,850	Viravanallur	...	R. C.	43,925	43,925	87,850	2,203	2,095	4,298	247	23.5	48.2	105.1	15.6	31.7
251	663,035	663,035	1,326,070	Viravanallur	...	Total District	663,035	663,035	1,326,070	18,733	17,841	36,574	137	13.0	26.7	105.3	6.7	28.7
252	16,477	16,477	32,954	Viravanallur	...	M. T. C.	16,477	16,477	32,954	500	498	1,000	165	14.6	31.1	112.4	2.2	13.3
253	6,896	6,896	13,792	Viravanallur	...	M. T. C.	6,896	6,896	13,792	169	164	333	174	16.9	34.3	103.0	6.4	14.7
254	14,805	14,805	29,610	Viravanallur	...	M. T. C.	14,805	14,805	29,610	380	313	693	107	10.9	20.9	105.4	1.3	12.3
255	8,482	8,482	16,964	Viravanallur	...	M. T. C.	8,482	8,482	16,964	294	271	565	173	15.9	33.2	108.5	1.0	15.4
256	6,971	6,971	13,942	Viravanallur	...	T. C.	6,971	6,971	13,942	265	220	485	183	15.2	33.6	120.9	12.4	18.0
257	6,927	6,927	13,854	Viravanallur	...	T. C.	6,927	6,927	13,854	89	74	163	68	5.8	12.6	120.3	10.9	5.5
258	4,363	4,363	8,726	Viravanallur	...	T. C.	4,363	4,363	8,726	146	146	292	142	14.1	28.3	100.7	7.0	6.5
259	4,711	4,711	9,422	Viravanallur	...	T. C.	4,711	4,711	9,422	921	167	1,088	219	16.6	36.5	132.3	...	8.1
260	78,210	78,210	156,420	Viravanallur	...	R. C.	78,210	78,210	156,420	1,786	1,675	3,461	115	10.8	22.3	106.8	7.2	11.1
261	59,053	59,053	118,106	Viravanallur	...	R. C.	59,053	59,053	118,106	1,330	1,257	2,587	112	10.6	21.8	105.8	...	11.0
262	65,484	65,484	130,968	Viravanallur	...	R. C.	65,484	65,484	130,968	1,388	1,523	2,911	103	11.2	21.6	91.1	2.5	9.9
263	31,481	31,481	62,962	Viravanallur	...	R. C.	31,481	31,481	62,962	669	664	1,333	106	10.6	21.2	100.7	...	11.3
264	98,804	98,804	197,608	Viravanallur	...	R. C.	98,804	98,804	197,608	1,952	1,855	3,807	99	9.4	19.3	105.2	3.5	8.0
265	52,506	52,506	105,012	Viravanallur	...	R. C.	52,506	52,506	105,012	977	913	1,890	92	8.7	17.9	107.0	0.1	9.3
266	64,918	64,918	129,836	Viravanallur	...	R. C.	64,918	64,918	129,836	1,378	1,334	2,712	106	10.3	20.9	103.0	...	8.6
267	67,688	67,688	135,376	Viravanallur	...	R. C.	67,688	67,688	135,376	1,208	1,177	2,385	89	8.7	17.6	102.6	...	7.2

No. I.—Showing Births registered in the districts of the Madras Presidency during the year 1892—continued.

1	2	3	4		5		6		7	8	9	10	
			Males.	Females.	Total.	Males.	Females.	Total.				Males.	Females.
	Population (exclusive of Europeans and Eurasians) as per census of 1891.	Districts and Town and Rural Circles.	Population (exclusive of Europeans and Eurasians) for which returns were received		Number of births registered (exclusive of Europeans and Eurasians and still-births).		Ratio of births per 1,000 of population.		Excess of births over females born.	Excess of deaths over births per 1,000 of population.	Mean ratio of births per 1,000 during previous five years.		
265	61,564	Gajapatinagar ... R. C.	61,564	62,211	123,795	1,451	1,465	2,916	...	5.4	8.9	8.7	17.6
266	77,664	Chippurpalle ... R. C.	77,664	79,162	156,826	1,533	1,444	2,977	...	1.2	7.1	7.1	14.2
267	34,391	Satir ... R. C.	34,391	30,391	70,782	728	651	1,379	...	3.0	7.4	6.9	14.3
268	56,393	Satir ... R. C.	56,393	57,919	114,312	1,475	1,438	2,913	...	7.9	7.0	6.8	13.8
269	97,273	Palkonda ... R. C.	97,273	101,165	198,438	2,151	2,151	4,302	...	3.1	5.7	5.3	11.0
270	43,321	Palkonda ... R. C.	43,321	50,776	94,097	1,112	1,141	2,253	...	4.0	7.4	7.1	14.5
22	959,912	Total District ...	959,912	982,283	1,942,195	21,185	20,541	41,726	...	0.2	8.6	8.3	16.9
55	800,955	Total of Municipal Town Circles.	800,955	833,661	1,634,616	25,025	23,974	48,999	...	0.5	14.2	13.4	27.6
36	213,129	Total of Rural Town Circles in the Presidency.	213,129	224,562	437,691	5,234	4,863	10,097	...	1.5	9.5	8.9	18.4
91	1,014,084	Total of all Town Circles in the Presidency.	1,014,084	1,058,223	2,072,307	30,259	28,837	59,096	...	0.7	13.2	12.4	25.6
179	15,659,125	Total of Rural Circles in the Presidency.	15,659,125	15,931,747	31,590,872	400,738	385,235	785,973	...	3.0	13.2	12.7	25.8
270	16,673,269	Grand Total for the Presidency.	16,673,269	17,019,970	33,693,239	430,997	414,032	845,029	...	2.8	13.2	12.7	25.9

NOTE.—The population for which the returns were received from the districts of Ganjam and Vizagapatam according to the census of 1891, is not available. Hence the ratios shown in column 6 have been calculated on the total population of these districts as per census of 1891.

No. II.—Showing the Deaths registered in the districts of the Madras Presidency during the year 1892.

1	2	3	4	5			6	7			8		
Number.	Districts and Town and Rural Circles.	Area in square miles.	Average Population per square mile.	Number of deaths registered (exclusive of Europeans and Eurasians and born-dead).			No. of males died to every 100 deaths of females.	Ratio of deaths per 1,000 of population.			Mean ratio of deaths per 1,000 during previous five years.		
				Males.	Females.	Total.		Males.	Females.	Total.	Males.	Females.	Total.
ANANTAPUR.													
1	Anantapur ... M. T. C.	...	...	124	129	253	96.1	35.7	36.9	36.3	24.8	25.9	25.3
2	Tadpatri ... T. C.	...	...	76	84	160	30.5	14.8	16.3	15.6	17.0	17.5	17.2
3	Anantapur ... R. C.	...	...	1,052	909	1,961	115.7	20.6	19.6	20.1	20.5	22.4	21.4
4	Gooty ... R. C.	...	...	1,739	1,601	3,340	108.6	23.9	22.9	23.4	23.5	23.6	23.5
5	Tadpatri ... R. C.	...	...	1,033	1,026	2,059	100.7	19.9	20.3	20.1	26.7	26.1	26.4
6	Penukonda ... R. C.	...	...	909	933	1,842	97.4	22.1	23.7	22.9	25.6	26.6	26.1
7	Dharmavaram ... R. C.	...	...	1,197	1,203	2,400	99.5	19.6	20.9	20.2	19.7	21.1	20.4
8	Hindupur ... R. C.	...	...	726	762	1,488	95.3	17.5	18.9	18.2	19.1	19.4	19.2
9	Madakasira ... R. C.	...	...	474	450	924	105.3	13.9	13.3	13.6	15.4	16.3	15.9
9	Total District ...	5,275	134.2	7,330	7,097	14,427	103.3	20.2	20.5	20.4	21.7	22.6	22.1
BELLARY.													
10	Bellary ... M. T. C.	...	...	960	1,072	2,032	89.6	32.9	37.4	35.2	29.4	32.2	30.8
11	Adoni ... M. T. C.	...	...	451	457	908	98.7	34.1	35.2	34.6	23.5	24.1	23.8
12	Hospet ... T. C.	...	...	206	119	325	173.1	32.9	18.0	25.2	21.1	18.9	20.0
13	Kanpli ... T. C.	...	...	144	105	249	137.1	26.6	20.5	23.6	19.4	21.7	20.6
14	Rayadrag ... T. C.	...	...	102	139	241	73.4	19.6	26.9	23.2	14.9	16.1	15.6
15	Bellary ... R. C.	...	...	1,913	1,957	3,870	97.7	31.1	32.9	32.0	24.2	24.5	24.4
16	Hospet ... R. C.	...	...	1,285	1,173	2,458	109.5	36.5	34.6	35.6	30.6	29.4	30.0
17	Kudligi ... R. C.	...	...	1,020	954	1,974	106.9	21.6	20.3	20.9	19.8	19.8	19.8
18	Hadagalli ... R. C.	...	...	1,294	1,369	2,663	94.5	23.6	27.8	25.6	20.4	22.7	21.5
19	Harpanahalli ... R. C.	...	...	1,105	1,049	2,154	105.3	26.7	25.7	26.2	23.9	23.2	23.5
20	Adoni ... R. C.	...	...	1,074	1,087	2,161	98.8	24.0	25.0	24.5	24.2	23.9	24.1
21	Adoni ... R. C.	...	...	1,880	1,794	3,674	104.8	27.3	27.3	27.3	22.8	23.5	23.2
22	Rayadrag ... R. C.	...	...	938	923	1,861	101.6	20.9	21.6	21.3	22.1	23.4	22.7
23	Zemindary ...	...	...	195	214	409	91.1	34.1	37.8	35.9	28.2	26.4	27.3
14	Total District ...	6,136	148.2	12,567	12,412	24,979	101.2	27.1	27.8	27.5	23.5	23.8	23.7
CHINGLEPUT.													
24	Conjeevaram M. T. C.	...	...	690	693	1,383	99.6	33.5	31.6	32.5	32.2	30.2	31.2
25	St. Thomas' Mount T. C.	...	...	65	59	124	110.2	11.2	9.3	10.2	12.1	11.4	11.7
26	Saidapet ... R. C.	...	...	2,428	2,270	4,698	107.0	22.9	21.8	22.4	23.7	23.7	23.7
27	Chingleput ... R. C.	...	...	1,658	1,494	3,152	111.0	23.9	21.9	22.9	23.3	22.7	23.0
28	Madurantakam ... R. C.	...	...	2,956	2,699	5,655	109.5	22.3	20.7	21.5	22.8	22.8	22.8
29	Conjeevaram ... R. C.	...	...	2,383	2,276	4,659	104.7	27.1	25.8	26.5	25.0	24.2	24.6
30	Tiruvallur ... R. C.	...	...	1,970	2,054	4,024	95.9	23.6	24.4	23.5	22.5	22.7	22.6
31	Ponnéri ... R. C.	...	...	1,435	1,259	2,694	114.0	23.1	20.9	22.0	22.7	22.7	22.7
8	Total District ...	2,842	399.0	13,585	12,804	26,389	106.1	23.8	22.7	23.3	23.5	23.3	23.4
COIMBATORE.													
32	Coimbatore M. T. C.	...	...	676	581	1,257	116.4	30.6	24.3	27.3	29.8	25.3	27.5
33	Erode ... M. T. C.	...	...	123	143	266	86.0	20.2	23.2	21.7	24.2	23.7	23.9
34	Karur ... M. T. C.	...	...	130	118	248	110.2	25.2	21.1	23.1	31.4	27.2	29.2
35	Coimbatore ... R. C.	...	...	2,724	2,474	5,198	110.1	21.3	18.6	19.9	18.4	15.9	17.2
36	Coimbatore ... R. C.	...	...	2,060	1,991	4,051	103.4	17.7	16.8	17.3	16.5	15.5	16.0
37	Erode ... R. C.	...	...	1,865	1,593	3,458	117.1	20.7	16.9	18.8	17.9	15.7	16.8
38	Satyamangalam ... R. C.	...	...	1,602	1,629	3,231	98.3	17.9	17.3	17.6	20.8	18.0	19.3
39	Pollachi ... R. C.	...	...	2,595	2,449	5,044	106.0	19.6	17.8	16.7	16.9	15.6	16.2
40	Palladam ... R. C.	...	...	1,206	1,055	2,261	114.3	20.4	17.3	18.8	17.4	15.3	16.4
41	Bhavani ... R. C.	...	...	909	914	1,823	99.5	20.9	20.3	20.6	19.6	17.8	18.7
42	Kollegal ... R. C.	...	...	1,205	1,278	2,483	99.0	18.2	17.3	17.3	17.6	16.2	16.8
43	Udamalpet ... R. C.	...	...	1,820	1,696	3,516	107.3	18.7	16.3	17.5	18.6	16.7	17.6
44	Karur ... R. C.	...	...	1,859	1,760	3,619	111.3	15.1	13.9	14.5	16.2	15.2	15.7
13	Total District ...	7,860	254.9	18,834	17,681	36,515	106.5	19.2	17.3	18.2	18.2	16.3	17.3
CUDDAPAH.													
45	Cuddapah ... M. T. C.	...	...	324	341	665	95.0	37.7	39.6	38.6	39.0	37.6	38.3
46	Badvel ... R. C.	...	...	1,811	1,654	3,465	109.5	88.7	35.7	37.2	23.5	22.4	23.0
47	Proddatur ... R. C.	...	...	1,162	1,217	2,379	95.5	23.4	24.9	24.2	27.0	26.4	26.7
48	Sidhout ... R. C.	...	...	780	704	1,484	110.9	23.1	21.2	22.2	22.1	21.0	21.5
49	Pullampet ... R. C.	...	...	1,807	1,765	3,572	102.4	23.9	24.0	23.9	22.4	20.9	21.7
50	Cuddapah ... R. C.	...	...	1,537	1,492	3,029	103.0	22.0	22.0	22.0	22.9	22.2	22.6
51	Jammalamadugu ... R. C.	...	...	1,164	1,137	2,301	102.4	22.6	22.8	22.7	26.2	26.1	26.1
52	Pulivendla ... R. C.	...	...	1,038	973	2,011	106.7	19.3	18.7	19.0	24.8	23.8	24.3

* Average for 3 years ending 1891.

No. II.—Showing the Deaths registered in the districts of the Madras Presidency during the year 1892—continued.

1 Number.	2 Districts and Town and Rural Circles.	3 Area in square miles.	4 Average Population per square mile.	5 Number of deaths registered (exclusive of Europeans and Eurasians and born-dead).			6 No. of males died to every 100 deaths of females.	7 Ratio of deaths per 1,000 of population.			8 Mean ratio of deaths per 1,000 during previous five years.		
				Males.	Females.	Total.		Males.	Females.	Total.	Males.	Females.	Total.
CUDDAPAH—cont.													
53	Rāvachōti ... R. C.	...	...	1,366	1,410	2,776	96.9	23.6	25.4	24.5	14.8	14.3	14.5
54	Kadiri ... R. C.	...	...	1,430	1,230	2,660	113.5	20.5	19.3	19.9	19.6	20.4	20.0
55	Vayalpad ... R. C.	...	...	2,080	1,861	3,941	111.7	32.4	29.6	31.0	16.3	15.9	16.1
56	Madanapalle ... R. C.	...	...	1,206	1,212	2,418	99.5	18.5	19.5	19.0	17.3	18.3	17.8
12	Total District ...	8,722	145.8	15,705	15,026	30,731	104.5	24.3	24.0	24.2	21.5	21.1	21.3
GANJĀM.													
57	Chicacole ... M. T. C.	...	...	248	185	433	134.1	29.3	18.9	23.8	28.9	22.9	25.7
58	Berhampur ... M. T. C.	...	...	362	306	668	118.3	29.4	23.2	26.2	40.2	33.5	36.8
59	Parlakimedi ... M. T. C.	...	...	209	167	376	125.1	27.1	19.3	22.9	27.6	18.4	22.8
60	Chicacole ... R. C.	...	...	1,976	2,030	4,006	97.3	21.3	20.0	20.6	17.6	14.7	16.1
61	Berhampur ... E. C.	...	...	2,803	2,491	5,300	112.8	19.8	15.9	17.8	18.3	14.6	16.4
62	Goomsur ... R. C.	...	...	1,805	1,681	3,486	107.3	20.2	17.4	18.8	17.9	14.6	16.2
63	Zemindaries ...	...	...	6,344	5,954	12,298	106.5	15.4	13.6	14.5	12.9	10.4	11.7
64	Agency Tracts ...	...	...	310	276	586	112.3	1.9	1.9	1.9	1.2	0.9	1.0
8	Total District ...	8,370	226.6	14,063	13,090	27,153	107.4	15.2	13.5	14.3	13.3	11.1	12.1
GÓDĀVARI.													
65	Cocanada ... M. T. C.	...	...	771	669	1,440	115.2	33.4	33.4	35.9	19.2	16.6	17.9
66	Rajahmundry ... M. T. C.	...	...	497	431	928	115.3	35.8	29.8	32.8	31.2	24.2	27.7
67	Ellore ... M. T. C.	...	...	459	454	913	101.1	32.2	30.1	31.2	21.6	19.7	20.6
68	Pithapuram ... T. C.	...	...	94	73	167	128.8	13.8	10.5	12.2	11.7	8.2	9.9
69	Peddapuram ... T. C.	...	...	167	152	319	109.9	25.2	21.6	23.4	22.8	19.3	21.0
70	Samalkot ... T. C.	...	...	153	141	294	108.5	23.9	20.0	21.9	17.3	13.8	15.5
71	Dowlaiswaram ... T. C.	...	...	200	178	378	112.4	41.5	31.6	36.1	26.7	18.4	22.5
72	Rameschandra-puram ... R. C.	...	...	4,365	4,015	8,380	108.7	33.7	30.4	32.1	20.0	17.9	16.9
73	Narsapur ... R. C.	...	...	2,545	2,473	5,018	102.9	23.1	20.6	21.8	14.9	12.2	13.5
74	Analaipuram ... R. C.	...	...	3,201	3,122	6,323	102.5	25.6	23.8	24.7	14.4	12.4	13.3
75	Tannu ... R. C.	...	...	3,241	3,105	6,346	104.4	32.5	29.7	31.1	21.7	18.3	20.0
76	Bhimgavaram ... R. C.	...	...	1,970	1,834	3,804	107.4	33.0	30.4	31.2	20.8	18.0	19.3
77	Ellore ... R. C.	...	...	1,834	1,682	3,516	109.0	25.1	24.2	24.6	18.0	17.8	17.9
78	Yernagudem ... R. C.	...	...	1,024	1,641	2,665	98.7	23.7	24.2	23.9	24.0	21.5	22.8
79	Rajahmundry ... R. C.	...	...	1,343	1,318	2,661	101.9	25.0	24.8	24.9	22.0	20.5	21.3
80	Peddapuram ... R. C.	...	...	2,033	1,827	3,860	111.3	32.9	29.3	31.1	23.8	21.5	22.7
81	Bhadrachalam ... R. C.	...	...	840	797	1,637	105.4	38.8	38.5	38.7	19.9	18.3	19.1
82	Zemindaries ...	...	...	3,684	3,408	7,092	108.1	24.3	22.4	23.4	12.4	11.6	12.0
16	Total District ...	7,867	264.4	29,021	27,320	56,341	106.2	28.3	25.9	27.1	18.4	16.3	17.3
KISTNA.													
83	Masulipatam ... M. T. C.	...	...	553	482	1,035	114.7	29.8	23.9	26.8	21.8	18.0	19.8
84	Guntur ... M. T. C.	...	...	452	419	871	108.0	38.6	36.2	37.4	23.8	19.2	21.0
85	Bezwada ... M. T. C.	...	...	419	424	843	98.3	36.9	45.7	40.9	23.8	24.8	24.3
86	Chirala ... T. C.	...	...	184	163	347	112.9	35.1	30.5	32.8	22.9	19.1	20.9
87	Répalie ... R. C.	...	...	2,785	2,596	5,381	107.3	24.6	23.6	24.1	20.3	19.6	19.9
88	Bápatla ... R. C.	...	...	2,535	2,365	4,900	107.2	29.1	28.1	28.6	20.8	20.3	20.5
89	Guntur ... R. C.	...	...	2,012	1,877	3,889	107.2	27.4	26.8	27.1	21.2	20.8	21.0
90	Palnad ... R. C.	...	...	2,995	3,025	6,020	99.0	42.6	42.1	42.4	22.5	21.1	21.8
91	Narasaraopet ... R. C.	...	...	2,100	1,920	4,020	109.4	26.6	24.8	25.7	18.0	17.5	17.8
92	Gudiváda ... R. C.	...	...	1,920	1,765	3,685	108.7	31.9	30.3	31.1	24.5	23.7	24.1
93	Sattenapalle ... R. C.	...	...	2,052	1,938	3,990	105.9	29.3	28.3	28.8	20.0	18.8	19.4
94	Masulipatam ... R. C.	...	...	1,716	1,585	3,301	108.2	21.4	20.0	20.7	19.5	17.6	18.6
95	Nandigáma ... R. C.	...	...	2,051	1,947	3,998	105.3	32.3	30.7	31.5	22.7	21.9	22.3
96	Bezwada ... R. C.	...	...	1,124	1,136	2,260	98.9	26.8	26.3	26.3	25.2	25.7	25.7
97	Vinnkonda ... R. C.	...	...	1,394	1,339	2,733	104.1	33.4	32.9	33.2	20.1	18.4	19.3
98	Zemindaries ...	...	...	1,953	1,854	3,807	105.3	17.8	17.7	17.7	14.8	14.3	14.7
16	Total District ...	6,397	229.0	26,245	24,835	51,080	105.7	27.9	27.1	27.5	20.4	19.5	19.9
KURNŌOL.													
99	Kurnool ... M. T. C.	...	...	595	740	1,334	79.4	51.2	59.1	55.2	28.6	25.9	27.2
100	Nandyal ... T. C.	...	...	307	271	578	113.3	57.5	50.4	54.0	32.4	25.5	28.0
101	Ramalakot ... R. C.	...	...	1,473	1,442	2,915	101.4	28.3	29.6	28.9	24.6	23.8	24.1
102	Pattikonda ... R. C.	...	...	1,790	1,709	3,499	104.7	25.0	25.4	25.2	26.9	26.1	26.5
103	Nandikotkur ... R. C.	...	...	1,773	1,872	3,645	94.7	39.6	42.8	41.2	28.5	28.2	28.4
104	Nandyal ... R. C.	...	...	1,400	1,329	2,729	105.3	32.3	31.4	31.9	27.8	26.7	27.2

* Average for 4 years ending 1891.

No. II.—Showing the Deaths registered in the districts of the Madras Presidency during the year 1892—continued.

1	2	3	4	5			6	7			8		
Number.	Districts and Town and Rural Circles.	Area in square miles.	Average Population per square mile.	Number of deaths registered (exclusive of Europeans and Eurasians and born-dead).			No. of males died to every 100 deaths of females.	Ratio of deaths per 1,000 of population.			Mean ratio of deaths per 1,000 during previous five years.		
				Males.	Females.	Total.		Males.	Females.	Total.	Males.	Females.	Total.
KURNOOL—cont.													
105	Koilkuntha ... R. C.	...	...	1,335	1,339	2,674	99.7	30.5	31.3	30.9	32.0	32.1	32.0
106	Sirvel ... R. C.	...	...	1,169	1,099	2,268	106.4	35.5	34.1	34.8	31.4	30.0	30.7
107	Cambum ... R. C.	...	...	2,626	2,420	5,046	108.5	44.8	41.0	42.9	23.8	21.3	22.5
108	Markapur ... R. C.	...	...	2,079	1,924	4,003	108.0	41.3	38.7	40.0	19.1	17.7	18.4
10	Total District ...	7,514	109.0	14,547	14,154	28,701	102.8	35.1	35.1	35.1	26.5	25.2	25.9
MADRAS.													
109	Madras ... M. T. C.	29	15,975.8	9,749	10,538	20,287	92.5	44.8	48.2	46.5	39.0	40.2	39.6
MADURA.													
110	Madura ... M. T. C.	...	...	1,262	1,294	2,556	97.5	28.9	29.8	29.3	26.8	25.4	27.6
111	Dindigul ... M. T. C.	...	...	238	175	413	136.0	23.8	17.2	20.5	24.1	20.8	22.0
112	Periyakulam ... M. T. C.	...	...	325	300	625	103.3	42.1	34.7	38.2	31.2	27.4	29.2
113	Palni ... M. T. C.	...	...	215	148	363	145.3	26.6	16.7	21.4	31.4	23.6	27.3
114	Ramnad ... T. C.	...	...	111	89	200	124.7	17.3	12.4	14.7	22.9	17.5	20.1
115	Aruppukottai ... T. C.	...	...	179	165	344	108.5	29.2	25.2	27.1	17.3	16.2	16.9
116	Kilakarai ... T. C.	...	...	112	96	208	116.7	19.0	14.7	16.8	35.0	33.0	33.9
117	Paramagudi ... T. C.	...	...	47	24	71	195.8	9.5	4.8	7.1	14.3	9.5	11.8
118	Madura ... R. C.	...	...	1,629	1,612	3,241	101.1	19.3	18.0	18.6	17.5	16.9	17.2
119	Málar ... R. C.	...	...	1,400	1,313	2,713	106.6	19.6	17.0	18.3	19.6	17.4	18.5
120	Tiruvangalam ... R. C.	...	...	2,304	2,171	4,475	106.1	17.7	16.1	16.9	16.1	14.7	15.4
121	Periyakulam ... R. C.	...	...	2,566	2,274	4,840	112.9	21.3	17.9	19.6	18.6	15.9	17.2
122	Dindigul ... R. C.	...	...	3,473	3,276	6,749	106.0	19.1	17.3	18.2	19.8	17.9	18.9
123	Palni ... R. C.	...	...	1,994	1,876	3,870	106.3	23.4	20.3	21.7	22.9	19.6	21.2
124	Sattenandal Villages, &c.	...	...	11	8	19	137.5	18.7	11.5	14.6	20.4	18.6	19.4
15	Total District ...	5,024	313.1	15,866	14,821	30,687	107.0	20.6	18.4	19.5	19.8	17.9	18.9
MALABAR.													
125	Tellicherry ... M. T. C.	...	...	456	449	905	101.5	34.8	33.2	34.0	22.4	22.0	22.3
126	Calicut ... M. T. C.	...	...	1,222	1,238	2,460	98.7	36.1	40.0	38.0	33.2	37.0	35.0
127	Palghat ... M. T. C.	...	...	631	654	1,285	96.5	33.1	32.2	32.6	24.9	24.0	24.4
128	Cochin ... M. T. C.	...	...	406	406	812	100.0	36.9	54.2	50.3	28.9	32.9	30.9
129	Cannanore ... M. T. C.	...	...	384	356	740	107.9	29.8	25.8	27.8	25.3	20.5	22.8
130	Chirakkal ... R. C.	...	...	3,935	3,715	7,650	105.9	28.4	25.6	27.0	15.4	12.8	14.0
131	Kottayam ... R. C.	...	...	1,863	1,821	3,684	102.3	22.5	21.2	21.9	14.9	12.6	13.8
132	Kurumbranát ... R. C.	...	...	2,789	2,697	5,486	103.4	18.4	17.6	18.0	12.9	11.0	11.9
133	Calicut ... R. C.	...	...	2,270	2,129	4,399	106.6	26.8	24.5	25.6	17.5	14.8	16.2
134	Ernad ... R. O.	...	...	4,634	3,879	8,513	119.7	27.3	22.9	25.1	18.4	15.7	17.0
135	Ponnáni ... R. C.	...	...	5,464	4,900	10,364	111.5	24.5	21.6	23.1	17.0	14.9	15.9
136	Walanabad ... R. C.	...	...	3,461	2,830	6,291	122.3	21.1	16.8	18.9	17.3	14.3	15.8
137	Palghat ... R. C.	...	...	3,642	3,201	6,843	113.7	22.6	18.6	20.6	16.8	13.4	15.0
138	Wynaad ... R. C.	...	...	1,324	850	2,174	155.7	31.1	25.1	28.4	23.0	19.7	21.5
139	Cochin ... R. C.	...	...	79	85	164	93.0	27.5	27.2	27.4	20.2	21.0	20.7
15	Total District ...	5,585	472.1	32,560	29,210	61,770	111.4	24.9	21.9	22.4	17.4	14.9	16.2
NELLORE.													
140	Nellore ... M. T. C.	...	...	330	244	574	135.2	23.2	16.3	19.7	27.2	22.7	24.8
141	Ongole ... M. T. C.	...	...	142	121	263	117.4	26.2	22.4	24.3	22.5	17.9	20.2
142	Gudur ... R. C.	...	...	864	877	1,741	98.5	12.5	13.1	12.8	9.5	9.4	9.5
143	Rapur ... R. C.	...	...	861	853	1,714	100.9	27.6	28.3	27.9	20.7	19.9	20.3
144	Nellore ... R. C.	...	...	1,169	1,175	2,344	99.5	13.9	13.9	13.9	14.4	13.4	13.9
145	Atmakur ... R. C.	...	...	1,307	1,107	2,414	118.1	25.5	22.2	23.8	18.2	17.5	17.9
146	Kávali ... R. C.	...	...	732	675	1,407	108.4	17.7	16.1	16.9	15.4	14.3	14.9
147	Udayagiri ... R. C.	...	...	733	704	1,437	96.0	14.4	15.4	14.9	9.5	9.0	9.3
148	Kandukur ... R. C.	...	...	1,494	1,319	2,813	113.3	20.1	17.7	18.9	13.9	13.0	13.5
149	Kanigiri ... R. C.	...	...	733	671	1,404	100.2	11.0	10.3	10.7	6.9	6.7	6.8
150	Ongole ... R. C.	...	...	2,336	2,236	4,563	104.9	21.8	20.8	21.3	12.8	11.9	12.3
151	Zemindaries ...	...	...	4,230	4,228	8,458	101.6	30.3	30.7	30.5	19.7	19.6	19.6
12	Total District ...	8,765	166.9	14,991	14,261	29,252	105.1	20.4	19.6	20.0	14.6	13.9	14.2

No. II.—Showing the Deaths registered in the districts of the Madras Presidency during the year 1892—continued.

1	2	3	4	5			6	7			8		
				Number of deaths registered (exclusive of Europeans and Eurasians and born-dead).				Ratio of deaths per 1,000 of population.			Mean ratio of deaths per 1,000 during previous five years.		
Number.	Districts and Town and Rural Circles.	Area in square miles.	Average Population per square mile.	Males.	Females.	Total.	No. of males died to every 100 deaths of females.	Males.	Females.	Total.	Males.	Females.	Total.
NILGIRIS.													
152	Ootacamund M. T. C.	...	...	172	151	323	113.9	23.1	23.1	23.1	21.7	20.5	21.1
153	Coonoor M. T. C.	...	...	123	86	209	143.0	40.9	33.3	37.4	24.6	24.0	24.3
154	Nilgiris R. C.	...	...	735	660	1,395	111.4	26.2	27.3	26.7	17.4	16	17.2
155	South-East Wynaad R. C.	...	...	300	236	536	127.1	18.7	26.2	21.4	14.8	19.0	16.3
4	Total District...	957	161.1	1,330	1,133	2,463	117.4	24.4	26.7	25.5	17.6	18.3	17.9
NORTH ARCOT.													
156	Vellore M. T. C.	...	...	581	554	1,135	105.0	27.4	23.5	25.4	24.5	21.3	22.3
157	Wálsápet M. T. C.	...	...	143	140	283	102.1	28.9	25.3	27.0	36.4	28.5	32.2
158	Gudiyáttam M. T. C.	...	...	280	284	564	98.6	30.3	29.8	30.1	27.8	27.1	27.4
159	Tirupatí M. T. C.	...	...	229	193	422	118.6	33.3	26.2	29.6	24.5	18.5	21.4
160	Kálahasti T. C.	...	...	92	76	168	121.1	16.7	12.3	14.4	14.6	13.9	14.3
161	Arcot T. C.	...	...	127	127	254	100.0	24.1	22.4	23.2	30.1	23.7	26.4
162	Ambúr T. C.	...	...	23	34	57	82.3	5.6	6.1	5.8	9.7	7.8	8.7
163	Chittoor R. C.	...	...	1,864	1,735	3,599	107.4	18.3	17.6	17.9	17.1	16.9	17.0
164	Chendragiri R. C.	...	...	863	784	1,647	110.1	16.7	18.2	16.4	17.7	17.1	17.4
165	Palmanur R. C.	...	...	410	437	847	93.8	16.9	18.3	17.6	17.0	16.8	16.9
166	Gudiyáttam R. C.	...	...	1,304	1,138	2,442	114.6	16.6	14.4	15.5	17.6	16.7	17.1
167	Vellore R. C.	...	...	1,161	1,066	2,227	106.9	16.9	15.8	16.3	21.6	20.2	20.9
168	Polur R. C.	...	...	1,143	1,071	2,214	106.9	17.5	16.1	16.8	22.8	21.0	21.9
169	Wandiwash R. C.	...	...	1,710	1,656	3,366	103.6	19.3	18.5	18.9	21.5	20.8	21.1
170	Arcot R. C.	...	...	1,736	1,660	3,396	104.6	21.1	19.8	20.5	22.2	21.3	21.7
171	Wálsápet R. C.	...	...	2,447	2,197	4,644	111.4	21.3	19.3	20.3	19.9	19.2	19.5
172	Zemindaries	...	...	6,608	6,458	13,066	102.3	18.3	18.4	18.4	17.2	17.5	17.3
17	Total District ...	7,616	286.2	20,732	19,630	40,362	105.6	18.9	18.1	18.5	22.9	18.7	20.8
SALEM.													
173	Salem M. T. C.	...	...	644	591	1,235	109.0	19.6	16.9	18.2	26.7	23.5	25.1
174	Ványambádi M. T. C.	...	...	251	228	479	110.1	35.9	28.7	30.2	29.9	24.0	26.6
175	Tirupattúr M. T. C.	...	...	171	145	316	118.6	22.1	16.6	19.2	27.5	23.6	25.6
176	Sendamangalam T. C.	...	...	69	69	138	87.0	9.3	9.9	9.6	10.8	9.8	10.3
177	Rasipur T. C.	...	...	52	73	125	71.2	10.2	13.5	11.9	18.3	14.9	16.6
178	Salem R. C.	...	...	2,715	2,617	5,332	103.7	18.3	16.1	16.7	17.9	16.1	17.0
179	Atur R. C.	...	...	1,593	1,588	3,181	103.3	17.8	16.4	17.1	23.2	20.1	21.1
180	Namakkal R. C.	...	...	2,584	2,544	5,128	101.5	18.6	17.2	17.9	18.8	17.5	18.1
181	Tiruchengódú R. C.	...	...	2,565	2,482	5,047	103.3	20.8	19.7	20.3	18.5	16.6	17.5
182	Hosúr R. C.	...	...	1,541	1,596	3,137	96.5	20.2	20.2	20.2	19.7	19.9	19.9
183	Krishnagiri R. C.	...	...	1,345	1,288	2,633	104.4	17.8	16.8	17.3	17.4	16.8	17.1
184	Dharmapuri R. C.	...	...	1,562	1,502	3,064	104.0	17.8	16.5	17.2	18.2	16.3	17.2
185	Tirupattúr R. C.	...	...	1,644	1,583	3,227	103.8	21.3	19.9	20.6	21.8	21.8	21.8
186	Úttangarai R. C.	...	...	1,754	1,651	3,405	106.2	25.9	23.5	24.7	23.5	21.3	22.4
14	Total District ...	7,629	260.6	18,481	17,907	36,388	103.2	19.2	17.9	19.5	19.8	18.2	19.0
SOUTH ARCOT.													
187	Cuddalore M. T. C.	...	...	447	437	884	102.3	19.4	18.2	18.8	16.1	17.7	18.4
188	Chidambaram M. T. C.	...	...	231	226	457	102.2	25.3	23.6	24.5	29.6	28.4	29.0
189	Póto Novo T. C.	...	...	90	117	207	77.0	14.5	14.9	14.7	18.1	17.8	17.9
190	Tiruvannámalaí T. C.	...	...	65	49	114	132.6	10.9	7.9	9.4	16.4	11.9	14.1
191	Cuddalore R. C.	...	...	2,928	2,844	5,772	110.7	20.1	18.3	19.2	20.3	18.7	19.5
192	Villupuram R. C.	...	...	3,201	2,933	6,134	109.1	21.1	19.6	20.3	24.6	23.9	23.6
193	Chidambaram R. C.	...	...	2,880	2,722	5,602	105.8	23.4	21.5	22.4	24.8	23.6	23.8
194	Tindivanam R. C.	...	...	2,871	2,678	5,549	107.2	18.0	17.1	17.6	22.3	21.8	21.8
195	Kallakurichi R. C.	...	...	1,941	1,862	3,803	104.2	16.3	15.4	15.8	18.3	17.0	17.6
196	Tirukkóyilūr R. C.	...	...	2,758	2,512	5,270	109.8	21.4	19.6	20.5	23.4	23.6	24.5
197	Tiruvannámalaí R. C.	...	...	1,480	1,324	2,804	111.8	15.2	13.8	14.5	20.0	18.9	19.4
198	Vridhachalam R. C.	...	...	2,225	1,994	4,219	111.6	20.3	17.6	18.9	24.2	21.8	23.0
12	Total District ...	6,217	414.5	21,117	19,498	40,615	108.3	19.6	17.9	18.8	22.5	20.9	21.7
SOUTH CANARA.													
199	Mangalore M. T. C.	...	...	629	623	1,252	100.9	29.7	32.0	30.8	22.8	25.4	24.1
200	Mangalore R. C.	...	...	2,806	2,209	5,015	104.1	19.9	18.1	19.0	19.6	16.7	18.0
201	Kasaragod R. C.	...	...	2,745	2,618	5,363	104.8	19.4	18.3	19.1	18.2	15.6	16.6
202	Uppinangadi R. C.	...	...	1,627	1,481	3,108	108.9	26.8	25.7	26.3	27.6	26.3	27.0
203	Udipi R. C.	...	...	2,991	2,774	5,765	107.8	25.2	20.5	22.7	24.6	19.6	21.9
204	Coondapoor R. C.	...	...	1,782	1,640	3,422	108.0	32.3	25.8	28.5	28.8	22.4	25.4
6	Total District ...	3,902	269.6	12,080	11,367	23,447	106.3	23.7	20.9	22.3	22.5	19.2	20.7

No. II.—Showing the Deaths registered in the districts of the Madras Presidency during the year 1892—continued.

No. II.—Showing the Deaths registered in the Districts of the Madras Presidency.													
1	2	3	4	5			6	7			8		
				Number of deaths registered (exclusive of Europeans and Eurasians and born-dead).				Ratio of deaths per 1,000 of population.			Mean ratio of deaths per 1,000 during previous five years.		
Number.	Districts and Town and Rural Circles.	Area in square miles.	Average Population per square mile.	Males.	Females.	Total.	No. of males died to every 100 deaths of females.	Males.	Females.	Total.	Males.	Females.	Total.
TANJORE.													
205	Tanjore ... M. T. C.	...	...	787	801	1,588	98.2	30.4	28.2	29.3	30.1	26.4	28.2
206	Kumbakonam ... M. T. C.	...	...	819	761	1,580	107.6	31.0	27.3	29.1	31.1	29.1	30.0
207	Máyavaram ... M. T. C.	...	...	384	357	741	107.6	33.3	29.2	31.2	30.9	28.0	29.4
208	Negapatam ... M. T. C.	...	...	762	826	1,588	92.2	28.5	25.9	27.1	28.2	24.4	26.2
209	Mannárgudi ... M. T. C.	...	...	296	198	494	149.3	30.5	18.5	24.2	24.9	22.1	23.4
210	Tiruválúr ... T. C.	...	...	117	102	219	114.7	19.3	14.8	16.9	18.4	17.6	18.0
211	Tanjore ... R. C.	...	...	4,543	4,442	8,985	102.3	26.3	24.2	25.2	24.0	22.1	23.0
212	Kumbakonam ... R. C.	...	...	5,130	4,970	10,100	103.2	32.8	29.7	31.2	28.8	27.1	27.9
213	Máyavaram ... R. C.	...	...	2,882	2,875	5,757	100.3	27.4	24.8	26.1	26.7	24.8	25.3
214	Shiyali ... R. C.	...	...	1,549	1,499	3,048	103.3	26.9	24.1	25.4	24.3	22.3	23.3
215	Nannilam ... R. C.	...	...	3,105	3,082	6,188	100.7	30.9	26.6	28.7	28.4	25.5	26.9
216	Negapatam ... R. C.	...	...	1,951	1,993	3,954	98.4	28.4	25.1	26.1	28.8	26.4	27.5
217	Mannárgudi ... R. C.	...	...	1,892	2,038	3,930	92.8	23.6	23.4	23.5	21.9	20.5	21.2
218	Tiratturappúndi ... R. C.	...	...	2,315	2,330	4,675	98.1	26.4	25.5	25.9	19.7	18.7	19.0
219	Pattukkottai ... R. C.	...	...	2,234	2,196	4,430	101.7	17.1	15.6	16.3	17.0	15.2	16.1
15	Total District ...	3,709	600.4	28,777	28,500	57,277	100.9	27.0	24.5	25.7	24.8	22.7	23.7
TINNEVELLY.													
220	Tinnevely ... M. T. C.	...	...	466	395	861	103.0	34.5	30.4	32.3	29.3	26.4	27.8
221	Palamcottah ... M. T. C.	...	...	265	260	525	101.9	30.1	26.5	28.3	31.2	24.4	27.7
222	Tuticorin ... M. T. C.	...	...	358	348	706	102.9	26.3	30.7	28.3	24.2	25.4	24.7
223	Srivilliputtúr ... T. C.	...	...	219	192	411	114.1	20.9	17.4	19.1	13.0	11.0	12.0
224	Kulasekarapatnam ... T. C.	...	...	244	210	454	116.2	34.8	23.6	28.5	27.4	20.9	23.8
225	Virudupatti ... T. C.	...	...	68	61	129	111.5	10.4	8.1	9.2	15.2	14.0	14.6
226	Viravanalur ... T. C.	...	...	177	191	368	92.6	27.2	25.6	26.4	20.8	18.5	19.6
227	Rajahpollyam ... T. C.	...	...	106	81	187	130.9	16.0	12.1	14.0	14.3	13.2	13.7
228	Tenkási ... T. C.	...	...	233	214	447	108.9	37.8	31.8	34.8	36.0	31.1	33.5
229	Sivakási ... T. C.	...	...	207	213	420	97.1	35.8	33.3	34.5	33.5	24.8	26.8
230	Káyalpatnam ... T. C.	...	...	160	125	285	128.0	36.3	17.7	24.8	15.2	9.5	11.7
231	Kálladakuruchi ... R. C.	...	...	205	154	359	133.1	39.2	26.2	32.3	30.5	20.9	25.6
232	Ottappidáram ... R. C.	...	...	3,212	3,285	6,497	97.9	20.7	20.3	20.5	19.8	18.7	19.2
233	Tenkarai ... R. C.	...	...	3,102	2,817	5,919	110.1	24.8	20.9	22.7	26.7	22.9	24.7
234	Tinnevely ... R. C.	...	...	1,755	1,634	3,389	107.4	25.6	22.4	24.0	24.7	22.2	23.4
235	Srivilliputtúr ... R. C.	...	...	1,583	1,515	3,098	104.5	20.6	19.2	19.8	20.0	17.6	18.7
236	Sankaranayamár-kóvil ... R. C.	...	...	1,837	1,763	3,603	104.0	17.3	16.4	16.8	16.8	16.0	16.4
237	Nángunéri ... R. C.	...	...	1,917	1,792	3,709	107.0	22.7	19.9	21.3	27.3	23.5	25.3
238	Ambásamúdrum ... R. C.	...	...	2,413	2,222	4,635	108.6	31.8	26.8	29.2	24.3	21.3	22.8
239	Sáttúr ... R. C.	...	...	1,540	1,467	3,007	105.0	19.8	18.2	19.0	18.1	16.9	17.5
240	Tenkási ... R. C.	...	...	1,700	1,711	3,411	99.4	24.2	23.8	24.0	20.5	19.8	20.2
21	Total District ...	5,387	355.1	21,707	20,653	42,380	105.1	23.2	21.0	22.1	22.0	19.8	20.9
TRICHINOPOLY.													
241	Trichinopoly ... M. T. C.	...	...	1,196	1,107	2,303	108.0	27.4	24.0	25.7	27.6	25.4	26.4
242	Srirangam ... M. T. C.	...	...	340	305	645	111.5	33.2	26.7	29.8	33.2	29.1	31.0
243	Trichinopoly ... R. C.	...	...	2,520	2,630	5,150	95.8	21.1	20.3	20.7	24.6	22.6	23.6
244	Musiri ... R. C.	...	...	2,504	2,582	5,086	97.0	18.7	17.4	17.9	19.8	18.5	18.7
245	Kulittalai ... R. C.	...	...	1,235	1,132	2,367	109.1	10.4	9.1	9.7	12.2	11.2	11.7
246	Perambalur ... R. C.	...	...	1,953	2,003	3,951	97.7	20.7	19.9	20.3	24.5	22.9	23.7
247	Udayarpálaiyam ... R. C.	...	...	2,505	2,485	4,990	100.8	25.3	24.2	24.7	28.6	26.5	27.6
248	Zemindaries ...	...	...	1,569	1,390	2,959	108.6	36.6	30.8	32.6	40.2	38.0	39.1
8	Total District ...	3,631	377.6	13,767	13,634	27,401	100.9	20.8	19.2	20.0	23.4	21.5	22.4
VIZAGAPATAM.													
249	Vizagapatam ... M. T. C.	...	...	608	523	1,131	116.2	36.9	29.9	33.3	27.2	23.5	25.5
250	Bimalipatam ... M. T. C.	...	...	185	210	395	88.1	39.9	41.5	40.7	26.0	23.9	24.9
251	Vizianagaram ... M. T. C.	...	...	359	324	683	110.8	24.2	20.3	22.2	25.9	19.4	22.5
252	Anakápallo ... M. T. C.	...	...	316	265	581	119.2	37.2	31.1	34.2	22.9	20.3	21.6
253	Bobbili ... T. C.	...	...	159	147	306	108.2	22.9	19.6	21.2	20.9	17.6	19.2
254	Sávara ... T. C.	...	...	179	125	304	143.2	29.9	18.0	23.5	24.6	16.1	20.0
255	Palkonda ... T. C.	...	...	119	102	221	116.6	24.4	18.5	21.3	19.5	15.6	17.4
256	Párvatipuram ... T. C.	...	...	120	105	225	114.3	25.4	19.6	22.4	21.4	12.9	17.0
257	Sarvasiddhi ... R. C.	...	...	2,385	2,189	4,574	103.9	31.1	27.9	29.5	13.7	12.6	13.1
258	Narasapatnam or Golconda ... R. C.	...	...	2,112	1,779	3,891	118.7	35.5	30.1	32.8	14.9	13.3	14.0
259	Anakápallo ... R. C.	...	...	1,723	1,526	3,249	112.9	25.9	22.2	24.0	11.9	10.4	11.2
260	Vizagapatam ... R. C.	...	...	743	710	1,453	104.6	23.6	22.6	23.1	13.7	13.4	13.6

No. II.—Showing the Deaths registered in the districts of the Madras Presidency during the year 1892—continued.

1 Number.	2 Districts and Town and Rural Circles.	3 Area in square miles.	4 Average Population per square mile.	5 Number of deaths registered (exclusive of Europeans and Eurasians and born-dead).			6 No. of males died to every 100 deaths of females.	7 Ratio of deaths per 1,000 of population.			8 Mean ratio of deaths per 1,000 during previous five years.		
				Males.	Females.	Total.		Males.	Females.	Total.	Males.	Females.	Total.
VIZAGAPATAM—cont.													
261	Viravilli ... R. C.	...	...	2,428	2,084	4,512	116.5	24.6	21.0	22.8	11.7	10.7	11.3
262	Bimlipatam ... R. C.	...	...	1,001	874	1,875	114.5	19.1	16.5	17.8	12.4	11.7	12.0
263	Springavarapukota ... R. C.	...	...	1,417	1,258	2,675	112.6	22.0	19.4	20.7	14.0	12.4	13.2
264	Vizianagram ... R. C.	...	...	1,160	1,172	2,332	99.0	17.1	17.2	17.2	10.7	10.3	11.2
265	Gajapatinagaram ... R. C.	...	...	1,148	1,100	2,248	104.4	18.6	17.7	18.1	13.6	13.4	13.4
266	Chipurapalle ... R. C.	...	...	1,426	1,349	2,775	105.6	18.4	17.0	17.7	11.3	11.3	11.3
267	Sálóru ... R. C.	...	...	635	531	1,166	119.6	18.5	14.6	16.5	18.4	15.2	16.7
268	Bobbili ... R. C.	...	...	1,037	981	2,018	105.7	18.4	17.1	17.6	13.8	12.2	12.9
269	Palkonda ... R. C.	...	...	1,893	1,773	3,666	106.7	19.4	17.5	18.4	12.5	11.0	11.7
270	Párvatipuram ... R. C.	...	...	955	895	1,850	106.7	19.7	17.6	18.7	18.6	15.3	16.9
22	Total District ...	4,619	420.5	22,108	20,022	42,130	100.4	23.0	20.4	21.7	14.0	12.9	13.3
55	Total of Municipal Town Circles in the Presidency.	...	...	24,636	23,543	48,179	104.6	30.7	28.2	29.4	27.3	25.1	26.2
36	Total of Rural Town Circles in the Presidency.	...	...	4,974	4,425	9,399	112.4	23.3	18.8	21.0	19.9	16.6	18.2
91	Total of all Town Circles in the Presidency.	...	...	29,610	27,968	57,578	105.8	29.2	26.2	27.6	25.8	23.2	24.5
179	Total of Rural Circles in the Presidency.	...	...	355,552	337,625	693,177	105.3	22.7	21.1	21.9	20.0	18.3	19.1
270	Grand Total for the Presidency.	124,943	269.7	385,162	365,593	750,765	105.3	23.1	21.5	22.3	20.4	18.6	19.5

NOTE.—The population for which the returns were received from the districts of Ganjam and Vizagapatam according to the census of 1891, is not available. Hence the ratios shown in column 7 have been calculated on the total population of those districts as per census of 1891.

No. III.—Deaths registered in the districts of the Madras Presidency during each month of the year 1892.

1 Number.	2 Districts.	3 January. February. March. April. May. June. July. August. September. October. November. December.												4 Total deaths registered during the year.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
1	Anantapur ...	874	819	1,574	1,353	996	912	1,419	1,803	1,425	1,114	1,032	1,133	14,427
2	Bellary ...	1,365	1,376	2,900	2,378	1,594	1,895	2,730	3,089	2,311	1,799	1,759	1,786	24,979
3	Chingleput ...	4,173	2,542	1,900	1,465	2,025	1,663	1,720	2,177	2,350	2,190	2,047	2,137	26,369
4	Coimbatore ...	4,531	2,939	3,229	3,315	3,167	2,710	2,594	2,777	2,582	2,723	2,585	3,060	56,511
5	Cuddapah ...	2,332	1,780	2,027	2,511	2,141	1,750	2,800	3,517	3,159	2,716	2,998	2,870	56,731
6	Ganjam ...	2,052	1,679	2,296	1,903	2,129	2,087	2,803	2,954	3,316	1,956	2,565	2,415	27,153
7	Godavari ...	3,972	4,838	4,354	3,522	4,057	4,537	12,344	6,408	3,560	3,033	3,423	3,275	56,541
8	Kistna ...	4,174	3,663	4,386	4,091	3,851	3,904	6,127	6,554	4,184	3,573	3,555	3,918	51,950
9	Kurnool ...	1,576	1,429	2,551	2,360	2,094	1,713	3,414	4,067	2,630	2,106	2,394	2,367	28,701
10	Kurnool ...	1,958	1,411	1,207	1,414	1,333	1,109	1,607	2,500	2,118	1,825	1,575	1,610	20,387
11	Madras ...	5,151	2,941	3,241	2,150	2,107	2,002	2,065	2,103	1,995	2,070	2,244	2,618	30,587
12	Malabar ...	4,692	5,425	6,230	5,091	5,187	5,436	6,855	7,532	6,611	3,536	2,964	3,631	61,770
13	Nellore ...	2,638	2,672	2,635	2,316	2,271	1,968	2,295	3,291	2,139	2,150	2,434	2,432	29,252
14	Nilgiris ...	168	138	205	250	311	293	266	190	179	139	177	147	2,463
15	North Arcot ...	5,770	3,597	3,104	2,872	3,364	3,104	2,923	3,639	3,103	3,110	3,198	3,178	40,562
16	Salem ...	5,063	2,974	2,802	2,532	2,981	2,784	2,802	2,867	2,966	2,810	2,807	3,000	36,388
17	South Arcot ...	7,843	4,077	3,145	2,705	2,700	2,485	2,953	2,866	2,883	2,981	2,963	2,946	40,616
18	South Canara ...	1,904	1,697	1,532	1,274	1,487	2,312	2,549	2,836	2,212	1,850	1,645	2,140	23,447
19	Tanjore ...	10,199	6,174	4,300	4,238	4,279	4,072	4,396	4,068	3,816	3,963	3,875	3,927	57,277
20	Tinnevely ...	8,296	4,112	3,490	2,921	2,754	2,517	3,070	3,048	2,563	3,000	3,041	3,518	42,360
21	Trichinopoly ...	4,526	2,874	2,213	2,003	1,965	1,718	1,978	1,980	1,968	2,077	2,005	2,154	27,491
22	Vizagapatam ...	3,623	3,571	4,377	3,206	3,128	3,506	4,298	4,080	3,609	2,759	2,973	3,000	42,130
Total, Madras Presidency ...		86,870	61,728	63,765	56,483	56,550	53,643	74,465	78,693	58,689	55,479	54,250	57,131	750,755
Ratio of deaths per 1,000 in each month ...		2.6	1.8	1.9	1.7	1.7	1.6	2.2	2.2	1.7	1.6	1.6	1.7	22.3

No. IV.—Deaths registered according to age in the districts of the Madras Presidency during the year 1892.

1	2	3		4		5		6		7		8		9		10		11		12	
Number.	Districts.	Under 1 year.		1 year and under 5.		5 years and under 10.		10 years and under 15.		15 years and under 20.		20 years and under 30.		30 years and under 40.		40 years and under 50.		50 years and under 60.		60 years and upwards.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	Anantapur	1,358	1,308	839	806	421	346	200	193	212	415	615	1,008	898	710	835	678	798	638	1,066	1,035
2	Bellary	2,457	2,299	2,191	2,225	804	724	373	314	449	621	1,210	1,720	1,323	1,495	1,300	922	1,158	1,034	1,212	1,358
3	Chingleput	3,359	3,083	2,180	2,242	733	746	413	338	388	544	858	1,063	1,040	898	1,104	827	1,187	920	2,214	2,143
4	Coimbatore	4,761	4,308	2,916	2,785	1,060	945	625	532	663	825	1,517	1,641	1,765	1,486	1,704	1,300	1,570	1,437	2,263	2,602
5	Cuddapah	2,584	2,330	1,721	1,773	928	875	459	385	574	811	1,470	1,994	1,355	1,615	2,053	1,464	1,931	1,673	2,047	2,166
6	Ganjam	3,342	3,014	1,888	1,660	790	768	535	422	511	618	1,057	1,145	1,265	1,036	1,277	946	1,316	1,113	2,073	2,308
7	Godavari	3,650	3,420	4,374	4,388	2,891	2,508	1,600	1,255	1,555	1,981	3,284	5,637	3,193	2,408	2,646	1,795	2,298	1,910	3,524	3,928
8	Kistna	5,610	5,083	4,865	4,720	2,162	1,840	1,055	916	1,091	1,397	1,869	2,209	1,824	1,486	1,629	1,178	1,692	1,380	4,448	4,676
9	Kurnool	2,532	2,359	2,113	2,060	1,108	1,004	602	520	665	778	1,659	1,830	1,086	1,450	1,531	1,105	1,219	1,212	1,432	1,827
10	Madras	2,758	2,425	1,686	1,639	592	577	269	315	199	360	730	921	670	764	685	622	658	603	1,762	2,412
11	Madura	3,118	3,195	2,825	2,638	1,017	887	632	495	611	797	1,340	1,452	1,568	1,355	1,489	1,170	1,234	1,202	1,632	1,830
12	Malabar	4,767	4,901	4,091	3,885	2,139	1,851	1,414	1,254	1,706	1,815	4,582	4,421	5,005	4,071	3,728	2,653	2,830	2,136	4,308	4,822
13	Nellore	2,685	2,265	2,676	2,369	1,425	1,377	979	968	827	852	942	937	975	845	1,007	840	1,313	1,127	2,112	2,652
14	Nilgiris	304	282	296	250	52	49	33	27	95	45	155	130	132	113	112	78	101	66	88	113
15	North Arcot	4,204	3,595	3,338	3,250	1,270	1,168	607	566	754	1,074	1,634	2,117	1,948	1,748	2,035	1,471	1,959	1,590	2,853	3,021
16	Salem	4,887	4,394	2,874	2,856	1,132	1,063	558	506	631	742	1,306	1,619	1,697	1,550	1,766	1,363	1,590	1,490	1,949	2,294
17	South Arcot	5,592	4,823	3,704	3,537	1,171	1,080	607	482	692	728	1,295	1,663	1,670	1,411	1,787	1,289	1,827	1,462	2,972	3,023
18	South Canara	2,782	2,401	1,277	1,269	522	525	350	277	496	528	1,103	1,378	1,348	1,087	1,546	829	1,121	870	1,815	2,132
19	Tanjore	6,644	5,472	3,259	2,971	1,627	1,496	1,067	958	1,133	1,516	2,532	3,092	3,506	2,680	2,643	2,413	1,898	1,671	2,726	3,441
20	Tinnevely	4,899	4,558	3,730	3,667	1,879	1,938	746	639	786	602	1,656	1,838	1,870	1,655	2,017	1,424	1,898	1,671	2,726	3,441
21	Trichinopoly	3,454	3,023	1,858	1,901	638	644	413	369	397	533	941	1,231	1,129	1,085	1,299	902	1,285	1,169	2,386	2,687
22	Vizagapatam	3,732	3,283	2,919	2,941	1,544	1,225	1,060	546	595	1,069	1,921	2,060	2,306	1,774	2,358	1,667	2,547	2,265	2,766	3,101
Total, Madras Presidency		78,01	68,831	37,507	55,923	25,442	22,747	14,707	12,377	15,088	18,541	33,587	39,096	37,592	32,531	36,533	26,797	34,135	2,401	52,254	59,249
Ratio per mille of population		Information not available.																			

No. V.—Deaths registered according to Classes in the districts of the Madras Presidency during the year 1892.

Number.	Districts.	Population for which returns were received.					Number of deaths registered.					Ratio of deaths per 1,000 of population.				
		Native Christians	Muhammadians	Hindus	Other classes	Total	Native Christians	Muhammadians	Hindus	Other classes	Total	Native Christians	Muhammadians	Hindus	Other classes	Total
1	Anantapur	1,377	51,333	655,105	328	708,143	7	771	13,648	1	14,427	51	15.9	20.8	3.9	20.4
2	Bellary	5,460	87,638	817,078	1,479	909,661	73	2,343	22,561	2	24,979	21.0	26.7	27.6	1.3	27.5
3	Chingleput	15,944	26,236	1,091,376	345	1,133,901	178	398	25,873	...	26,389	11.2	12.9	23.7	...	23.3
4	Coimbatore	14,638	43,947	1,945,010	316	2,003,911	238	633	35,024	...	36,315	17.6	14.4	18.3	...	18.2
5	Cuddapah	9,374	119,564	1,142,727	59	1,271,721	86	2,313	25,327	...	30,731	9.2	19.4	24.8	...	24.2
6	Ganjam	2,410	5,514	1,888,424	52	1,896,400	15	62	27,073	4	27,153	6.2	11.2	14.3	77.0	14.3
7	Godavari	8,140	41,042	2,028,003	71	2,077,858	148	975	55,218	...	56,341	18.1	23.7	27.2	...	27.1
8	Kistna	67,903	108,567	1,678,338	168	1,855,924	1,158	2,497	47,423	2	51,080	17.4	23.0	28.2	12.7	27.5
9	Kurnool	22,534	92,419	987,616	44	1,102,613	531	3,394	24,776	...	28,701	23.5	34.8	35.5	...	35.1
10	Madras	23,590	53,134	358,997	505	435,226	960	2,402	16,977	8	20,287	38.2	45.2	47.3	13.4	46.5
11	Madura	42,298	73,465	1,457,400	95	1,573,318	532	1,567	28,598	...	30,687	12.3	21.3	19.6	...	19.5
12	Malabar	42,372	739,242	1,834,234	776	2,606,674	1,384	19,220	41,179	7	61,770	32.2	25.3	22.4	9.0	23.4
13	Nellore	46,797	78,185	1,337,979	309	1,463,275	208	888	28,066	...	29,252	6.4	11.3	20.9	...	20.0
14	Nilgiris	8,594	4,900	83,531	40	93,065	181	140	2,132	...	2,453	22.2	36.4	25.5	...	25.5
15	North Arcot	14,101	96,238	2,061,105	8,141	2,179,585	63	1,250	30,025	15	40,362	4.5	13.1	18.9	1.8	18.5
16	Salem	17,601	61,505	1,882,409	269	1,961,784	472	1,014	35,202	...	36,388	9.8	16.5	18.7	...	18.5
17	South Arcot	54,329	58,661	2,043,679	5,070	2,162,339	336	763	39,482	84	40,415	6.2	13.0	19.3	6.0	13.8
18	South Canara	70,002	108,201	862,573	10,203	1,052,982	1,275	2,380	10,567	266	23,447	18.0	21.6	22.7	25.9	22.3
19	Tanjore	84,538	110,864	2,022,200	579	2,217,981	1,542	2,775	52,400	...	57,277	18.3	23.1	28.2	...	22.1
20	Tinnevely	145,580	95,951	1,674,150	32	1,915,792	2,703	2,302	37,355	...	42,360	18.6	24.0	22.3	...	20.0
21	Trichinopoly	69,410	38,371	1,264,037	8	1,371,726	1,035	648	25,718	...	27,401	14.9	16.9	20.3	...	21.7
22	Vizagapatam	1,938	21,058	1,019,070	60	1,042,125	35	279	41,816	...	42,130	17.6	13.2	21.8	...	21.7
Total, Madras Presidency.		767,367	2,149,742	30,745,848	29,722	33,633,179	12,800	48,927	688,500	330	750,755	16.8	22.8	22.4	11.4	22.3

No. VI.—Deaths registered from Different Causes in the districts and towns of the Madras Presidency during the year 1892.

1	2	3	4	5	6	7	8					9	10	11							
Number.	Districts and towns.	Population for which returns were received.	Cholera.	Small-pox.	Fever.	Dysentery and Diarrhoea.	Injuries.					All other causes.	Total deaths from all causes.	Ratio of deaths per 1,000 of population.					From all causes.		
							Males.	Females.	Wounds and accidents.	Snake-bite and killed by wild beasts.	Total.			Cholera.	Small-pox.	Fever.	Dysentery and Diarrhoea.	Injuries.			All other causes.
A.—Districts.*																					
1	Anantapur	600,895	719	129	2,915	216	9	26	142	36	212	9,823	14,014	1.0	0.2	4.2	0.3	0.3	14.2	20.3	22.1
2	Bellary	791,890	1,741	344	8,145	961	18	35	135	40	226	9,807	21,224	2.2	0.4	10.3	1.2	0.3	12.4	26.8	23.2
3	Chingleput	1,079,218	1,913	346	6,735	3,448	46	48	308	97	409	11,941	24,832	1.8	0.3	6.2	3.2	0.5	11.1	23.1	23.7
4	Coimbatore	1,934,926	2,007	2,468	14,286	931	55	75	381	101	612	14,440	34,744	1.0	1.3	7.4	0.5	0.3	7.5	18.0	21.1
5	Cuddapah	1,254,510	3,268	403	21,071	706	63	101	364	73	601	4,018	30,066	2.6	0.3	16.8	0.3	0.5	3.2	24.0	11.6
6	Ganjam	1,896,324	574	405	19,677	606	30	51	264	89	423	4,096	25,676	0.2	0.3	10.7	0.3	0.2	2.2	13.9	17.2
7	Godavari	1,922,060	12,833	6,041	17,521	724	60	83	329	110	685	14,198	51,962	6.6	3.1	9.1	0.4	0.3	7.4	26.9	19.2
8	Kistna	1,701,868	4,273	6,382	16,723	747	61	69	319	92	588	10,322	47,984	2.4	3.6	9.5	0.4	0.3	11.0	27.2	19.2
9	Kurnool	782,650	4,965	421	17,761	586	29	42	150	46	276	3,576	20,779	5.6	0.5	22.7	0.5	0.4	4.5	34.3	26.8
10	Madras	436,375	565	25	6,794	3,809	2	1	129	5	137	8,903	20,287	1.3	0.06	15.6	3.9	0.3	30.4	46.5	30.7
11	Madura	1,384,120	2,384	2,234	7,736	695	43	94	307	137	581	12,377	25,907	1.7	1.6	8.0	0.4	0.4	4.6	46.7	18.1
12	Malabar	2,462,078	7,460	10,467	19,274	5,445	93	34	424	119	970	12,252	55,568	3.0	4.2	7.8	2.2	0.3	5.0	23.5	15.5
13	Nellore	1,423,397	7,151	1,319	12,666	843	20	17	345	21	406	11,433	28,415	1.2	0.9	8.9	0.6	0.3	8.0	19.9	16.9
14	Nilgiris	77,188	20	68	1,532	87	...	...	...	...	25	1,931	1,931	0.3	0.9	19.3	1.1	0.3	2.6	25.1	16.9
15	North Arcot	2,058,167	8,107	1,948	15,034	1,229	36	59	609	134	898	15,258	37,474	1.1	0.9	7.3	0.6	0.4	7.4	18.2	18.7
16	Salem	1,837,950	8,543	1,553	13,855	779	49	40	294	132	615	13,853	34,104	1.9	0.8	7.5	0.4	0.3	7.8	18.5	22.6
17	South Arcot	2,070,434	3,654	1,500	12,130	878	44	34	422	222	724	19,698	38,953	1.3	0.8	5.9	0.4	0.3	9.6	10.1	20.6
18	South Canara	1,011,332	213	483	8,417	1,362	65	32	347	62	506	10,214	22,196	1.2	0.5	8.3	1.3	0.5	10.1	21.9	20.6
19	Tanjore	2,062,910	8,441	658	3,711	764	44	30	223	231	528	37,625	51,067	4.2	0.3	1.9	0.3	0.3	18.2	25.3	23.3
20	Tinnevely	1,721,080	3,746	1,875	5,072	956	55	114	405	71	635	24,244	37,268	2.2	1.1	2.9	0.6	0.4	14.5	21.4	21.9
21	Trichinopoly	1,280,428	1,942	278	4,321	294	32	34	224	138	428	16,692	24,453	1.5	0.2	8.8	0.2	0.3	13.2	19.4	12.7
22	Vizagapatam	1,803,927	3,004	1,617	30,524	733	61	73	319	84	537	1,960	38,284	1.7	0.8	16.9	0.4	0.3	1.1	21.2	12.7
Total of districts		31,610,872	72,322	41,012	266,409	26,316	915	1,020	6,534	2,035	10,574	270,344	693,177	2.3	1.3	8.4	0.8	0.3	8.7	21.0	18.9

* Exclusive of B.—Towns.

No. VI.—Deaths registered from Different Causes in the districts and towns of the Madras Presidency during the year 1892—cont.

VI.—Deaths registered in 1891.																					
Number.	Districts and towns.	Population for which returns were received.	Cholera.	Small-pox.	Fever.	Dysentery and diarrhoea.	Injuries.					All other causes.	Total deaths from all causes.	Ratio of deaths per 1,000 of population.							
							Suicides.		Wounds and accidents.	Snake-bite and killed by wild beasts.	Total.			Cholera.	Small-pox.	Fever.	Dysentery and diarrhoea.	Injuries.	All other causes.	For the year.	Mean of previous 5 years.
							Males.	Females.													
B.—Towns.																					
1	Anantapur.	6,973	80	...	22	4	...	...	3	...	3	144	253	11.5	...	3.2	0.6	0.4			
2	T. C. Tadipatri	10,275	21	...	...	2	...	...	...	...	...	137	180	2.0	...	...	0.2	...			
3	Bellary.	57,789	663	19	484	94	1	...	20	...	21	1,054	2,032	3.2	0.3	8.4	1.6	0.4			
4	M. T. C. Adoni	25,216	119	...	347	27	...	...	7	...	9	406	908	4.5	...	13.2	1.9	0.3			
5	T. C. Hospet	12,869	58	...	249	4	...	...	6	...	7	8	325	4.5	...	19.3	0.3	0.5			
6	T. C. Kampli	10,628	62	1	175	1	...	...	4	...	4	5	240	5.9	0.09	10.7	0.09	0.4			
7	T. C. Rayadurg	10,378	115	...	121	...	...	...	...	...	...	5	241	11.1	...	11.6	...	...			
8	M. T. C. Conjeevaram.	42,543	37	21	333	169	2	...	11	1	14	809	1,383	0.9	0.5	7.8	4.0	0.5			
9	T. C. St. Thomas Mount.	12,140	7	...	31	29	...	1	1	...	2	55	124	0.6	...	2.5	2.4	0.2			
10	M. T. C. Coimbatore.	46,007	34	206	232	110	4	12	11	2	29	646	1,257	0.7	4.5	5.0	2.4	0.6			
11	M. T. C. Erode	12,238	30	...	77	16	...	...	5	1	6	137	265	2.4	...	6.3	1.3	0.5			
12	M. T. C. Karur	10,740	20	1	81	46	...	...	5	...	6	95	248	1.9	0.09	7.5	4.3	0.5			
13	M. T. C. Cuddapah.	17,211	70	2	291	23	...	...	8	1	11	268	665	4.1	0.1	16.9	1.3	0.6			
14	M. T. C. Chingleput.	18,204	1	...	137	58	2	1	2	...	5	232	433	0.05	...	7.5	3.2	0.3			
15	M. T. C. Berhampur.	25,493	75	...	153	62	...	...	5	1	6	571	668	3.0	...	6.0	2.4	0.2			
16	M. T. C. Parlakimedi.	16,379	18	3	156	83	...	...	6	...	6	110	376	1.1	0.2	9.5	5.1	0.3			
17	M. T. C. Cocanada.	40,968	304	35	223	229	...	...	12	1	23	625	1,440	7.6	0.9	5.5	5.7	0.6			
18	M. T. C. Rajahmundry.	28,279	162	29	224	147	1	1	14	1	17	354	923	5.9	0.7	7.9	5.2	0.6			
19	M. T. C. Ellore	26,296	140	51	241	97	...	...	7	2	9	375	913	4.8	...	1.7	8.2	3.3			
20	T. C. Pithapuram	13,751	19	18	24	10	1	1	4	...	6	90	107	1.4	...	1.3	0.7	0.4			
21	T. C. Peddapuram	13,652	22	4	14	5	...	...	2	...	2	274	319	1.9	0.3	1.9	0.2	0.1			
22	T. C. Samalkot	13,439	34	26	197	4	...	...	1	...	1	32	244	2.5	1.9	14.7	0.3	0.7			
23	T. C. Dowlaishewaram	10,454	100	15	2	5	1	1	2	...	4	254	378	9.6	2.4	0.2	0.3	0.5			
24	M. T. C. Masulipatnam.	38,067	3	2	246	77	...	...	8	...	3	704	1,035	0.06	0.05	6.3	2.0	0.1			
25	M. T. C. Guntur	23,267	82	3	279	88	1	1	22	1	25	394	871	3.3	0.1	12.0	3.8	1.1			
26	M. T. C. Bezwada	20,611	182	5	169	123	...	...	11	3	14	330	843	8.5	0.2	8.2	6.0	0.7			
27	T. C. Ghirala	10,581	...	46	97	18	...	...	5	...	5	181	347	...	4.3	9.2	1.7	9.5			
28	M. T. C. Kurnool	24,306	135	...	762	44	...	2	17	1	20	383	1,344	5.5	...	31.4	1.8	0.8			
29	T. C. Nandyal	10,704	383	...	108	4	1	...	1	...	2	18	578	36.1	...	15.7	9.4	9.2			
30	M. T. C. Madura	87,121	20	253	408	255	3	2	30	3	38	1,589	2,556	0.2	2.9	4.7	2.9	0.4			
31	M. T. C. Dindigul	20,115	18	2	51	6	...	...	14	1	15	344	443	0.9	0.1	7.5	0.3	0.7			
32	M. T. C. Periyakulam.	16,963	241	11	86	69	...	...	3	3	6	212	625	14.7	0.7	5.2	4.2	0.4			
33	M. T. C. Pahi	10,940	...	8	37	9	1	...	7	...	8	301	368	...	0.5	2.2	0.5	0.5			
34	T. C. Rammud	13,689	8	...	6	...	...	2	3	...	5	181	200	0.6	...	0.4	...	0.4			
35	T. C. Aruppukottai.	12,673	157	1	52	28	...	5	6	...	11	95	344	12.4	0.1	4.1	3.2	0.8			
36	T. C. Kilakarai	12,566	10	...	66	21	2	...	11	1	14	47	208	0.8	...	7.7	1.7	1.1			
37	T. C. Parangudi	10,901	...	...	47	...	1	...	...	...	1	23	71	...	...	4.7	...	0.1			
38	M. T. C. Tellicherry	26,431	199	184	85	63	3	...	4	3	10	364	965	7.5	6.9	3.2	2.4	0.4			
39	M. T. C. Calicut	64,738	435	360	246	356	1	2	10	3	16	1,047	2,490	6.7	5.6	8.8	5.5	0.2			
40	M. T. C. Palghat	39,597	29	344	250	92	3	4	7	...	14	565	1,285	0.5	8.7	6.3	2.3	0.4			
41	M. T. C. Cochin	16,147	25	321	38	86	...	...	1	...	1	341	812	1.5	19.9	2.4	5.3	0.1			
42	M. T. C. Cannanore.	26,653	86	19	225	74	...	...	6	...	6	330	740	3.2	0.7	8.4	2.8	0.2			
43	M. T. C. Nellore	29,128	66	10	153	11	...	...	8	...	8	326	574	2.3	0.3	5.2	0.4	0.3			
44	M. T. C. Ongole	10,832	1	16	75	33	...	...	9	...	9	129	263	0.9	1.5	6.2	3.0	0.8			
45	M. T. C. Ootacamund.	13,991	...	4	84	48	...	...	6	...	6	181	323	...	0.3	6.0	3.4	0.4			
46	M. T. C. Coonoor	5,586	1	3	99	28	...	...	...	...	1	77	209	0.2	0.5	17.7	5.0	0.2			
47	M. T. C. Vellore	44,724	49	96	279	210	2	...	12	2	17	484	1,135	1.1	2.1	6.2	4.7	0.4			
48	M. T. C. Walajpet.	10,485	...	12	130	40	...	...	...	1	1	111	283	0.9	...	12.4	3.8	0.1			
49	M. T. C. Gudiyattam.	18,745	109	15	165	94	...	...	1	...	3	188	564	5.8	0.6	8.4	5.0	0.2			
50	M. T. C. Tirupati	14,238	16	...	176	4	...	...	2	...	1	167	422	1.1	1.3	12.4	3.0	0.3			
51	T. C. Kalapasti	11,715	24	1	60	...	...	...	3	...	4	70	228	2.1	0.4	5.9	...	0.3			
52	T. C. Arcot	10,928	20	...	4	2	...	...	...	...	...	228	254	1.8	...	0.4	0.2	...			
53	T. C. Ambur	10,593	1	...	48	3	...	...	...	...	...	10	62	0.6	...	4.5	0.3	...			
54	M. T. C. Salem	67,640	155	34	337	83	...	...	10	1	11	815	1,235	2.3	0.5	4.9	1.2	0.2			
55	M. T. C. Vaniyambadi.	15,388	138	...	186	4	...	...	4	...	4	152	479	8.4	...	11.7	0.3	0.3			
56	M. T. C. Tirupattur.	16,463	8	4	154	19	...	...	2	...	2	129	516	0.5	0.2	9.4	1.2	0.1			
57	T. C. Shendamamza.	13,354	20	7	7	...	...	...	1	...	1	94	129	1.5	0.5	0.5	...	0.1			
58	T. C. Rasipuram.	10,539	2	...	1	...	...	...	4	1	5	117	125	0.2	...	0.1	...	0.5			
59	M. T. C. Cuddalore.	47,025	88	33	195	72	...	...	9	4	13	483	884	1.9	0.7	4.1	1.5	0.3			
60	M. T. C. Chidambaram.	18,634	31	5	134	47	...	...	1	...	11	229	457	1.7	0.2	7.2	2.5	0.6			
61	T. C. Porto Novo	14,045	44	2	39	2	...	...	6	...	6	118	207	3.1	0.1	2.8	0.1	0.1			
62	T. C. Tiruvannamalai.	12,148	14	1	39	1	...	...	...	...	...	53	114	1.1	0.1	3.2	0.1	0.5			
63	M. T. C. Mangalore.	40,620	55	2	340	201	...	...	17	...	17	630	1,252	1.3	0.05	8.6	4.9	0.4			

No. VI.—Deaths registered from Different Causes in the districts and towns of the Madras Presidency during the year 1892—cont.

1	2	3	4	5	6	7	8					9	10	11								
Number.	Districts and towns.	Population for which returns were received.	Cholera.	Small-pox.	Fever.	Dysentery and diarrhoea.	Injuries.					All other causes.	Total deaths from all causes.	Ratio of deaths per 1,000 of population.								
							Suicides.		Wounds and accidents.	Snake-bite and killed by wild beasts.	Total.			Cholera.	Small-pox.	Fever.	Dysentery and diarrhoea.	Injuries.	All other causes.	For the year.	Mean of previous 5 years.	
							Males.	Females.														
B. Towns—cont.																						
64	Tanjore.	M. T. C. Tanjore ...	54,258	202	15	303	451	...	11	2	13	604	1,588	3.7	0.3	5.6	8.3	0.2	11.1	29.3	28.2	
65		M. T. C. Kumbakonam.	54,254	146	20	313	211	...	6	4	10	875	1,580	2.7	0.4	5.8	3.9	0.2	16.1	29.1	30.0	
66		M. T. C. Mayavaram.	23,754	70	3	130	99	1	...	3	3	7	432	741	3.0	0.1	5.4	4.2	0.3	18.2	31.2	29.4
67		M. T. C. Negapatnam	58,573	98	13	358	235	...	10	5	15	869	1,588	1.7	0.2	6.1	4.0	0.3	14.8	27.1	26.2	
68		M. T. C. Mannargudi.	20,392	123	4	75	75	...	1	7	8	209	404	6.0	0.2	3.7	3.7	0.4	10.2	24.2	23.4	
69		T. C. Tiruvallūr ...	22,594	13	...	21	7	...	...	...	...	175	219	1.0	...	1.6	0.5	0.2	13.6	16.9	18.0	
70	Tinnevely.	M. T. C. Tinnevely.	24,750	70	9	132	106	1	5	0	...	469	801	2.8	0.4	5.3	4.3	0.6	18.9	33.3	27.8	
71		M. T. C. Palamcottah.	18,612	140	7	47	37	...	1	1	...	2	292	526	7.5	0.4	2.5	2.0	0.1	15.7	28.2	27.7
72		M. T. C. Tuticorin.	24,964	44	60	226	115	1	...	6	1	8	255	706	1.8	2.4	9.1	4.6	0.3	10.1	28.3	24.7
73		T. C. Srivilliputhūr.	21,448	4	26	35	...	...	2	5	4	11	335	411	0.2	1.2	1.6	...	0.5	16.6	19.1	12.0
74		T. C. Kulasēkarpattanam.	15,910	123	32	92	2	1	...	4	...	6	195	454	8.0	2.0	5.8	0.1	0.3	12.3	28.5	23.5
75		T. C. Virudunpatti ...	14,075	7	1	40	17	...	...	1	...	3	61	129	0.5	0.1	2.8	1.2	0.3	4.3	9.2	14.6
76		T. C. Viravanallur ...	15,951	86	3	29	...	2	...	3	...	5	245	368	0.2	0.2	2.1	...	0.4	17.3	20.4	19.6
77		T. C. Rajahmundry ...	15,301	1	...	3	...	...	...	3	...	6	177	187	0.07	...	0.2	...	0.4	13.3	14.0	13.7
78		T. C. Tenkasi ...	12,301	50	81	45	26	...	4	...	6	231	447	4.6	6.5	3.5	2.0	0.4	18.0	34.8	33.5	
79		T. C. Sivakasi ...	12,184	29	...	59	2	...	...	2	...	7	523	420	2.4	...	4.8	0.2	0.6	26.5	34.5	28.9
80		T. C. Kayalpattanam.	11,464	...	20	107	...	...	...	...	7	523	420	2.4	...	4.8	0.2	0.6	26.5	34.5	28.9	
81		T. C. Kalladakurichi.	11,066	144	11	6	...	...	...	...	2	196	350	13.0	1.0	0.5	...	0.2	17.6	32.3	25.6	
82	Trichinopoly.	M. T. C. Trichinopoly.	89,666	300	137	614	318	...	30	...	30	904	2,303	3.3	1.5	6.9	8.0	0.3	10.1	25.7	26.4	
83		M. T. C. Srirangam.	21,632	86	6	105	29	2	1	0	9	410	645	4.0	0.3	4.9	1.3	0.4	18.9	29.3	31.0	
84	Vizagapatnam.	M. T. C. Vizagapatnam.	33,961	100	1	354	229	3	...	12	...	15	432	1,131	2.9	0.03	10.4	6.8	0.4	12.8	33.3	25.5
85		M. T. C. Bimlipattam.	9,696	12	5	73	104	1	...	0	...	7	194	393	1.2	0.5	7.5	10.7	0.7	20.0	40.7	24.9
86		M. T. C. Vizianagaram.	30,735	46	3	236	20	2	4	1	8	370	683	1.5	0.1	7.7	0.6	0.3	12.0	22.2	22.5	
87		M. T. C. Anakapalle	17,001	67	57	196	45	...	6	...	6	210	581	3.9	3.4	11.5	2.6	0.3	12.3	34.2	21.6	
88		T. C. Bobbili	14,448	...	...	67	...	...	...	3	...	3	202	306	...	0.3	6.7	...	0.2	14.0	21.2	19.2
89		T. C. Saluru	12,910	...	...	221	72	...	1	3	...	4	7	304	...	...	17.1	5.6	0.3	21.3	20.4	30.3
90		T. C. Palakonda	10,364	...	...	219	...	...	2	...	...	9	...	221	...	...	21.1	...	...	21.3	17.4	17.0
91		T. C. Parvatipuram.	10,053	...	...	218	2	...	...	...	...	...	221	...	...	21.1	...	...	21.3	17.4	17.0	
		Total, Towns ...	2,082,807	6,711	2,745	14,218	5,777	50	65	560	63	738	27,380	57,578	3.2	1.3	6.8	2.8	0.3	13.2	27.6	24.5
		Total, Rural districts ...	31,610,872	72,822	41,012	266,409	36,510	915	1,000	6,534	2,035	10,574	276,344	693,177	2.3	1.3	8.4	0.8	0.3	8.7	21.9	19.1
		Total, Madras Presidency.	33,693,179	79,533	43,757	280,627	32,293	965	1,155	7,094	2,069	11,312	303,733	750,755	2.8	1.3	8.5	1.0	0.3	9.0	22.3	19.5

* Average for two years (1890 and 1891).

No. VII.—Deaths registered from Cholera in the districts of the Madras Presidency during each month of the year 1892.

1	2	3	4	5												6		7							
Number.	Districts.	Circles of registration.	Villages.													Total.		Ratio of deaths per 1,000 of population.							
		Number in each district.	Number from which deaths from cholera were reported.	Number in each district.	Number from which deaths from cholera were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.	Mean ratio per 1,000 for previous 5 years.	
1	Anantapur	9	8	941	49	15	7	...	2	...	4	251	354	163	31	...	...	436	384	820	1.2	1.1	1.2	1.9	
2	Bellary	14	14	819	185	...	10	174	204	103	212	671	690	251	48	...	...	1,320	1,135	2,455	2.8	2.5	2.7	1.7	
3	Chingleput	8	8	1,997	408	717	266	67	30	214	152	80	184	139	73	25	10	1,038	919	1,957	1.8	1.6	1.7	1.7	
4	Coimbatore	13	13	1,478	285	1,077	214	40	155	277	135	85	71	25	7	1	3	1,158	963	2,091	1.2	0.9	1.0	1.7	
5	Cuddapah	12	12	1,276	276	212	104	67	4	33	132	857	1,180	570	82	69	22	1,781	1,557	3,338	2.7	2.5	2.6	2.3	
6	Ganjam	8	7	6,037	101	19	...	10	5	2	11	25	145	16	31	175	30	246	223	469	0.3	0.2	0.2	1.6	
7	Godavari	18	18	2,603	717	71	771	240	190	2	374	1,642	1,130	2,296	257	118	77	2,651	6,697	13,618	6.8	6.3	6.5	1.5	
8	Kistna	16	15	1,848	461	264	278	308	411	149	121	1,282	1,364	176	65	43	74	2,457	2,082	4,539	2.6	2.3	2.4	1.5	
9	Kurnool	10	10	802	289	56	10	50	89	482	315	1,523	1,724	403	116	102	16	2,633	2,253	4,886	6.4	5.6	6.0	1.7	
10	Madras	1	1	1	1	21	27	3	83	157	15	28	150	60	15	4	2	303	262	565	1.4	1.2	1.3	1.1	
11	Madura	15	12	1,078	254	1,694	538	496	46	40	17	6	...	...	1	...	...	1,528	1,310	2,838	2.0	1.6	1.8	2.2	
12	Malabar	15	15	2,245	277	391	291	650	912	462	675	1,563	2,471	635	137	14	24	3,954	4,271	8,225	8.0	3.1	3.1	3.3	
13	Nellore	12	12	1,793	298	178	162	25	42	10	35	241	891	192	8	24	...	984	834	1,818	1.3	1.1	1.2	0.8	
14	Nilgiris	4	2	62	7	18	3	...	...	...	...	...	...	...	...	...	...	13	8	21	0.2	0.2	0.2	0.2	
15	North Arcot	17	17	4,465	772	1,124	379	151	133	498	375	320	154	51	1	...	...	1,812	1,515	3,327	1.6	1.4	1.5	0.9	
16	Salem	14	14	3,811	404	1,415	566	326	297	482	364	153	192	138	13	1	4	2,036	1,825	3,861	2.1	1.8	2.0	1.6	
17	South Arcot	12	12	2,897	644	3,754	277	232	16	7	22	41	22	7	2	...	...	2,046	1,755	3,801	1.9	1.6	1.8	2.3	
18	South Canara	6	6	1,277	120	42	8	...	...	...	...	21	115	156	542	207	82	14	79	609	657	1,266	1.2	1.2	0.4
19	Tanjore	15	15	3,550	1,141	4,549	1,946	532	419	433	619	425	108	52	10	2	...	4,630	4,454	9,084	4.4	3.8	4.1	2.8	
20	Tinnevely	21	20	1,538	442	2,611	630	327	233	151	78	209	172	45	12	...	...	2,378	2,080	4,458	2.5	2.1	2.3	2.2	
21	Trichinopoly.	8	8	1,502	353	1,447	615	108	99	28	22	1	8	...	...	...	...	4,298	1,050	5,348	1.5	1.5	1.7	2.7	
22	Vizagapatam.	22	13	2,668	326	1	48	785	202	354	696	672	366	74	24	7	...	1,768	1,461	3,229	1.8	1.5	1.7	0.5	
Total, Madras Presidency		270	251	44,678	7,940	18,676	6,874	4,001	3,632	4,417	5,957	16,739	13,003	3,402	876	400	286	41,368	37,965	79,033	2.5	2.2	2.3	1.1	

No. VIII.—Deaths registered from Small-pox in the districts of the Madras Presidency during each month of the year 1892.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	2	3	4	5												6			7		8			9					
				Districts.	Circles of registration.		Villages.		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.				Number of deaths among children.		Ratio of deaths per 1,000 of population.		
					Number in each district.	Number from which deaths from small-pox were reported.	Number in each district.	Number from which deaths from small-pox were reported.													Males.	Females.	Total.		Under 1 year.	Under 12 years.	Males.	Females.	Total.
	Anantapur	9	7	941	30	7	8	10	15	11	19	10	6	13	14	8	8	61	68	129	65	64	0.2	0.2	0.2	1.1			
	Bellary	14	10	819	67	6	4	38	48	42	40	28	35	17	9	21	70	168	196	364	116	172	0.4	0.4	0.4	1.3			
	Chingleput	8	7	1,997	160	32	35	56	52	35	31	33	33	22	9	13	15	169	198	367	99	148	0.3	0.3	0.3	0.5			
	Coimbatore	13	12	1,278	488	291	322	351	353	287	207	185	207	101	112	80	103	1,291	1,544	2,835	89	1,127	0.4	0.3	0.3	0.4			
	Cuddapah	12	12	1,276	97	41	35	41	34	26	25	30	43	37	43	25	32	215	192	407	73	1,420	0.3	0.3	0.3	0.8			
	Ganjam	8	6	6,037	243	25	34	40	48	99	72	44	34	20	24	27	31	837	201	1,038	133	140	0.2	0.3	0.3	0.8			
	Godavari	18	18	2,805	254	814	878	908	798	708	404	502	358	321	149	157	164	3,169	3,042	6,211	681	2,424	0.3	0.3	0.3	0.8			
	Kistna	16	16	1,848	726	1,329	1,389	1,180	993	506	331	251	161	113	93	44	48	3,189	3,249	6,438	1,386	3,344	0.4	0.3	0.3	0.7			
	Kurnool	10	8	802	93	42	43	43	64	50	47	27	21	23	18	6	38	199	223	421	17	62	0.5	0.5	0.5	1.7			
	Madras	1	1	1	1	2	1	5	5	5	3	204	4	2	2	1	...	13	12	25	5	18	0.06	0.06	0.06	0.1			
	Malabar	15	11	1,078	256	305	204	413	239	178	135	204	188	160	161	162	160	1,267	1,252	2,519	505	1,063	0.6	0.6	0.6	1.1			
	Malabar	15	15	2,245	262	1,229	2,196	2,442	1,079	853	614	479	385	400	387	373	600	6,225	5,470	11,695	213	1,828	0.7	0.7	0.7	1.4			
	Nellore	12	12	1,793	243	77	90	53	203	200	169	119	113	124	70	45	24	608	677	1,285	377	448	0.9	0.9	0.9	0.3			
	Nizirris	4	4	52	23	8	5	8	14	4	5	5	5	5	8	8	8	43	32	75	2	5	0.8	0.8	0.8	0.8			
	North Arcot	17	14	4,465	680	270	298	221	196	143	145	130	145	119	130	134	149	1,054	1,018	2,072	295	616	0.8	0.9	0.9	1.3			
	Salem	14	12	3,811	307	120	109	170	131	156	128	139	153	137	134	305	110	779	819	1,598	260	80	0.8	0.8	0.8	0.6			
	South Arcot	12	12	2,897	532	219	240	235	203	105	93	88	98	90	65	64	101	815	786	1,601	429	779	0.7	0.7	0.7	1.8			
	South Canara	6	6	1,277	181	63	66	117	78	30	28	14	6	11	11	9	13	239	216	455	16	44	0.5	0.4	0.5	0.5			
	Tanjore	15	14	3,550	242	71	104	78	48	56	43	60	41	43	67	37	50	367	346	713	60	227	0.3	0.3	0.3	0.6			
	Tinnevely	21	19	1,538	362	328	195	214	226	138	110	100	142	131	255	172	114	1,001	1,054	2,055	410	1,040	1.2	1.0	1.1	0.7			
	Trichinopoly.	8	8	1,696	71	41	39	29	19	23	27	25	52	23	41	54	45	224	165	389	104	155	0.3	0.3	0.3	0.4			
	Vizagapatnam.	22	19	2,668	342	85	141	222	232	131	107	131	134	133	86	78	107	816	771	1,587	198	401	0.8	0.8	0.8	0.9			
	Total, Madras Presidency...	270	245	44,678	5,455	5,405	6,437	6,872	5,728	3,802	2,878	2,612	2,361	2,039	1,858	1,619	2,215	22,417	21,540	43,957	6,092	14,314	1.3	1.2	1.3	0.8			

Births registered according to Months and Classes in the districts of the Madras Presidency during the year 1892.

Number.	Districts.	Births registered according to classes.												Ratio of births per mille of population.										
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total Births.	Native Christians.	Muhammadians.	Hindus.	Other classes.	Total.	Native Christians.	Muhammadians.	Hindus.	Other classes.	Total.
1	Anantapur	1,406	1,377	1,645	1,550	1,075	1,767	1,883	1,814	1,763	1,793	1,631	1,833	19,536	18	1,210	18,308	...	19,536	1371	235	279	...	276
2	Bellary	2,252	2,201	2,536	2,517	2,580	2,068	2,893	2,618	2,839	2,517	2,139	1,965	22,588	96	2,770	26,722	...	29,688	277	316	327	...	325
3	Chingleput	2,680	2,665	1,830	1,533	1,786	1,935	2,612	2,481	2,682	3,112	3,543	3,751	29,879	162	425	29,202	...	29,879	103	162	208	...	264
4	Coimbatore	3,970	3,686	3,364	4,000	4,324	4,067	4,515	4,207	4,306	5,022	4,370	4,369	51,029	299	908	49,924	...	51,029	204	183	253	...	255
5	Cuddanah	2,343	2,132	2,202	2,226	2,287	2,353	2,743	2,856	2,883	2,970	2,778	2,907	39,074	140	2,922	27,012	...	39,074	149	244	236	...	236
6	Ganjum	2,827	2,502	2,643	2,425	2,835	2,390	3,393	3,519	3,306	2,794	2,427	2,156	33,739	17	74	33,687	11	33,739	71	134	178	...	178
7	Goddavari	3,854	2,968	2,629	2,025	3,756	3,953	4,765	4,023	4,699	4,329	4,140	3,463	46,800	118	631	46,147	...	46,800	144	154	232	...	231
8	Kistna	3,852	2,808	3,116	3,283	4,401	5,017	6,115	5,696	5,327	5,940	4,870	4,325	54,933	1,016	2,380	40,927	1	54,933	149	273	303	...	296
9	Kurnool	1,920	1,696	1,967	2,601	2,348	2,890	2,432	2,375	2,364	2,300	2,027	1,585	25,576	424	2,381	22,170	...	25,576	188	306	318	...	304
10	Madras	1,417	1,145	1,154	1,662	1,133	1,104	1,296	1,409	1,433	1,056	1,565	1,508	16,082	836	1,909	13,835	2	16,082	354	339	371	34	368
11	Madura	3,198	3,320	4,104	3,729	3,403	4,032	3,087	3,330	3,401	4,024	4,133	4,344	45,168	1,093	2,015	42,170	5	45,168	237	274	289	...	288
12	Malabar	3,715	3,797	3,655	4,169	4,790	5,351	5,284	5,021	4,956	4,863	4,145	3,897	63,833	1,210	16,084	36,586	...	63,833	235	212	192	...	204
13	Nellore	2,746	2,625	2,747	2,575	2,287	2,470	2,785	2,735	2,631	3,832	2,923	2,714	32,070	374	1,240	30,450	...	32,070	80	158	227	...	219
14	Nilgiris	142	166	203	217	132	190	183	207	211	203	196	160	2,200	271	87	1,902	...	2,200	315	189	228	...	234
15	North Arcot	4,516	3,630	3,655	3,000	3,450	3,820	4,470	4,318	4,204	4,882	4,687	4,659	40,251	100	1,754	37,382	5	40,251	771	182	229	...	226
16	Salem	4,486	3,679	4,353	4,031	3,074	3,558	4,534	4,147	4,388	4,924	4,525	4,156	50,663	189	1,411	49,063	...	50,663	107	239	260	...	258
17	South Arcot	4,012	3,657	3,394	3,109	3,432	3,616	4,038	4,707	5,064	5,727	5,344	4,907	31,537	693	949	40,843	62	51,537	128	162	244	...	239
18	South Canara	3,130	2,652	3,073	2,981	2,980	3,823	3,307	2,745	2,241	2,191	2,166	2,631	33,370	2,354	3,119	27,901	263	33,470	318	298	323	...	319
19	Tanjore	4,254	3,649	4,005	3,947	4,019	4,319	5,473	6,220	6,695	6,713	5,722	5,228	69,151	1,092	2,718	55,741	...	69,151	201	227	273	...	270
20	Tinnevely	4,034	3,321	4,253	4,280	4,341	4,001	4,428	4,180	4,032	4,888	4,035	4,943	61,810	3,405	2,753	45,672	...	61,810	234	283	273	...	270
21	Trichinopoly	2,624	2,598	2,935	2,790	2,934	2,876	3,427	3,355	3,193	3,555	3,355	3,216	36,634	1,851	854	54,228	1	36,634	229	213	271	1250	267
22	Vizagapatam	3,673	3,178	3,156	3,486	3,643	3,764	4,432	4,138	3,783	3,102	2,942	2,309	41,735	32	202	41,492	...	41,735	160	90	216	...	215
Total, Madras Presidency		62,101	59,759	63,416	62,163	60,504	69,762	79,428	76,830	75,732	79,939	74,421	60,964	845,029	15,950	49,853	778,573	373	845,029	207	232	253	...	251
Ratio per mille of population		20	18	19	15	19	21	24	23	22	24	22	21	251	15,950	49,853	778,573	373	845,029	207	232	253	...	251

No. XII. - Births and Deaths registered among Europeans and Eurasians from different causes in each district of the Madras Presidency and the number born dead among all classes during the year 1892.

District.	Number.	Ratio per 1,000 of population.										13		14	
		Population for which returns were received.					Deaths from all causes.					Total.		Born dead among Europeans and Eurasians.	
		Males.	Females.	Total.	Cholera.	Small-pox.	Fever.	Dysentery and Diarrhoea.	Injuries.	Killed by wild beasts.	All other causes.	Males.	Females.	Males.	Females.
1 Anantapur	75	140	133	273	...	...	...	...	...	...	...	...	...	...	...
2 Bellary	877	338	333	671	...	...	...	...	...	...	...	...	...	...	...
3 Chingleput	1,001	469	550	1,019	...	...	...	...	...	...	...	...	...	...	...
4 Coimbatore	117	117	254	371	...	...	...	...	...	...	...	...	...	...	...
5 Cuddapah	78	40	137	177	...	...	...	...	...	...	...	...	...	...	...
6 Gajum	105	64	139	203	...	...	...	...	...	...	...	...	...	...	...
7 Godavari	233	128	361	489	...	...	...	...	...	...	...	...	...	...	...
8 Kistna	137	109	246	355	...	...	...	...	...	...	...	...	...	...	...
9 Kurnool	50	32	82	114	...	...	...	...	...	...	...	...	...	...	...
10 Madras	2,448	1,732	4,290	6,022	...	...	...	...	...	...	...	...	...	...	...
11 Madura	108	63	173	236	...	...	...	...	...	...	...	...	...	...	...
12 Malabar	883	235	1,063	1,298	...	...	...	...	...	...	...	...	...	...	...
13 Nellore	132	112	244	356	...	...	...	...	...	...	...	...	...	...	...
14 Nilgiris	923	873	1,295	2,168	...	...	...	...	...	...	...	...	...	...	...
15 North Arcot	127	109	227	336	...	...	...	...	...	...	...	...	...	...	...
16 Salem	181	138	319	457	...	...	...	...	...	...	...	...	...	...	...
17 South Arcot	102	179	356	535	...	...	...	...	...	...	...	...	...	...	...
18 South Canara	107	46	153	199	...	...	...	...	...	...	...	...	...	...	...
19 Tanjore	181	111	292	403	...	...	...	...	...	...	...	...	...	...	...
20 Tirunelveli	151	75	122	197	...	...	...	...	...	...	...	...	...	...	...
21 Trichinopoly	320	303	726	1,029	...	...	...	...	...	...	...	...	...	...	...
22 Vizagapatnam	169	145	357	502	...	...	...	...	...	...	...	...	...	...	...
Total ...	8,902	5,016	13,313	18,329	...	...	...	...	...	...	...	...	...	...	...

Return showing the Births and Deaths registered in the Municipalities of the Madras Presidency during the year 1892.

VITAL STATISTICS OF THE GENERAL POPULATION

Return showing the Births and Deaths registered in the

Districts.	Municipal towns.	Population according to Census of 1891.	Births.										Deaths.									
			Class.						Total Births.	Class.						Total Deaths.						
			Europeans.	Eurasians.	Native Christians.	Hindus.	Muhammadans.	Other Classes.		Europeans.	Eurasians.	Native Christians.	Hindus.	Muhammadans.	Other Classes.							
																	M.	F.	Total.	M.	F.	Total.
Ganjam	Chitacole	15,241	1	...	2	454	35	8	255	245	500	...	...	1	396	36	...	248	185	433		
	Berhampur	25,633	2	4	15	781	27	1	414	416	830	...	...	12	636	29	...	363	306	669		
	Parlakimedi	16,390	...	1	...	556	11	...	281	287	568	...	...	1	367	9	...	210	166	376		
Vizagapatam.	Vizagapatam	34,487	6	6	10	980	68	...	564	506	1,070	7	15	10	1,027	94	...	618	635	1,253		
	Bimlipatam	9,827	4	3	...	325	8	...	174	168	340	2	5	1	389	5	...	187	215	402		
	Vizianagaram	30,381	...	...	...	622	21	...	330	313	643	...	...	1	600	22	...	359	334	693		
Gedavari	Anakapalle	17,910	...	...	...	562	3	...	294	271	565	...	...	...	566	16	...	316	265	581		
	Cocanada	40,553	3	9	13	1,151	44	...	640	580	1,220	7	9	17	1,375	45	...	778	675	1,453		
	Rajahmundry	28,397	2	4	7	952	43	...	563	455	1,018	...	2	7	858	63	...	490	451	941		
Kistna	Bilore	29,382	...	2	11	709	97	...	418	401	819	2	1	11	750	152	...	461	465	926		
	Masulipatam	38,809	2	2	14	1,004	89	...	509	542	1,111	1	3	10	923	102	...	554	485	1,039		
	Guntur	23,359	1	4	16	465	225	...	366	344	710	1	4	13	237	220	...	452	423	875		
Nellore	Bezawada	20,741	1	6	3	497	99	1	363	303	606	...	2	6	715	120	2	421	424	845		
	Nellore	29,393	3	2	26	554	125	...	368	344	710	...	1	11	461	102	...	331	244	575		
	Ongole	19,860	...	...	18	259	28	...	159	146	305	...	18	216	29	...	142	121	263			
Madras	Madras	452,515	144	433	836	13,335	1,002	2	8,546	8,113	16,659	97	463	900	10,977	2,402	8	10,022	10,825	20,847		
Chingleput	Conjeeveram	42,548	...	...	3	1,407	43	...	772	741	1,513	...	...	1	1,349	33	...	690	693	1,383		
South Arcot.	Cuddalore	47,353	...	11	18	1,482	53	...	817	747	1,564	...	5	17	833	34	...	449	440	889		
	Chidambaram	18,640	...	1	3	407	38	21	238	232	470	...	1	3	419	25	11	232	227	459		
Trichinopoly.	Trichinopoly	90,000	9	18	171	1,452	236	2	1,000	906	1,906	7	18	2436	1,761	299	...	1,212	1,116	2,328		
Tanjore	Srirangam	21,632	...	...	6	593	2	...	308	293	601	...	...	3	639	3	...	540	305	845		
	Tanjore	54,390	1	2	97	1,321	64	...	672	713	1,385	...	1	118	1,405	65	...	788	801	1,589		
	Kumbakonam	54,307	...	1	16	1,342	31	...	716	674	1,390	...	22	1,501	57	...	819	761	1,580			
Madura	Mayavaram	23,705	...	...	13	702	16	...	466	325	791	...	12	716	13	...	384	357	741			
	Yercaud	52,221	4	23	159	876	406	...	790	699	1,489	1	11	144	1,008	436	...	766	834	1,600		
	Mannargudi	20,595	...	...	6	518	22	...	283	263	546	...	6	477	13	...	296	198	494			
Tinnevely	Madura	97,428	3	10	76	2,630	216	...	1,429	1,499	2,928	3	3	26	2,322	208	...	1,238	1,297	2,535		
	Periyakulam	16,363	...	...	44	461	53	...	297	261	558	...	1	32	516	77	...	226	261	487		
	Dindigul	20,293	...	4	163	580	102	...	448	460	848	...	1	57	318	38	...	238	176	414		
Kurnool	Palni	16,940	...	...	4	545	41	...	278	312	590	...	1	344	18	...	215	148	363			
	Tinnevely	24,798	...	1	12	825	43	...	445	441	886	...	11	748	42	...	406	305	801			
	Palani	18,886	2	1	70	480	18	...	360	274	580	2	1	46	466	13	...	267	261	528		
Cuddapah	Tuticorin	25,107	1	4	291	368	37	...	357	334	691	...	1	207	479	20	...	358	349	707		
	Kurnool	24,376	1	1	12	348	409	...	380	481	861	1	...	10	622	712	...	596	749	1,345		
	Cuddapah	17,379	4	...	12	245	307	...	286	282	568	1	1	1	368	296	...	326	341	667		
Bellary	Bellary	56,467	12	11	73	905	463	...	763	798	1,561	11	17	59	1,364	619	...	979	1,031	2,010		
	Adoni	26,243	...	1	3	633	371	...	509	490	1,008	...	...	5	681	335	...	453	488	941		
Anantapur	Anantapur	6,994	...	...	1	142	80	...	110	123	233	...	1	...	181	72	...	125	129	254		
North Arcot.	Vellore	44,925	1	10	28	1,103	366	...	750	768	1,508	1	7	23	792	319	...	587	655	1,242		
	Gudiyattam	18,747	...	...	2	520	117	...	337	302	639	...	...	...	492	70	2	280	284	564		
	Walajpet	10,485	...	...	...	324	28	...	181	171	352	...	...	...	237	26	...	143	140	283		
Salem	Tirupati	14,242	...	...	4	298	15	...	156	161	317	...	...	1	406	15	...	229	189	422		
	Salem	67,710	1	1	42	1,612	129	...	930	835	1,765	...	1	26	1,102	113	...	645	661	1,306		
	Palayamkottai	15,838	...	...	3	233	391	...	340	314	654	...	...	...	210	269	...	227	228	455		
Coimbatore.	Tirupattur	16,499	...	...	3	391	220	...	291	293	524	...	...	3	177	136	...	171	145	316		
	Coimbatore	46,988	2	9	77	1,469	95	...	809	782	1,592	1	6	69	1,123	65	...	681	593	1,264		
	Erode	12,330	1	...	15	269	53	...	151	164	315	...	...	8	232	28	...	124	144	268		
Nilgiris	Karur	10,750	...	...	14	343	48	...	193	212	405	...	...	7	226	18	...	193	118	311		
	Ootacamund	15,653	20	17	150	206	46	...	229	225	454	14	7	84	177	62	...	187	167	354		
	Coonoor	6,049	20	4	72	95	15	...	102	104	206	9	6	43	145	21	...	134	90	224		
South Canara.	Mangalore	40,922	5	1	372	708	236	...	644	678	1,322	2	2	339	687	225	...	632	638	1,270		
Malabar	Telliocherry	27,106	4	9	65	379	395	...	331	441	822	2	21	51	435	421	...	471	457	928		
	Calicut	66,078	6	46	174	1,010	772	...	1,082	956	2,068	7	36	186	1,398	971	1	1,261	1,262	2,523		
	Palghat	59,481	...	2	23	1,045	187	...	681	676	1,357	...	...	25	1,056	204	...	651	644	1,295		
	Cochin	17,061	2	43	578	93	43	...	273	286	560	1	37	451	252	108	1	418	492	910		
	Cannanore	27,418	11	14	86	282	447	...	444	395	889	2	8	54	246	440	...	381	329	710		
Total		2,101,967	285	720	3,720	51,804	9,537	33	33,776	32,323	66,099	182	690	6,399	54,631	10,36	25	34,853	34,107	69,960		

Municipalities of the Madras Presidency during the year 1892.

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PART II.

SANITARY ENGINEERING.

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SANITARY ENGINEERING DEPARTMENT.

J. A. JONES, MEM. INST. C.E., F.R.S.E.,
Sanitary Engineer to Government.

Sanitary Engineering Department.



In this the third report of the department it is proposed to deviate from the form in which the annual report has hitherto been presented. The reports of the last two years have referred to each town in detail, and now, unless there have been surveys or works begun, a similar procedure would entail little more than repetition of what has been already put forward. It may be useful every four or five years to refer to each town in detail, but at present there is no good reason for doing so. Besides table No. 1 in the Appendix shows what are the prospects of each town in regard to improvement in its drainage or water-supply.

2. The major portion of this report will, therefore, be confined to describing the work done in connection with each town with which the department has dealt during the past year as regards larger sanitary works.

3. The in-door staff remained unchanged during the year 1892. The drawing and survey branch consisted of 1 Office Assistant, 7 Draftsmen, 1 Surveyor, and 4 Lascars, and the clerical branch of 1 Manager, 7 Clerks, 1 Accountant and 6 Peons.

4. The following out-door staff was sanctioned during 1892:—

2 Assistant Engineers @ Rs. 450 each	...	...	...	...	...	Rs. 900
1 Sub-Engineer @ Rs. 280	...	...	...	...	...	280
1 Supervisor @ Rs. 200	...	...	...	...	...	200
4 Supervisors @ Rs. 150 each	...	...	...	...	...	600
3 Draftsmen—2 @ Rs. 50, 1 @ Rs. 40	...	...	...	...	...	140
3 Clerks @ Rs. 25 each	...	...	...	...	...	75
3 Accountants @ Rs. 35 each	...	...	...	...	...	105
12 Lascars @ Rs. 7 each	...	...	...	...	...	84

5. The subordinate staff of Clerks, Accountants, Draftsmen and Lascars has been ordered to be omitted in future Provincial budget, and paid direct from funds available for the works on which they are employed.

6. One Assistant Sanitary Engineer is in charge of Madura water-works and Dindigul water-works and another Tanjore water-works. The Sub-Engineer who was in charge of Kumbakonam drainage works for a portion of the year was transferred to Trichinopoly water-works. A Supervisor was in charge of Kumbakonam drainage works for the remainder of the year, one Supervisor was at Coonoor drainage works and one at Cuddapah water-works.

7. Two out of the five supervisors sanctioned were not employed.

SURVEYS.

8. The following towns were surveyed and levels taken in connection with the projects noted:—

Town.	For what purpose.	Complete or in progress.	Cost.	Remarks.
Bellary	Water-supply	Completed	Rs. 1,285	By Public Works Department.
Calicut	Do. and drainage.	In progress	...	
Chidambaram	Water-supply	Do.	...	
Cuddalore	Do. and drainage.	Do.	250	
Ellore	Drainage	Completed	486	By Municipality. By Local Fund Engineer. By Public Works Department. Additional levels taken by Office Surveyor.
Guntur	Do.	Do.	1,662	
Kurnool	Water-supply	Do.	...	
	Do.	Do.	...	
Nellore	Water-supply and drainage.	Do.	662	
Palni	Do.	Do.	168	
Rajahmundry	Water-supply	Do.	418	
Tinnevely	Do. and drainage.	Do.	519	
Tuticorin	Water-supply	Do.	491	
Vizagapatam	Do. and drainage.	Do.	1,050	

9. In addition to the surveys noted above surveys or levels have been taken and plotted and information is now available to allow of the following schemes being prepared:—

1. Berhampore	...	...	...	...	Water-supply.
2. Bezvada	...	...	...	...	Drainage.
3. Conjeeveram	...	...	...	...	Water-supply.
4. Cuddapah	...	...	...	...	Drainage.
5. Erode	...	...	...	...	Do.
6. Karur	...	...	...	...	Do.
7. Salem	...	...	...	...	Do.

10. Briefly it may be stated that out of the 55 Municipalities in the Presidency for 21 towns surveys or levels have yet to be taken, but in many of these nothing can be done for some years to come. The population of the towns already surveyed is 1,180,868 as against 446,694 in the 21 towns not yet dealt with.

11. Schemes for the following towns, estimated at the cost shown, were sent to Government on the dates mentioned:—

No.	Name of Town.	Drainage or water-supply.	Date of submission to Government.	Estimated cost.	Order of Government.	Remarks.
1	Nagapattam	Drainage	8th Feb. 1892	Rs. 4,13,000	NIL.	
2	Ongole	Water-supply	22nd Apl. "	{ 1,20,000 }	"	Alternative schemes.
3	Bellary	Do.	14th Sept. "	{ 49,700 }	"	
4	Coimbatore	Do.	1st Oct. "	{ 9,06,642 }	"	
5	Cocanada	Do.	7th Nov. "	{ 4,01,000 }	"	Alternative schemes.
6	Kurnool	Do.	6th Dec. "	{ 3,72,000 }	"	
				{ 4,36,830 }	"	
				{ 3,89,000 }	"	
				1,41,000	"	Funds to be provided in 1893-94.

12. A short description of each scheme will be found in its proper place among the following pages.

13. Works were either in progress or were completed in the following towns during the year:—

No.	Name of Town.	Drainage or water-supply.	Estimated cost.	Remarks.
1	Madura	Water-supply	Rs. 3,91,000	
2	Trichinopoly	Do.	4,26,600	
3	Tanjore	Do.	3,77,200	
4	Cuddapah	Do.	19,385	
5	Ootacamund (Kandal)	Drainage	35,000	
6	Do. (South)	Water-supply	43,000	
7	Kumbakonam	Drainage	1,10,000	
8	Coonoor	Do.	48,000	
9	Ootacamund intercepting sewer.	Do.	11,300	

14. Details of the work done and other particulars will be found under the name of the town referred to and also in tables Nos. 2 to 10 of the Appendix.

15. In addition to the towns named in paragraph 11 the following schemes were previously presented and have been sanctioned (except Adoni) for execution but funds have not as yet been provided:—

No.	Name of Town.	Drainage or water-supply.	Estimated cost.	Remarks.
1	Adoni	Water-supply	Rs. 1,53,742	
2	Dindigul	Do.	71,700	
3	Coonoor	Do.	80,000	
4	Tirupati	Drainage	96,000	
5	Vellore	Water-supply	3,13,000	

16. The following are the details of work done in regard to each town to which reference is necessary:—

Town.	District.	Population, 1891.
(1) Adoni.	BELLARY.	26,212.

17. The only remark necessary to make in regard to this town is that, though the scheme referred to in last year's report remains as yet unsanctioned, the Financial Department has provided funds for its execution in 1893-94 and, therefore, the work is likely to be undertaken before the next report comes to be written.

Town.	District.	Population, 1891.
(2) Anantapur.	ANANTAPUR.	6,981.

18. When His Excellency the Governor visited this town in April 1892, he, in reply to an address, requested the people to make a representation to Government on the subject of its water-supply, as the scarcity of water had been severely felt during the late distress, and a report was ordered on the subject. The town was visited in September 1892. Government requested that the chance of obtaining artesian water should be considered, but geological conditions put this out of the question. Outside the town there are several good wells, notably one which is considered good water by the people, adjacent to the police head-quarter station, and it was advised that, if an analysis of the water of this well proved satisfactory, a large well (with adits if necessary) should be sunk in the vicinity and raised into a tank whence it would gravitate to the town. The distribution would be of a simple character, perhaps of not more than four or five fountains at the junction of the main streets of the town. The scheme must be of a limited nature, because the income of the Municipality is small, and it has at present other heavy calls, one being a new hospital, to meet. An analysis was ordered and obtained. The quality of the water is declared to be suspicious and Government has ordered that under the circumstances the question of preparing a scheme may be dropped.

Town.	District.	Population, 1891.
(3) Bellary.	BELLARY.	53,256.

19. At the date of the last report, the survey and levels for this town were still under execution; the surveys were completed on 21st June 1892. Before that, however, sufficient details were available to allow of a portion of the scheme being designed and sent forward, viz., that portion relating to the increase of the capacity of the Alipore tank, for execution as a famine work. The work was actually begun, but sufficient labour was not presented and the work could not therefore be continued.

20. The portion of the scheme sent forward was criticised by the Chief and Superintending Engineers, but on the main points, the undersigned was unable to accept the conclusions arrived at as being founded on a proper basis, and these criticisms were replied to in sending forward the complete scheme (*vide* this office letter No. 1901, dated 14th September 1892). The surveys took much longer time than anticipated, as several portions, in view of points which were elicited during the course of the surveys, had to be re-surveyed and portions of the scheme re-designed. The scheme was forwarded to Government on 14th September 1892, and may be briefly described as follows:—

21. From a point opposite the 9th milestone from Bellary on the Bellary-Dharwar road, and between that road and the Copper Mountains, there begins an intercepting channel varying in width between 38 feet and 170 feet, which in its course of 5 miles intercepts four nullahs, and, after crossing the Chuttrum Vunkah, enters the existing channel (which will be widened) which now carries a portion of the diverted water of this Vunkah to the Alipore tank. This channel will have a maximum discharge of 3,699 cubic feet per second. The area drained is 12.8 square miles, which has a maximum discharge of 5,615 cubic feet per second. It is proposed to extend and raise the bund of the Alipore tank from a level of 1558.55 to 1563.00, and to increase its capacity from 101.74 millions of cubic feet to 162 millions of

cubic feet. The tank itself has a drainage area of 5.94 square miles. The rainfall varies from 5.79 inches to 30.83 inches per annum, and a large tank capacity is necessary to secure a sufficient supply. From the tank the water will be taken to the engine-house well situated some 1,700 feet from the outlet of the tank. The water will be raised from this well and pumped into a service reservoir on higher ground. The maximum lift will be about 42 feet. The reservoir will contain one day's supply, and from it the water will be delivered by gravitation to the cantonment and town. The population allowed for is 58,161 people in the town and 8,215 in cantonment, and it is proposed to supply 15 gallons per head. The cost is expected to be Rs. 9,06,642, Rs. 7,29,272 being debitable to the Civil and Rs. 1,77,370 to the Military authorities. The distribution will be effected through an 18" diameter main and branch pipes 28 miles in length, with 90 fountains or stand-pipes, valves, &c. The scheme is still with the Government of Madras, but must, as the Military proportion of the cost falls to be paid by it, also have the approval of the Government of India. Bellary is a town much in want of a proper water-supply, and it is hoped therefore that the scheme will receive approval and early sanction.

Town.	District.	Population, 1891.
(4) BEZVADA.	KISTNA.	17,652.

22. Nothing has as yet been decided about this water-supply, except that the Engineer of East Coast Railway had made such arrangements at the Kistna bridge abutment wells that he expects to deliver 140,000 gallons per day of 10 hours to a tank situated above the town. The details of the scheme have not yet been worked out, but will be so during 1893, when it is hoped that the Sanitary Engineer will, in communication with the Chief Engineer of the East Coast Railway, be able to submit definite proposals.

Town.	District.	Population, 1891.
(5) CALICUT.	MALABAR.	65,592.

23. During the year a question arose as to whether the drainage or water-supply of this town should first be considered. The Council considered that a pure water-supply was a secondary consideration to that of drainage, but Government having already decided that, as a rule, water-supply should precede drainage, the question was considered by the Sanitary Commissioner as well as by the undersigned, and it was thought that the most imperative need was a water-supply to the Moplah quarters of Calicut. The survey was begun on the 10th December 1892 and will be completed before the end of the financial year 1892-93, during which Rs. 700 have been allotted for that purpose.

Town.	District.	Population, 1891.
(6) CHICACOLE.	GANJAM.	17,904.

24. This town was visited on 26th February 1892. A great portion of the town is provided with V-shaped drains, but in only one quarter of the town, viz., the Brahmin quarters, are these drains found carrying away fluid matter. It would not be a difficult matter to drain the town, and very suitable land for sewage farming is to be found adjacent to the Languliya river. The amount of water used in the town is very small, and until there is a larger supply of water available, drainage was not recommended. A report on the whole matter was sent to Government on 2nd March 1892, but no orders regarding it have been received.

Town.	District.	Population, 1891.
(7) CHIDAMBARAM.	SOUTH ARCOT.	18,658.

25. A scheme for water-supply is still under investigation by the Public Works Department (Executive Engineer, South Arcot) by which it is proposed to bring a channel from the Shatia Tope anicut on the Vellar river. The preparation of the scheme is approaching completion.

Town.	District.	Population, 1891.
(8) COCHIN.	MALABAR.	17,473.

26. The proposal made during 1891, that a deep well should be sunk in order to obtain if possible a better supply of water for this town, met with some opposition and doubt as to the results. The Director of the Geological Survey was unable to give much information as to the strata lying below Cochin. One fact, however, was patent, and that was that Cochin could never attempt to bring water from Alwaye, a distance of 15 miles, and that therefore a boring was desirable. Boring apparatus arrived in August last sufficient to bore 500 feet deep, and it is proposed to try this apparatus at Cochin. An estimate for the experimental boring was forwarded for sanction on 17th September 1892. The anticipated cost of the boring, including certain apparatus required, labour, &c., was estimated at Rs. 3,388. This proposal was sanctioned in G.O., No. 2059 M. of 15th December 1892, and as soon as funds are provided the work will be undertaken.

27. After visiting the town in 1891, a recommendation was made to Government that the Iravelli swamp, which lies between British and Native Cochin, should be filled up and that the Cochin Government might be asked to bear a portion of the expense. The Chairman reported (30th November 1892) that the cost would be Rs. 4,865-14-0, but that the estimate had not been submitted to Government, as a private individual put in a claim stating that the whole swamp had been leased to him by the British Government, whereas it was believed that half the swamp belonged to the Cochin State; the matter is still under reference to the Deputy Collector.

Town.	District.	Population, 1891.
(9) COCANADA.	GODAVARI.	40,685.

28. This town was visited in March 1892 with reference to some points regarding the design for the water-supply then under preparation. Plans and estimates for a complete scheme for the town were forwarded to Government on 7th November 1892. As has been stated in former reports the town has a partial supply for ten months per annum from the Godavari-Samulcottah canal through brick conduits which feeds the various tanks in the town, but the supply is unfiltered and liable to much pollution after it enters the town. The southern portion of the town, called Jaganaikapuram, is similarly but inefficiently supplied from the Cocanada-Dowlaishweram canal.

29. In the scheme forwarded to Government it is proposed to draw the supply (for the whole town) from the Cocanada-Samulcottah canal, to pass the same direct towards the filters whence the water will flow to a service reservoir. From this it will pass to the pump-well where it will be pumped to a height of 49 feet. During two months of the year water will also be drawn sufficient to fill a storage reservoir of a capacity to contain two months' supply for use during canal closure. The scheme provides for a supply of 50,000 of a population with 15 gallons per head, and the total cost of the scheme will be Rs. 4,36,830. At first it is proposed by omitting one of the filter beds and by supplying only 10 gallons per head to bring down the cost to Rs. 3,89,000. The annual cost of the scheme (Government having promised to contribute a moiety of the cost) will be Rs. 21,842 for interest, sinking fund, pumping and working charges.

Town.	District.	Population, 1891.
(10) COIMBATORE.	COIMBATORE.	46,362.

30. A scheme with plans and estimates for a supply of water to this town was forwarded to Government on 1st October 1892. The scheme is still under reference. The proposals for the supply contemplate the construction of a filter gallery some 600 feet long parallel to the river Noyel, which is an almost perennial stream. The filtration gallery site is about 2 miles from the town. The gallery is expected to yield over 1,100 gallons per minute, while the supply required for Coimbatore is about 522 gallons per minute (15 gallons per head per diem for 52,000 of a population). The water will have to be raised about 120 feet to pass it by means of a 12" diameter main to a reservoir above the town whence the distribution pipes

will be laid. There will be three engines of ten horse-power each in the pumping station. The analysis of the water showed it hard (varying from 28° to 17°) and that it held a high percentage of nitric acid. This, however, is not derived from organic sources, but from nitre deposits in the soil, and was therefore neglected when considering the quality of the water which is in other respects good. The anticipated cost of the scheme as at first proposed to be executed amounts to Rs. 3,72,000, and the annual charges (presuming that Government will contribute a moiety) to Rs. 31,986 for pumping charges, repairs and interest.

Town. District. Population, 1891.
(11) CONJEEVERAM. CHINGLEPUT. 42,561.

31. The designs for the water-supply of this town, though not on the programme of work for 1892, are fairly far forward and will be with Government in the early part of 1893. The water from the site of the proposed filtration gallery has been analysed and found satisfactory.

Town. District. Population, 1891.
(12) COONOR. NILGIRIS. 6,049.

32. *Water-supply.*—The scheme alluded to in last year's report was approved in G.O., dated 11th December 1891, No. 2199; but seeing that the drainage works were under execution, Government did not insist on the scheme being immediately carried out, but have in G.O. of 15th August 1892, No. 1345 M., required that the scheme be not indefinitely postponed.

33. *Drainage.*—The scheme was practically complete and in operation at the end of the year. The heavy rains and floods referred to in last year's report washed away and otherwise altered the conformation of the banks of the stream, along which certain of the sewers were intended to be laid. Much heavier revetment was therefore necessary than at first proposed, but the excess cost has been met from savings in other items. In the Appendix, table No. 2, will be found a statement of the value of the works executed up to 31st December 1892 and the remainder about Rs. 1,270 due. This shows a saving of Rs. 6,160; but from this has to be deducted the cost of the staff paid from Provincial Funds employed on the works. The balance or net saving is likely to be Rs. 3,160. There is nothing very particular to note regarding these works. The drains are open along each side of the streets; they are formed of concrete-in-cement. The drains under 6 inches in size are half oval stoneware drains. The tiles forming these drains were obtained from Calcutta (Raneegunge Works—Burn and Company). The stoneware pipes for the intercepting and outlet sewers were obtained from the same firm. The outfall sewer is 12 inches in diameter and of iron pipes, some of them near the outfall under the Coonor bridge being laid in a trench in the rock and fastened down with iron bolts. The sewage is discharged into the first waterfall below the bridge and thus has every chance of dilution and oxygenation. Near where the street drains join the pipe sewers they are furnished with the usual silt traps and overflows to pass off storm water. The sewers are constructed with the usual manholes and ventilators. The following is a statement of the length of drains actually laid:—

No.	Main Head.	Concrete surface drains.					Stone-ware house drains.	Stoneware pipes.		Cast iron pipes.				
		Size of drains.					Size of pipe sewers.							
		6"	9"	12"	15"	4"	6"	9"	6"	9"	12"			
		FEET.	FEET.	FEET.	FEET.	FEET.	FEET.	FEET.	FEET.	FEET.	FEET.	FEET.		
A.	Main bazaar drains	5,074	659	1,096	8	3,647								
B.	Mission Hill	1,674	110			1,424								
C.	Main bazaar sewer						835	684		27				
D.	Main branch sewer						216		92					
E.	Mission Hill sewer						459	487		74				
F.	Outfall pipe											286		

Town. District. Population, 1891.
(13) CUDDALORE. SOUTH ARCOT. 47,337.

34. A Surveyor was sent to this town in September 1892 when the town was visited by the Sanitary Engineer in view to preparing a design for the water-supply; levels will, however, also be taken in view of a drainage scheme for Old Cuddalore, the Council having sanctioned Rs. 750 for the purpose of the survey (G.O., 28th March 1892, No. 616 M., Mis.). Before this date Major Smart, R.E., lately Executive Engineer of South Arcot, had interested himself in the matter and had drawn up a scheme, to which, however, there seemed certain modifications desirable. The points in question are now being investigated, and the results with both schemes will, it is hoped, be submitted to Government during 1893. Major Smart proposes to draw the water from the Guddelum and pump it on to Mount Capper, a lateritic plateau about 2 miles from the centre of the New and Old Towns, but throughout these 2 miles a large population within Municipal limits will be benefited if the supply is undertaken.

Town. District. Population, 1891.
(14) CUDDAPAH. CUDDAPAH. 17,121.

35. Cuddapah was one of the districts which suffered considerably from want of water during a great portion of the early part of the year by reason of the failure of the monsoon in 1891. This caused the springs, which fed the filtration gallery in the river Booga, to fall below the level of the gallery floor, and further deepening of the channel into which they discharged was therefore useless. Seeing this state of affairs it was evident that some improvement in the works was necessary to enable them to be efficient at such and similar times. A scheme was, therefore, forwarded to Government which provided for considerably deepening the gallery in channel into which the springs discharge for laying stoneware pipes in such deepened gallery and carrying the water so obtained to a well on the south or opposite side of the river Booga from that on which the pump-well and reservoir stood. From this well the water was to be raised by centrifugal pumps and sent through an 8-inch pipe to the existing reservoir which was retained. Government sanctioned the proposals on 12th May 1892, and made a grant of Rs. 9,690, being a moiety of the cost of the works immediately required. The works were begun on 27th May 1892, and the pipes were laid across the river; a portion of the pump-well, the engine-house and the engines were erected and the improved scheme is now in operation; but owing to the rain of the south-west monsoon having begun to fall on the 23rd June, and the river since that time having been in flood, it has been found impossible to complete the filter gallery and well; and these works are therefore left over until the next dry season. The work done is giving good results and the supply to Cuddapah is ample.

36. The town was entirely without pipe-water from 1st February 1892 to 10th August 1892, and during that time had to depend on wells for its supply.

37. A statement showing the expenditure incurred to date will be found in table No. 3 of the Appendix.

CUDDAPAH DRAINAGE CHANNEL

38. An estimate for carrying out this work, referred to in last year's report, was called for by Government on 24th June 1892, and plans and estimates were forwarded on 4th November 1892. The cost of the channel, including all masonry works, will be about Rs. 19,210. The channel will have its bottom on an average of 10 feet below ground, and, when running 6 feet deep, will discharge 680 cubic feet per second, equal to 6 inches of rainfall per diem from an area of 4.3 square miles.

Town. District. Population, 1891.
(15) DINDIGUL. MADURAI. 20,215.

39. The scheme for the water-supply of this town, which was sanctioned in 1891, was not begun during the year. There were difficulties raised by the Council as to the manner in which the necessary funds to pay for interest and working charges should be raised; the Council also desired further experiments to

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be undertaken as to the available supply by sinking a shaft in proximity to the site of proposed works. This, Government ordered to be done in G.O., No. 1089 of 24th June 1892. This experiment was begun about the end of July after funds had been obtained. The result of the sinking of the shaft was to show that water was at the depth below ground anticipated, but the amount of water at varying depths was less than expected from the results of experiments made at other wells lower down the slope above the town. The well was finally deepened to 50 feet, and the following shows the yield.

Depth of reduced level of water below normal level.	Yield in gallons per minute.
14 feet	3.00
15 "	3.00
16 "	3.00
17 "	8.61
18 "	8.61
19 "	15.83
20 "	15.83
21 "	15.83

It was anticipated in the original plans that it would be necessary to drive a tunnel 300 feet long and 30 feet below ground to obtain enough water, but by going deeper the work is less expensive and the tunnel will be much shorter.

40. His Excellency the Governor when on tour visited the well on 10th November 1892 when the nature of the work was explained to him. Government has provided funds for carrying out the Dindigul scheme during the financial year 1893-94.

Town.	District.	Population, 1891.
(16) ELLORE.	GODÁVARI.	29,363.

41. The Council provided funds in 1891 for a survey of the town with reference to the preparation of a scheme for drainage, but no surveyor was available for the works. One was, however, sent in April last, and the levels were completed after an inspection by the Assistant Sanitary Engineer in July. The sections have been plotted, and information is now available for the preparation of a scheme when time permits.

Town.	District.	Population, 1891.
(17) GUNTÚR.	KISTNA.	23,486.

42. *Drainage.*—The plans and sections necessary for the preparation of a drainage scheme were received from the Municipal Council in October. The levels will also be of use for preparing a water-supply scheme for the town, which must have the preference.

43. *Water-supply.*—Several plans and sections were received from the Collector towards the end of the year. These are in connection with the scheme for passing water from Nullapad tank, some 5 miles distant to the Black tank at Guntúr. The Nullapad tank, which was breached when the question was first considered, has since been repaired and the water draining into it, it is believed no longer finds an exit to the Black tank. There has, however, not been time enough to give the matter consideration, and it is feared the project cannot be dealt with even next year.

Town.	District.	Population, 1891.
(18) KARÚR.	COIMBATORE.	10,746.

44. Some little work has been done during the year in regard to the preparation of a drainage scheme for this town. It is hoped that the scheme will be completed and be before Government early in 1893.

Town.	District.	Population, 1891.
(19) KUMBAKÓNA.	TANJORE.	54,004.

45. *Drainage.*—This work was begun in June 1891 on the Main Channel and in October 1891 on the Branch Channels; but as stated in last year's report the

abnormal rainfall did not allow much work to be done and the country is under water for all except three or four months a year. The water for the most part of the year is seldom more than 3 or 4 feet below ground, and hence the difficulty of getting work done. During seven months no earthwork can be done, and when the work can be commenced, the harvesting season comes on, and hardly a cooly is to be had. The Tanjore cooly is so well-to-do, that he is independent of work outside his own particular occupation. For these reasons the work was not completed before the last south-west monsoon, and since that began (this year it has been an abnormal one) work practically has been at a stand-still, only a few masonry works going on. At the end of the year 1892 the works were in the following state:—

	Main Channel.		South Branch Channel.		North Branch Channel.		Central Branch Channel.	
	Completed %	To be completed %	Completed %	To be completed %	Completed %	To be completed %	Completed %	To be completed %
Earthwork	37%	63%	67%	43%	5%	95%	96%	4%
Masonry	88%	12%	74%	26%	...	100	50%	50%

46. It is hoped and indeed every endeavour will be made to complete the works before the monsoon again sets in.

47. Details of the work done will be found in table No. 4 of the Appendix.

48. The question of street drainage was under consideration during the year. The sections were completed, and a report, dated 28th October 1892, No. 2367, was sent to Government on the subject. The town is so flat that drainage will be exceedingly expensive, and the Municipality has been advised to adopt the Shone system and to, by degrees, bring in additional areas from time to time.

49. The water-supply question in this town is also on the tapis; the desire seems to be to adopt a temporary expedient, viz., to fill tanks by conduits during floods in the Cauvery, or to bring a very limited supply to them by pumping. The undersigned is of opinion that a proper pipe system should be introduced and as much as possible executed at first. Before a pipe-supply is introduced the drainage of backyards and houses is a necessity—in fact a necessity whether the pipe supply is introduced or not.

Town.	District.	Population, 1891.
(20) KURNOOL.	KURNOOL.	24,523.

50. It was not until 5th May 1892 that the Chairman reported that the experimental well, which was necessary to test the supply obtainable from the Hindri in the dry season, had been completed. Experiments were made by pumping and samples were drawn and sent to the Chemical Examiner for analyses. The well had not been properly built and the experiments were not conclusive; but they showed that sufficient water was obtainable had this source been adopted for the supply. The Chemical Examiner, however, reported the water to be suspicious and recommended filtration through charcoal, &c. The town-people were averse to the Hindri as a source of supply, and the Collector of Kurnool stated that cholera usually followed the course of the river when it occurred in villages higher up. This might or might not show contamination in the upper waters, but it must be remembered that the river is apparently dry or with little water in it for a large portion of the year. The water the people in Kurnool consider unwholesome, and it was therefore decided, although the scheme had been worked out, to give up this plan of drawing water from the Hindri bed and to resort to the canal which draws its waters from the Tungabhadra. The water is stated by the Chemical Examiner to be good and it is abundant for most part of the year except during canal clearance. The scheme was sent to Government on 6th December 1892, and is as follows:—From the canal the water is proposed to be taken to a settling tank, 500' x 220' x 10', capable of containing a fortnight's supply. In this the water will

be deprived of its silt to a great extent. The amount of silt in the water amounts to 30-38 grains per pint during the monsoon. It would have been advisable to provide filter beds, and these must be added by and by. Meantime after the water has settled it will be drawn off to the pump-well whence it will be raised by centrifugal pump into a tank adjoining the engine-house. Thence it will gravitate to the town. There will be 6 miles of pipes, 30 fountains, and 15 hydrants, &c. The cost of the scheme is expected to amount to Rs. 1,41,000.

Town. District. Population, 1891.
(21) MADURA. MADURA. 87,426.

51. The scheme for the supply of water to Madura, referred to in last year's report, was finally sanctioned at a cost of Rs. 4,24,360, the details of which are as follow:—

	RS.
Infiltration works	35,000
Engine and boiler house	28,000
Engines, pumps and boilers	60,900
Pipes, valves, bends, &c. }	2,15,184
Less value of existing pipes }	
Laying and jointing pipes, &c.	29,925
Add contingencies	3,69,009
	55,351
Total	4,24,360

And the total annual cost was estimated at—

	RS.
Cost as above	4,24,360
Amount paid to Mr. O'Shaughnessey for preparing a former scheme	7,476
Moiety to be borne by Government	Total ... 4,31,836
	2,15,918
	Total ... 2,15,918
Annual payment, including interest, for extinguishing loan of Rs. 2,15,918 in thirty years	12,868
Pumping and other charges	19,885
	32,753
Add interest and sinking fund on existing loan	2,510
Total	35,263

52. Sanction was received in February 1892.

53. Tenders were called for during March and April, and those for pipes and laying them respectively were received on the 11th May 1892. The lowest tenders were—

	£	s.	d.
Messrs. Richardson and Cruddas for pipes, &c.	10,310	4	11 *
Numberumal Chetty for laying and jointing pipes, &c.	24,399	2	0
and these were accepted.			

54. Tenders for the machinery were received on 8th June 1892, and the lowest tender in accordance with the terms of the specification was judged to be that of Messrs. James Simpson and Company, Chelsea, London, for £3,497, whose engines are now being adopted in most of the later drainage and water-works of India. The machinery is to consist of three sets of triple expansion Worthington engines and pumps and locomotive boilers; these to be set up and worked for three

* Arranged for at Rs. 1,62,250-9-8.

months at the above cost. Tenders for the infiltration works and engine and boiler house were received in August 1892 and that of Messrs. Sivagnanam Pillai and Veeramani Iyer for Rs. 57,719-14-0 was accepted. Few persons responded to the advertisement for tenders for this work because of the uncertain cost of the river works, and though this tender plus Rs. 6,000 for tiles to be supplied departmentally with other works not included in the contractors' bill amount to more than the estimate, it was deemed advisable to accept the same. The savings over the total estimate were considerable, and it was reported to Government that the cost of the works based on the tender figures would probably be—

	Original figures.	Anticipated expenditure.
	RS.	RS.
Infiltration works	35,000	75,000
Engine and boiler house, store-shed and land, &c.	28,000	6,000
Engi drivers' quarters	60,900	62,000
Eng and pumps	2,15,184	1,69,000
Pipes, valves, &c.	29,925	28,000
Laying and jointing pipes, &c.		
Total	3,69,009	3,40,000
Contingencies	55,351	51,000
	4,24,360	3,91,000

55. Government in G.O., No. 1923 M., dated 21st November 1892, ordered that of the grant made to Madura Rs. 14,287 should be refunded to Government, pending final adjustment on completion of the works.

56. With the execution of the works it was not intended to make much progress during the year, because it is not safe to begin river work until late in December. The work chiefly done has reference to the forming of engine-house site, the diversion of the road around the same and the foundation of the engine and boiler house and pump-well. The foundation of this well is 22 feet below ground level. The receipt of the pipes and especially the large mains was not completed until December 1892, and a very large proportion of the larger pipes was found cracked. These will have to be replaced at the cost of the contractors, otherwise much more pipe laying might have been done, but this was not an urgent matter so long as it was unable to begin the filtration gallery. In table No. 5 of the Appendix is shown the amount of work done and the value of materials received up to 31st December. His Excellency the Governor visited Madura on 8th to 10th November 1892 and laid a stone in the corner of the building on 9th November 1892.

Town. District. Population, 1891.
(22) MASULIPATAM. KISTNA. 38,851.

57. A proper water-supply is the first sanitary improvement desirable in Masulipatam, but there appears little chance of that improvement being effected at present, for in G.O., dated 28th September 1892, No. 1580 M., Mis., a resolution of the Council was communicated which was to the effect that until an improvement is effected in their revenue, the question of the water-supply cannot be considered unless Government is prepared to afford the Municipality substantial aid. The question is meantime not pressed as it is proposed to try a deep boring at Masulipatam after the Cochin boring is completed. The prospects of success are however doubtful.

Town. District. Population, 1891.
(23) NEGAPATAM. TANJORE. 58,848.

58. For this very important town a scheme for drainage was forwarded for sanction so long ago as 8th February 1892. But no orders have yet been received regarding the scheme. The town is of a somewhat circular form, and along the

main streets forming the boundaries of the town it is intended to construct the main intercepting sewer into which all the sub and minor sewers will gravitate. The sewers will be flushed from tanks and wells on the higher ground in the centre of the area dealt with. It is not intended to interfere except by degrees with the existing house drainage except in so far that it will be arranged so that it is delivered over the grating of an intercepting trap in the street close to the side of each house, this trap being in communication with the sewer. The ventilation of the sewers will be effected *via* the traps and ventilating pipes which will rise well above the houses. All the sewers will be of stoneware pipes from 6 inches to 18 inches diameter. The house drains will be 4 inches in diameter. The sewers will discharge into a well on the outskirts of the town where the sewage will be lifted and pumped on to an area raised by rubbish and known as Hathaway's Park. On this crops will be raised. The town is separated from the said "Park" by the Devanadi river.

59. The following is an abstract of the capital and annual cost of the scheme:—

Abstract of the cost of the scheme.

	RS.
Street sewers and connections	2,63,681
Intercepting sewers	66,495
Sewage well and pumping house	9,845
Engines and boilers	9,000
Pumping main	8,535
Sewage farm and distributing cistern	1,626
Contingencies	53,818
Total	4,13,000

Abstract of the annual cost of the scheme.

Interest and sinking fund for 30 years at 5.96 % on a moiety of the cost (4,13,000) Rs. 2,06,500	12,307
Working charges	8,000
Total	20,307

Town.	District.	Population, 1891.
(24) NELLORE.	NELLORE.	29,341.

60. The surveys and levels for both the water-supply and drainage of this town were completed during the year. But it will not be possible to work out the schemes for sometime. This probably will not delay their execution much as Government can only allot a limited amount of funds year by year; and there are many schemes already sanctioned for execution waiting for allocation of funds.

Town.	District.	Population, 1891.
(25) ONGOLE.	NELLORE.	10,863.

61. The inhabitants of this town, which is situated in one of the districts affected by the late scarcity, petitioned Government in February 1892 in view of the scarcity of water which prevailed in the town. The preparation of the schemes for the supply of water was therefore expedited and two schemes were submitted to Government on 22nd April 1892. Scheme A was a complete scheme for the supply of 15 gallons per head to a population of 12,000 and was estimated to cost Rs. 1,20,000 or Rs. 10 per head. An alternative scheme B was also designed to supply through 10 fountains $7\frac{1}{2}$ gallons per head, and the cost was estimated at Rs. 49,700. In both schemes the source of supply was to be a tunnel driven in the gravel water bearing beds to the west of the town. The ground here is low, so that the lift (61 feet) is considerable. The annual expenditure, Government providing half the original cost, was estimated at Rs. 3,575. The schemes were referred to the Council by G.O., No. 943 M., Mis., of 31st May 1892, for report as to the action the Council intended to take, but this department has heard nothing further of the matter. Another water famine may probably bring forward the question again.

Town.	District.	Population, 1891.
(26) OUTACAMUND.	NILGIRIS.	15,052.

62. *Water-supply.*—The existing works of the north water-supply were inspected twice during the year. One improvement was suggested and will be carried out in January 1893, and that is the abolition of the Snowdon reservoir into which the water is delivered after leaving the Snowdon tunnel. It was advised that the pipes to the town should be connected to the tunnel, as the passage of the water into a shallow pond, liable to pollution, after it has passed out of the main reservoir was not a measure that added to either the purity or quality of the water, and that in fact the water deteriorated. The cost of the work which will be carried out by the Municipal Engineer will be Rs. 650. This includes the cost of a balance valve to keep the water from rising above a maximum height in the tunnel. The quality of the water from the Marlimund reservoir does not improve, and besides the work mentioned above, the council was advised that the quality might be improved by the construction of the following works:—

- (1) Cutting off the surface drainage from the tea estates surrounding the reservoir.
- (2) Bunding off by a dam the peat bog which is gradually encroaching on the reservoir and from which the larger part of the organic contamination must be received.

63. The council also considered the question of the construction of filter beds at the site of the Snowdon reservoir. Their cost was roughly estimated at Rs. 50,000, and this amount seemed prohibitive. The present quality of the water is not very satisfactory.

64. Several other improvements are required to the north supply, such as the provision of additional sluice valves and of stop-cocks between the mains and each fountain. Several extensions of this supply were made during the year, but these may be left to be noticed in the Council's report of their operations.

65. *South water-supply.*—In last year's report it was stated that tenders were received late in December for this scheme and these were sent to the council to dispose of. The council accepted Messrs. Massey and Company's tender amounting to Rs. 29,437 for the supply of pipes, and by arrangement with Messrs. P. Thompson and Company accepted their tender reduced to Rs. 7,723-14-0 for laying and jointing. The work was under the Municipal Engineer's supervision with aid of a Supervisor sent up to assist. The marking-out of the pipe lines down the steep slopes of Dodabetta gave some trouble, as it was advisable to lay the pipes with as few changes of gradient as possible. The height between the lowest point of the pipe line and the full supply level of the upper or Dodabetta reservoir is 688 feet. The pipe line starts by a junction with a cast iron outlet pipe under the bund of the upper reservoir and falls with a gradient of about 1 in 8 to the lower reservoir. This lower reservoir is fed by the surplus from the upper reservoir and also from a separate drainage area. There was a question as to whether the upper reservoir would always afford the necessary supply, but, in the absence of continuous gaugings, the supply could not be determined on a rainfall basis. It was, however, shown that, though the open channel had drawn from the reservoir continually, there had been seldom any want of water, though sometimes the supply had to be limited. With a pipe system the draught will be very much less and with the additional supply of the lower reservoir any scarcity need hardly be apprehended. Referring again to the pipe line when it reaches the lower reservoir, it descends by a vertical bend and joins an outlet pipe laid from near the bottom of that reservoir, the actual outlet being by means of a floating pipe. Near this reservoir a very heavy piece of rock-cutting had to be done to keep the pipe below the level of the outlet pipe from the lower reservoir. From this point the work was fairly simple though the route was very uneven. At a point 150 feet from the lower reservoir a break pressure tank has been placed to reduce the pressure of the remaining portion of the route; this reduces the maximum static head by 173 feet. During the laying, the pipes were carefully tested as laid and several defective pipes were found and removed. But, since the completion of the work, no bursts have occurred though there were slight leaks in two joints. The work was practically completed and

opened to the public (when most of the houses along the route had been connected) on the 15th December 1892. The cost of the work is Rs. 37,815 as shown in table No. 6 of the Appendix. This is less than the estimated cost of Rs. 43,000 by Rs. 5,185, and in addition to this there are about 600 feet of pipes available. These it is intended to use in the Kodapamund scheme, for which the grants made are insufficient. The original estimate by the Public Works Department was Rs. 65,000, so that the saving effected for the council has been Rs. 27,185.

66. *Intercepting Sewer.*—The revised plans and estimates referred to in last report were approved and forwarded to Government. The cost was estimated at Rs. 11,300. Government made in March 1892 (*vide* G.O., dated 7th April 1892, No. 673 M., Mis.) a grant of Rs. 10,000. The work has almost been completed and acts satisfactorily. The whole expenditure will not have been incurred at the end of December 1892; but it is likely that the work will cost less than the estimate. Along the whole of the side of the upper lake and the lake channel the improvements effected are very marked, and only on occasion of very heavy storms does any sewage reach the lake. The Hobart Park Road has been raised and it and the bridge over the lake channel improved.

67. *Kandal Drainage.*—This work was completed in September 1892, and the result has been a very marked improvement in the condition of the village. The cost of the work has been Rs. 34,820 against the estimate of Rs. 35,000, and the work has been satisfactorily executed. The sewage is carried to a point below the lake bund at Loch End, where it joins the main bazaar sewer. From this point it is carried by an iron pipe into the Kandal stream. This is not satisfactory and is a matter which requires urgent attention, as the discharge of such an amount of sewage into a stream is very undesirable, and arrangements ought to be made to dispose of the sewage on land which borders the stream, but which there is apparently some difficulty in acquiring. Four acres of Government land are now available, and suggestions were made to the Chairman during the year as to the manner in which it ought to be laid out for sewage irrigation.

68. *Ootacamund Lake.*—None of the proposals mentioned in last year's report were approved, but a modified plan was sanctioned in G.O., dated 7th April 1892, No. 673 M., Mis. Funds were not, however, available, and the work was not begun during the year. This work is likely to be done in 1893.

Town.	District.	Population, 1891.
(27) PALGHAT.	MALABAR.	39,501.

69. The Council was unable in 1892-93 to provide funds for the survey and taking of levels of the town in reference to drainage. It is believed that this will be done in 1893-94, and meantime a portion of the existing town survey map has been enlarged to a scale of 100 feet to 1 inch on which alterations and extensions will be shown and the scheme for drainage prepared. A market was designed for this town and a latrine for its college during the year.

Town.	District.	Population, 1891.
(28) PALAMCOTTAH.	TINNEVELLY.	18,683.

70. This town as regards its water-supply is intimately connected with Tinnevely, and in the report as to that town reference will be made to Palamcottah.

Town.	District.	Population, 1891.
(29) PALNI.	MADURA.	16,941.

71. Government on 24th March 1892 ordered a scheme for the drainage and improvement of the water-supply of Palni to be undertaken. This could not be done in 1891-92, but has since been taken in hand. The surveys and levels are complete, and the scheme will probably be presented to Government next year. The scheme of drainage is intended to intercept all drainage from the tank and the improvement in the water-supply will consist chiefly in storing supplies for the dry season in tanks at either end of the town.

Town.	District.	Population, 1891.
(30) PERIYAKULAM.	MADURA.	16,338.

72. With reference to the remarks made in last year's report, Government considered that the anticipated cost of drainage was beyond the means of the town. Rs. 1,25,000 is only Rs. 8 per head, and the undersigned was unable to suggest any cheaper plan, because a town should be drained on recognized principles, and to attempt it on any other plan would lead to much expense and disproportionate results. That the drinking supply of water in this town should be improved is a statement which has met with very strong support by the ravages of cholera during the past year when 240 people died from that disease in January, February and March; the scheme proposed was very simple; it is to be regretted that it has not met with support.

Town.	District.	Population, 1891.
(31) RAJAHMUNDRY.	GODAVARI.	28,406.

73. Surveys and levels were taken of this town during the year and the town was visited again on completion of the levels in view to fixing the sites of pumping station, mains and reservoirs. The scheme for water-supply will be presented in 1893.

Town.	District.	Population, 1891.
(32) SALEM.	SALEM.	67,750.

74. This town so long ago as 8th April 1892 desired Government to include in the Sanitary Engineer's programme of work for 1892 the preparation of the plans for the town's water-supply. Last year a scheme was submitted, but Government, though not acceding to the above request, stated it would be prepared to consider it if the question of financing the scheme were settled. Nothing so far as is known to this department has been done, nor is it believed that any decision has been come to even to reject the scheme. The Council in this matter has certainly acted in a dilatory manner to say the least of it.

Town.	District.	Population, 1891.
(33) SRIRANGAM.	TRICHINOPOLY.	21,658.

75. The questions of water-supply as well as of drainage are still undisposed of, but it can be no longer maintained by the Council that the water-supply does not need improvement. The results of the analysis of all the well water sent for examination showed it to be "bad," and Government considers (G.O., dated 8th October 1892, No. 1638 M., Mis.) that the quality of the existing supply is certainly not such as to relieve the Municipal Council from the obligation of providing a purer supply, and the Council was ordered to make provision to that end and for the improvement of the drainage of the town. Government further ordered the closure of the wells if they could not be improved. It is presumed the Council will now take some action.

Town.	District.	Population, 1891.
(34) TANJORE.	TANJORE.	54,055.

76. The Council having declined to undertake the construction of the scheme of water-supply, Government on 25th January 1892 (G.O., No. 153 M., Mis.) called on the Council under sections 37 and 143 of Act IV of 1884 to carry out the scheme and to report within one month what action had been taken by the Council and to show cause under section 49 of the same Act why the arts and water taxes should not be levied. The taxes were imposed from 1st April 1892, and Government granted a loan of Rs. 1,90,000, a moiety of the amount required to carry out the scheme. The loan was not actually granted to the municipality until October 1892, but before that date in view to obtain tenders, &c., specifications and advertisements were issued and tenders received from England and India on 30th August 1892. Tenders for laying and jointing pipes, &c., were received on 15th September 1892. The lowest tender for the pipes, valves, fountains, &c., was that

of the Stanton Iron Works Company of Nottingham for £9,718-19-3, or at 1s. 2 $\frac{3}{4}$ d. = Rs. 1,62,263. The lowest Indian tender was for Rs. 1,71,671. There are about 1,459 tons of pipes and 25 $\frac{1}{2}$ tons of specials besides 83 fountains and 123 valves. The lowest tender for labour was that of Ellayalwar Naidu for laying and jointing about 27,936 yards of pipes between 18" and 3" for Rs. 16,913-11-3.

77. The pipes did not arrive before December. The Assistant Engineer in charge of the execution of the works joined his duties on 5th October 1892, and has since been engaged in preliminary operations of surveying pipe lines, laying out works, and arranging for supplies of bricks, cement, &c. The work in the river cannot be started until February, or perhaps later.

78. Tenders were also received for engines from Messrs. James Simpson and Company who are also supplying the engines for Trichinopoly and Madura. The engines here, as at Trichinopoly, will be vertical, triple expansion, Worthington engines and pumps. There will be three sets, any two capable of supplying the maximum demand.

79. When tenders had been received for pipes and laying, a revised estimate of probable expenditure was framed basing the cost of the river works on the amount of the tenders received for similar works at Madura. This statement is shown below :—

	Original amount.	Anticipated expenditure.
	RS.	RS.
Infiltration works	27,650	32,500
Engine and boiler-house including store shed ..	30,694	27,500
Engine driver's quarters		6,000
Engines and boilers	63,000	* 70,000
Pipes, valves, &c.	2,20,771	1,70,000
Laying and jointing	30,925	22,000
	3,73,040	3,28,000
Contingencies, 15 per cent.	55,960	49,200
Total	4,29,000	3,77,200

* Approximate tender with foundations, Rs. 65,000.

80. His Excellency the Governor cut the first sod of the works on 17th November 1892. The length of time the works will take to execute depends entirely on getting the filter bed in in one season. There is but a short interval when the river is not in flood, as the Vennar is really a very large irrigation channel fed from the Cauvery, which itself depends for its supply on the south-west monsoon rains.

81. In table No. 9 of the Appendix will be found a statement showing the expenditure on works up to date.

Towns.	District.	Population, 1891.
(35) TINNEVELLY. }	TINNEVELLY.	{ 24,780.
(28) PALAMCOTTAH. }		
		{ 18,683.

82. The report on the water-supply scheme was communicated on 5th January 1892 by G.O., No. 21 M., to the Councils of Tinnevely and Palamcottah and the District Board of Tinnevely, who might all be partners in a joint scheme of supply from the Tamraparni river; Government said at the same time that no immediate grant of funds was possible. The matter stands thus. The Tamraparni, a perennial river, flows midway between Tinnevely and Palamcottah, and near the river itself is springing up and extending rapidly a large village adjacent to the terminus of the South Indian Railway; in this large village the District Board is interested, as the village lies beyond the boundary of either Palamcottah or Tinnevely. No reply has come from the Board, or if so, it has not been communicated to this office.

83. If the foregoing proposal fails, separate schemes must be made for Tinnevely and Palamcottah; the former must be a modification of Mr. Russel's scheme, the latter has not yet been considered, though during the year the Sanitary Commissioner made certain proposals regarding the improvement of the water-supply (*vide* G.O., No. 1229 M. of 20th July 1892); time has not allowed these to be investigated, and indeed pending the settlement of the main question, it was not thought necessary to do so.

Town.	District.	Population, 1891.
(36) TIRUPATI.	NORTH ARCOT.	14,085.

84. This town is mentioned in this report, not as it should be with reference to something done, but because nothing has been done. Government sanctioned the drainage scheme in November 1891 and promised a grant of Rs. 48,000 (a moiety), but though Government has called on the Council repeatedly for a special report as to the manner of raising the remainder of the money for the scheme, the Council still remains irresponsive.

85. Government has complained of the inordinate delay, and prominent attention is drawn to the matter, because it seems that something more than complaint should be the result of such apathy in public affairs.

Town.	District.	Population, 1891.
(37) TIRUPATUR.	SALEM.	16,499.

86. A report on the drainage and water-supply of this town was forwarded to Government on 11th January 1892 and thereafter sent to the Council; the report was on the lines of the remarks made in last year's Administration Report. The Council was unable in 1892-93 to make any allotment for the necessary surveys.

Town.	District.	Population, 1891.
(38) TRICHINOPOLY.	TRICHINOPOLY.	88,715.

87. Government having awaited for some time the reply from the Military Department as to its acquiescence in the scheme for the water-supply amounting to Rs. 4,44,245 and having accepted its own share in the joint scheme for the jail supply and it having been urged by the South Indian Railway Company that an early commencement of the works was desirable if it was still to be a contributor, the sanction for commencing the works was issued on 13th May 1892, and a grant of Rs. 2,22,000 was sanctioned in G.O., No. 1025 of 15th June 1892, Financial. The specification and schedules for pipes were sent to the press within a fortnight of receipt of the former order; tenders for pipes were called for on 11th June 1892, and for laying and jointing on 1st July 1892. Tenders were received from England as well as India on 15th August 1892 and were disposed of as follow :—

	RS.	A.	P.
Supply of pipes—Messrs. Richardson and Cruddas, Bombay.	1,95,390	0	0
Laying and jointing—Ellayalwar Naidu	17,682	12	5

88. The land for the head works was applied for on 5th July 1892, and the Gazette notification was issued on the 20th September 1892.

89. Conductor A. C. Lord was transferred from Kumbakonam to charge of the Trichinopoly Water Works and took charge on 26th September 1892.

90. The tender of Messrs. James Simpson and Company of London (Chelsea) was accepted for machinery as follows :—

	£
Main pumping station	4,200
Subsidiary station	1,298

91. The machinery at the main station will consist of three vertical, triple expansion, condensing, Worthington engines and pumps and Babcock and Wilcox boilers, and at the subsidiary station of two horizontal triple expansion engines and pumps and two locomotive boilers. At the former station any two engines will meet maximum demand, leaving one engine spare, at the latter station one engine is equal to the maximum demand.

92. After receipt of tenders a statement of probable expenditure was made showing that there would be savings in some items and increases in others with a total probable saving of Rs. 17,645.

	Original amount.	Anticipated expenditure.
	RS.	RS.
Infiltration works	26,920	35,700
Engine and boiler-house (main)	17,610	21,100
Do. do. (subsidiary)	6,000	5,300
Store-shed	..	2,100
Engine driver's quarters	..	6,000
Engines and boilers (main)	75,600	72,000
Do. do. (subsidiary)	10,800	22,000
Pipes, valves, bends, &c.	2,31,957	1,95,000
Laying and jointing	25,998	20,000
	3,94,885	3,79,200
Contingencies, 12½ per cent.	49,360	47,400
Total ..	4,44,245	4,26,600

93. Government, pending final adjustment, ordered the refund to Government of Rs. 8,700, and that the shares of the Public Works (Railway), Military and Judicial departments payable, would stand at Rs. 49,573, 19,264 and 5,883 respectively.

94. His Excellency the Governor laid a stone of the engine and boiler house on 12th October 1892, and at this date a portion of the house had been raised to basement level and the pump-well had been partially sunk. The progress of the river works is dependent on the state of the river between the north-east and south-west monsoons, and as there is only a limited time to work in the river, it may not be possible to complete the works in one season; but everything is in readiness to do so when the river subsides.

95. In table No. 10 of Appendix will be found a statement showing the progress and expenditure on works up to date.

Town. District. Population, 1891.
(39) TUTICORIN. TINNEVELLY. 25,221.

96. This town and its existing water-works have been under survey during the year; the result of these surveys is to confirm the opinion expressed in last year's report, but it is thought that it will be necessary and advisable to design the scheme in the usual manner with stand-pipes and the supply at a moderate pressure instead of the water being lifted from dip wells or by hand-pumps as originally suggested. Colonel Fraser, R.E., suggested during the year that the supply from the Korampallam tank should be raised by a turbine fed from same tank; the cost of water would have been very heavy; the economy of the proposal was doubtful; certain questions in relation to the probable maximum and minimum levels in the tank, &c., were replied to by the Chief Engineer for Irrigation; as to these it is unnecessary to go into detail at present. The Deputy Sanitary Commissioner in his inspection notes recommends that nothing but a pressure supply should be introduced; he also notes certain methods he would adopt to effect that purpose.

97. As the scheme will, it is hoped, be laid before Government in 1893, further reference to the scheme is at present unnecessary.

Town. District. Population, 1891.
(40) VANIYAMBADI. SALEM. 15,939.

98. The report as to the drainage and water-supply of this place was sent by Government to the Council on 5th April 1892. This showed that, unless a proper survey map was obtainable, it was impossible to decide what works would have to be undertaken. This was not obtainable from the Survey Department and the

Council was unable to allot funds for the survey, which it was anticipated would cost Rs. 450. The Council has promised to allot funds in the budget for 1893-94.

Town. District. Population, 1891.
(41) VELLORE. NORTH ARCOT. 44,950.

99. The scheme referred to in last report (amounting to Rs. 3,13,000) received the approval of the Chief Engineer and was sanctioned by Government on 19th February 1892, and Council was requested to expedite its report as to financing the scheme. The Council replied that, as the present scheme sanctioned by Government involves a very large amount of expenditure on the very starting besides the annual excessive cost of maintaining the scheme, it found it impossible to provide funds and instead requested Government to instruct the Sanitary Engineer to investigate the scheme of water-supply from the Virupatchipuram tank. Government in its endorsement No. 387, dated 25th May 1892, referred the above letter to the Sanitary Engineer for remarks.

100. The tank was visited and it was reported that the tank was the one which breached in 1872 and was the cause of much loss of life and destruction of property. On a reference the Chief Engineer, Public Works Department, stated that under no circumstance would a recommendation to repair the breach in this tank be made to Government. This closed the question, and it now remains for the Council to carry out the scheme originally reported.

Town. District. Population, 1891.
(42) VIZAGAPATAM. VIZAGAPATAM. 33,723.

101. After various delays owing to the illness of the special surveyor sent to take the surveys and levels for this scheme, all the necessary information was obtained and the surveys completed on 26th May 1892. The town, &c., was again inspected by the Sanitary Engineer in February 1892 in view to certain matters connected with the design of the scheme.

102. So far investigations tend to show that the most economical scheme will be the construction of a dam and formation of a reservoir in the Moodasalavoo valley whence the water will flow by gravitation to Vizagapatam. The scheme will be presented to Government in 1893.

Town. District. Population, 1891.
(43) VIZIANAGRAM. VIZAGAPATAM. 29,364.

103. On the invitation of the Collector and at the wish of H.H. the Maharajah of Vizianagram this town was visited in February 1892, in view to inspecting the lines, sites and plans of the proposed water-works for which a scheme was being prepared by Mr. Beckett who was sent out from England by Mr. Bradford Leslie, in whose hands the preparation of the scheme was placed. The works proposed seem to be such as will give Vizianagram town and cantonment an excellent high pressure supply. But details cannot be put before Government, as the plans have not been submitted for approval. The Collector of Vizagapatam states that the plans are deposited in the Maharajah's office. The scheme is estimated to cost Rs. 5,00,000, which is rather costly for a population of 30,000; but the source of supply is distant. It is not likely that the scheme can be begun without financial assistance from Government, and of that at present there seems to be little hope.

104. The foregoing paragraphs relate to the major works in progress or proposed for the municipal towns mentioned. It will be noticed that no mention has been made of the following towns, viz.:—Anakapalle, Berhampore, Bimlipatam, Cannanore, Erode, Gudiyatam, Mangalore, Mannargudi, Mayavaram, Parlakimedi, Tellicherry and Walajpet, because there is nothing particular to state regarding them.

DISTRICT AND TALUK BOARDS.

105. No major works in reference to schemes for drainage or water-supply have been proposed by any Board, District or Taluk, during the year. But the following matters in reference to such schemes in North Arcot had attention :—

106. *Chittoor*.—This town was inspected in reference to both its drainage and water-supply. This inspection was made because of the desire of the Taluk Board to construct certain street drains which were not of proper design, nor did they form portion of any complete scheme. The Board had provided Rs. 600 in their budget of 1891-92 for the purpose of taking levels in view to improvement of drainage, and this sum was utilized and the sections for new drainage were completed and are now in hand. A report was made to Government regarding both the water-supply and drainage, and this was forwarded to the President of the Local Fund Board on the 9th April 1892, Government desiring to be informed what action he intended to take. No reply has been received, at least it has not been communicated, so the matter has made no progress.

107. *Tiruchengód*.—With reference to G.O., No. 2773 L. (Mis.), dated 29th November 1892, requesting Sanitary Engineer to depute his Assistant to examine the locality and report what action should be taken to convert the Ammenkulam tank in Tiruchengód taluk (Salem district) into a drinking-water reservoir, the place was visited and a report was submitted to Government on 21st December 1892. The proposed expenditure of Rs. 5,000 on the Ammenkulam will not benefit the town of Tiruchengód as regards its water-supply either directly or indirectly. Deepening of Chinna and Peria Teppa columns was suggested.

108. *Upper Tirupati*.—The following correspondence took place regarding the water-works of this important town. Important so far, that is, the site of a shrine and temple whither pilgrims come far and near and is one of the holy places of Southern India, and hence is a centre whence an epidemic is likely to spread quickly and be widely distributed. It has not been found possible to inspect the works, but an effort will be made to do so.

From the Sanitary Engineer to Government, to the Collector of North Arcot, dated Fort St. George, 1st November 1892, No. 2393.

I have the honor to inform you that some five or six (perhaps more) years ago some Rs. 20,000 were spent by the late Mahant in providing a water-supply for Upper Tirupati, including pipes, valves, fountains, &c. The construction of these works was, as far as I remember, due to reports by the then Sanitary Commissioner, Dr. Furnell, as to the frequency of cholera at Upper Tirupati and its subsequent distribution by the movements of the pilgrims leaving Tirupati.

2. I am informed (though not officially) that these works are not now used and are closed, and the same state of things must therefore now prevail as prevailed before their introduction.

3. This is to be regretted, and if my information is correct, I shall be obliged if you will inform me whether you, either as Collector or as President of the Local Fund Board, can take any steps to induce the present Mahant to have the works put and maintained in order.

From the Collector and District Magistrate, North Arcot, to the Sanitary Engineer to Government, dated Chittoor, 27th November 1892, No. 5638.

Referring to your letter No. 2393, dated 1st November 1892, I have the honor to inform you that Sri Mahant of Tirupati states that the water works in Upper Tirupati are, for the most part, in a fair condition and are in use, and that arrangements have been made to repair the parts which are out of order as early as possible.

JAILS.

109. *Coimbatore*.—The estimate for deepening the Coimbatore jail main gate well through 50 feet of gneissic rock amounted to Rs. 6,250. The Inspector-General of Jails reported that on 18th January 1892, the jail had been vacated on account of an epidemic of cholera and requested that No. 5 well, inside the jail, might be

cleaned out, so that when the deepening of the main gate well was proceeded with water might be available. No orders, however, had been received regarding the work, and if any orders have since been issued, they have not been communicated to this office.

110. *Trichinopoly*.—Government during the year accepted the proposals for the supply of this jail by a branch from the main to the railway station and military lines of the water works now under construction.

111. *Bellary*.—The Inspector-General asked for advice as to what would be the effect of deepening one of the jail wells. Sections were taken showing the levels of the kunkur and rock and the bottoms of the various wells in the vicinity, but the rock dipped in so many various directions and seemed to have so many depressions and elevations over a very small area, while the kunkur overlying it varied in depth so much that it was found inexpedient to offer any opinion as to the result of what the deepening would be. It could only be found by experiment.

PERSONAL PROCEEDINGS.

112. When on tour in the various towns, assistance and advice has been rendered whenever sought. Many markets, hospitals, slaughter-houses have been visited as well as other municipal works. Designs have been furnished for various works and information given in regard to the construction of latrines, of carts, &c.

113. Table No. 1 of the Appendix shows the towns visited during 1892; it will be seen that the Sanitary Engineer visited the following towns, viz.:—Kumbakonam, Coonoor, Ootacamund, Vizagapatam, Vizianagrum, Chicacole, Rajahmundry, Cocanada, Cuddapah, Vellore, Madura, Trichinopoly, Dindigul, Tuticorin, Anantapur, Kurnool, Cuddalore and Tanjore.

114. The town visited twice was Tanjore. Certain others were visited thrice, viz., Kumbakonam, Trichinopoly and Dindigul. Others four times, viz., Coonoor, Ootacamund, Cuddapah and Madura (these being towns where works are under construction), and the Assistant Sanitary Engineer visited the following towns, viz.:—Chittoor, Cuddapah, Kurnool, Ellore, Coonoor, Ootacamund, Nellore, Cuddalore, Kumbakonam and Tiruchengód (Salem district).

115. The town Cuddapah was visited by Assistant Sanitary Engineer four times.

116. The following table is a record of the travelling done during the year :—

	By Sanitary Engineer.	By Assistant Sanitary Engineer.
Number of towns visited	* 37 towns.	* 13 towns.
Number of miles by sea	842	4,424
Number of miles by rail	7,828½	80
Number of miles by canal	76	147
Number of miles by road	631	4,669½
Total miles	9,377½	* 67
Number of days on tour	* 147	

MISCELLANEOUS.

117. The office work has been very heavy during the year, during which six schemes, amounting to Rs. 24,18,472, have been designed and sent to Government; a great deal of work has had to be taken in hand in connection with details of works under construction and with plans and estimates received by the Sanitary Board for criticism, with type drawings, &c. All new type drawings are issued to each Municipality. They are also available on application from District or Taluk Boards or from any Government Department requiring such drawings.

* Including more than one visit.

150 copies of Nos. 2, 4, 7 and 8 were furnished to the Public Works Department during the year. The following are available :—

- (1) Slaughter-house.
- (2) Covered masonry latrine with seven seats.
- (3) Open masonry double latrine with ten seats in each compartment.
- (4) Iron double latrine on bucket system with twelve seats in each compartment.
- (5) Native house latrine.
- (6) Iron water-tight conservancy cart.
- (7) Single iron latrine of six seats on bucket system with corrugated iron roof and angle iron vertical posts.
- (8) Double latrine on dry-earth system with eight seats in each compartment and with a corrugated iron roof over dry-earth bins.
- (9) Bullock slaughter-house.
- (10) Double iron latrine with six seats in each compartment.

118. Further designs will be issued from time to time; those which are more urgently required seem to be, cinerators for rubbish, small vaccine depôts, light rubbish conservancy cart for hill work, hospitals, and dispensaries; these will be kept in view and got out as opportunity permits.

119. The following Municipalities were specially furnished with designs as follows :—

Municipalities.	Description of plans sent.
1. Bezvada	Municipal hospital and dispensary.
2. Berhampore	Plan of a vaccine depôt.
3. Madura	Plan of an urinal.
4. Palghat	Market.
5. Ongole	Do.
6. Vizagapatam	Bullock slaughter-house.

SANITARY BOARD'S PROCEEDINGS.

120. All estimates for sanitary works by Municipalities or Local Fund Boards for works, original or repair, and estimated to cost over Rs. 200, are required under existing regulations to obtain before execution the approval and sanction of the Sanitary Board. Such sanitary works include drainage and water-supply works, hospitals, markets, dispensaries, latrines, slaughter-houses, &c.

121. In regard to Municipalities the Board being furnished with copies of the detailed budget of each Municipality can, so far as works for which sums are allotted in a budget, see that the rules are attended to and it has been found necessary to report certain Municipalities during the year for breaches of the rules.

122. As regards Local Boards, District and Taluk, there is no check as to whether the rules are attended to or not, except when, as has been often the case after the work has been completed and payment required, the disbursement of the amount has been refused owing to the sanction of the Sanitary Board not having been obtained. This has been given in special cases in which due explanation was afforded. Doubtless a large percentage of the Taluk Boards do not carry out many works exceeding an estimated cost of Rs. 200; but as only 17 Taluk Boards out of a total of 86 have sent in any estimates for sanction at all, it is a question whether the rules are attended to by such Boards.

123. Table No. 11 in the Appendix shows the number of plans and estimates and their amount received from Local and Municipal Boards during the year. In this list 28 Municipalities, 10 District Boards, 69 Taluk Boards have no place.

124. The chief works proposed were the following :—

	RS.
i. Minor drainage works { The Municipality of Bellary	15,388
Do. Srirangam	945
Do. Tanjore	880
The District Boards	Nil.
The Taluk Board of Cocanada	570
Do. Tindivanam	915

	RS.
The Municipality of Bellary	32,676
Do. Nellore	718
Do. Tanjore	1,782
Do. Ootacamund	330
The District Board of Bellary	5,448
Do. North Arcot	5,922
Do. South Arcot	300
Do. Kistna	4,060
Do. Madura	372
Do. Nellore	250
Do. Nilgris	250
Do. Salem	5,365
The Taluk Board of Bellary	2,756
Do. Calicut	345
Do. Cocanada	950
Do. Chittoor	650
Do. Cuddalore	1,708
Do. Kumbakonam	1,690
Do. Madura	418
Do. Musiri	600
Do. Negapatam	3,580
Do. Pollachi	1,000
Do. Repalle	5,041
Do. Saidapet	290
Do. Tindivanam	9,590
Do. Tinnevely	1,350
Do. Trichinopoly	670
Do. Tirupatūr	250
Do. Vriddhachalam	2,727
The Municipality of Anantapur	8,940
Do. Bellary	5,809
Do. Cocanada	1,315
Do. Mannargudi	2,750
Do. Trichinopoly	740
Do. Palghat	450
The District Board of North Arcot	10,060
Do. Godavari	5,560
The Taluk Boards	Nil.
The Municipality of Gudiyatam	4,170
The District Boards	Nil.
The Taluk Board of Trichinopoly	2,500
The Municipality of Bezvada	2,000
Do. Cocanada	642
Do. Dindigul	500
Do. Erode	340
Do. Guntūr	8,300
Do. Ongole	4,500
Do. Palghat	13,500
Do. Salem	365
Do. Tanjore	849
Do. Tirupati	800
Do. Trichinopoly	1,000
Do. Conjeevaram	300
The District Board of Coimbatore	14,100
The Taluk Boards	Nil.
The Municipality of Negapatam	620
Do. Nellore	200
Do. Palni	1,748
Do. Salem	547
Do. Vizagapatam	2,450
The District Boards	Nil.
The Taluk Boards	Nil.
The Municipality of Bellary	1,850
Do. Chidambaram	1,465
Do. Coonoor	320
Do. Ellore	375
Do. Guntūr	380
Do. Salem	3,585
Do. Tirupatūr	467

vii. Latrines—cont.	{	The Municipality of Vaniyambadi	Rs. 467
		Do. Ootacamund	270
		The District Board of Bellary	900
		Do. Nilgiris	700
viii. Cholera shed	{	The Taluk Boards	Nil.
		The Municipality of Chidambaram	1,170
ix. Rubbish cart-stand.	{	Do. Tuticorin	600
		Do. Conjeeveram	701
x. Improvement of village-site.	{	The Taluk Board of Tirupatūr	640
xi. Extending Madanapalle town.	{	The District Board of Cuddapah.	Nil.
xii. Extirpating Lantana in Gúdalur.	{	Do. Nilgiris	500
xiii. Removing prickly-pear.	{	The Municipality of Bellary	16,000

125. The following new plans were furnished either with the Sanitary Board's Proceedings or separately:—

Names of Municipalities and Boards.	Hospitals.	Dispensaries.	Markets.	Slaughter-houses.	Latrines.	Miscellaneous.	Names of Municipalities and Boards.	Hospitals.	Dispensaries.	Markets.	Slaughter-houses.	Latrines.	Miscellaneous.
<i>Municipalities.</i>							<i>Taluk Boards.</i>						
Anantapur	1						Cocanada						1
Bellary							Negapatam						1
Berhampore							Tindivanam						1
Bozvéda	1	1					Wynaad					3	
Chidambaram													
Cocanada	1						<i>District Boards.</i>						
Cuddapah							Bellary						1
Madura			1				Godavari	1					
Ongole			1				North Arcot						1
Palni				1									
Pálghat			1										
Srirangam													
Vizagapatam				1									

126. The Sanitary Board is sometimes called to account for proposing alterations and improvements in designs that make the buildings more expensive than anticipated and have been informed that Local bodies have to cut the coat according to their cloth.

127. Economy is no doubt a very necessary factor in all administration, and the Board has always kept in view the necessity of not enhancing the cost of proposals submitted and has indeed effected many reductions during the year. At the same time there are certain principles from which the Sanitary Board cannot well depart, and it is to be remembered that if a properly-constructed building cannot on account of cost be put up at once, it is much better to wait for a year or two and obtain further funds, and meantime to get along as well as possible with what is in existence instead of putting up something that may pass muster for a time, but which for want of funds is not what it should be.

128. The scheme for the improvement of the river Cooum is still in abeyance, as the report of Mr. Cousins regarding it and schemes for the improvement of the water-supply and drainage of Madrás had not been received during the year.

129. Certain proposals were made during the year to Government in reference to the future maintenance of the water-supply and drainage works under execution. These proposals were generally accepted—vide G.O., dated 7th November 1892, No. 1825 M. One proposal accepted, need not be carried out until late in next year, viz., the appointment of a qualified Mechanical Engineer, who, attached to this department, will constantly be inspecting the machinery of the various works, &c., and see that it is kept in order. The fact that no Municipality except Ootacamund has an Engineer renders it necessary that very frequent inspections should be made

of all new works to see that they are kept in order and that the staff is efficient. Municipalities will no doubt welcome this aid, because they will be otherwise unable to maintain the works and they cannot individually afford an Engineer.

130. Though Government has, in all cases, given at least a moiety of the cost of each work and lent funds for the balance for a period of 30 years, the amount required to pay off principal and interest, being 5.96 per cent., yet many Municipalities still find it difficult to face more than the ordinary expenditure necessary to pay for works of maintenance and conservancy, medical charges and hospitals and dispensaries and education. The Legislature has not as yet dealt with the existing District Municipalities Act, and even though the sources of income placed at the disposal of the Municipalities be largely increased, it is doubtful if many towns will even then find themselves in a position to deal in a complete manner with their drainage or water-supply. In fact the financial difficulty is almost the only real difficulty of the sanitarian in India. The difference of habit from European races can be met and provided for, prejudices against a proper drainage or water-supply have almost disappeared, but the financial difficulty only grows stronger. Some of the Municipalities during the year have been able to appreciate what a falling rupee means, and they have found that when water or drainage works have to be executed, they cost a good deal more to the tax-payer than they might have done had exchange not been so low. On the other hand the fall in the cost of freight has to some extent lessened the loss sustained by the fall of silver, but should the silver still continue to fall and the cost of freight begin to rise, the execution of sanitary works in India, and especially water-works will receive, it is feared, a considerable check. The future prospects are, therefore, not favorable, and the fall of silver as affecting or likely to affect the health of the people is one that cannot be disregarded.

131. The office work of the year was very much greater than that of the year before; Government was unable to sanction an increase of staff, and it was only by working extra hours that the work was overtaken; this my staff cheerfully did, and this year, as already recorded, six new schemes, aggregating to Rs. 24,18,472 with detailed plans and estimates, were sent to Government, while eight works, amounting to Rs. 14,61,485, were under execution and thirteen separate surveys and levels were made.

132. If amount of expenditure during the year on works under construction be taken and compared with the staff on construction, the cost of the staff bears a proportion of 5.8, while if a usual charge of 2½ per cent. be taken on 24 lakhs for the preparation of designs, the amount would be Rs. 60,000, but the in-door staff including the Assistant Sanitary Engineer cost only Rs. 36,000 and the designs are but a portion of the work of the office. These charges compare very favorably with what Government adopt as a fair establishment charge.

133. In conclusion, the Sanitary Engineer would mention the name of the Assistant Sanitary Engineer to Government, Mr. Hormusji Nowroji, B.C.E., to whom much of the credit is due for the large amount of work turned out.

J. A. JONES, MEM. INST. C.E., F.R.S.E.,
Sanitary Engineer to Government.

OFFICE OF SANITARY ENGINEER TO GOVT.,
Fort St. George, January 1893.

TABLE

Statement showing progress made in respect of Water-supply

District.	Serial number of Municipality.	Town.	Date of inspection of town.	Date of preliminary report-- (1) Water-supply. (2) Drainage.	Whether Council has sanctioned funds for survey and levels.	Water-	
						Under survey or not.	Estimate under preparation or not.
1. Anantapur	1	Anantapur	21 and 22-9-92—S.E.	(1) 26-9-92	...	...	...
2. Bellary	2	Adoni	1890	(1) 9-8-90	...	...	Prepared.
	3	Bellary	1891	(1) 15-10-90	Yes	Completed	Prepared.
3. Chingleput	4	Conjeeveram	1891	(1) 19-12-90	Yes	Completed	Under preparation.
4. Coimbatore	5	Coimbatore	1891	(1) and (2) 21-11-90.	Yes	Completed	Prepared.
	6	Erode	1891	...	Yes	No	No
	7	Karur	1891	...	Yes	No	No
5. Cuddapah	8	Cuddapah	26 to 29-5-92; 25 to 28-8-92; 26 and 27-9-92; and 18 to 21-10-92—S.E. 5 to 7-3-92; 4-7-92; 21 to 25-7-92; 24 to 28-10-92—A.S.E.	(1) 3-9-90 and (2) 17-9-91.	Yes	Completed	Completed
6. Ganjam	9	Berhampore	1891	(1) and (2) 20-2-91.	...	Completed	Prepared, by Executive Engineer
	10	Chicacole	26-2-92—S.E.	(1) and (2) 2-3-92.	Yes	...	No
	11	Parlakimedi	...	...	...	...	...
7. Godavari	12	Cocanada	5 to 7-3-92—S.E.	(1) and (2) 31-1-91, (1) 2-2-91.	Yes	Completed	Prepared.
	13	Ellore	27 and 28-6-92—A.S.E.	(1) and (2) 7-2-91.	Yes	No	No
	14	Rajahmundry	2-3-92—S.E.	(1) 9-2-91	Yes	Completed	...
8. Kistna	15	Bezavada	1891	...	Yes	...	...
	16	Guntur	1891	(1) and (2) 15-2-91.	Yes	Yes, by Local Fund Engineer	...
	17	Masulipatam	1891	(1) 25-2-91	...	...	...
9. Karnool	18	Karnool	24 and 25-7-92—S.E. 16 to 23-5-92—A.S.E.	(1) 10-4-91	...	Completed by P.W.D.	Prepared.
10. Madura	19	Dindigul	4 to 5-8-92; 5-10-92 and 10-11-92—S.E.	(1) 15-9-90	...	Completed	Prepared.
	20	Madura	15 to 19-6-92; 6 to 7-8-92; 6 and 7-10-92; and 7 to 10-11-92—S.E.	(1) 28-4-90	...	Completed	Prepared.
	21	Palni	1891	(1) and (2) 27-10-91	Yes	Completed	...
11. Malabar	22	Periyakulam	1891	(1) and (2) 23-10-91	...	...	...
	23	Calicut	1891	(1) and (2) 2-8-91.	Yes	Yes	...
	24	Cannanore	1891	(1) and (2) 30-7-91.	...	...	...
	25	Cochin	1891	(1) and (2) 3-9-91.	...	...	...
	26	Palghat	1891	(1) and (2) 6-8-91.	...	...	...
12. Nellore	27	Tellicherry	1891	No special reports sent.	...	...	...
	28	Nellore	21 to 23-10-92—A.S.E.	...	Yes	Completed	...
	29	Ongole	1891	(1) 7-4-91	...	Completed	Prepared.

No. 1.

and Drainage of District Municipalities during 1892.

supply.		Drainage.			Amount of estimate sent in or anticipated cost.	Remarks.
Date on which scheme was forwarded.	Amount of estimate sent in or anticipated cost.	Under survey or not.	Estimate under preparation or not.	Date on which scheme was forwarded.		
...	Rs.	...	...	...	Rs.	Water suspicious on chemical examination. Government ordered to drop preparation of a scheme. Work is likely to be executed in 1893-94.
15-10-90	1,53,742	...	...	...	...	
14-9-92	9,06,642	...	...	...	...	Scheme under preparation.
...	Approximate 2,00,000	...	...	...	...	* Reduced estimate.
1-10-92	4,01,000	...	...	...	...	
...	* 3,72,000	Completed.	...	...	...	
...	...	Completed.	...	...	...	Water-supply works in progress.
9-9-91	19,385	Completed.	...	...	...	
...	...	...	...	...	...	† Inclusive of Rs. 23,430 for stoneware pipes for distribution purposes.
...	† 33,480	...	...	...	...	
...	...	...	...	...	...	† Reduced estimate.
7-11-92	4,36,830	...	...	...	...	
...	† 3,89,000	...	...	...	...	
...	...	Completed.	...	...	...	A scheme for water-supply will be forwarded in 1893.
...	...	Completed.	...	...	...	
...	...	Completed (By L.F. Engineer.	...	...	...	It is proposed to try a deep boring after the boring at Cochin is completed.
6-12-92	1,41,000	...	...	...	...	
12-12-90	71,700	...	...	...	...	Scheme sanctioned. Trial well in progress.
11-7-91	3,91,000	...	...	...	...	Works in progress.
...	...	Completed.	...	...	...	
...	...	Yes	...	...	...	
...	...	...	...	...	...	A deep boring will be tried in 1893.
...	...	...	...	...	...	
...	...	Completed.	...	...	...	
22-4-92	1,20,000 49,700	...	...	...	...	

TABLE

Statement showing progress made in respect of Water-supply and

District.	Serial number of Municipality.	Town.	Date of inspection of town.	Date of preliminary report— (1) Water-supply. (2) Drainage.	Whether Council has sanctioned funds for survey and levels.	Water-	
						Under survey or not.	Estimate under preparation or not.
13. Nilgiris	30	Coomoor	25 to 27-1-92; 22 to 30-4-92; 14 to 18-7-92; & 11 to 13-12-92—S.E.	.....	Yes	Completed	Prepared.
	31	Ootacamund	17 to 27-8-92—A.S.E. 28 to 31-1-92; 1 to 10-5-92; 6 to 13-7-92; & 14 to 18-12-92—S.E. 23-8-92 to 1-9-92—A.S.E.	(1) 3-9-90	...	Completed	Prepared.
14. North Arcot	32	Gudiyátam	.....	.....	...	...	...
	33	Tirupati	1890	(2) 1-7-90	Yes	...	...
	34	Vellore	5 to 7-6-92—S.E.	(1) & (2) 12-5-90...	Yes	Completed	Prepared.
	35	Wálanjápet	.....	.....	...	...	...
15. Salem	36	Salem	1891	(1) 30-9-91	Yes	Completed	...
	37	Tirupatúr	1891	(1) & (2) 26-12-91.	Yes	...	...
	38	Vániyambádi	1891	(1) & (2) 26-12-91.	Yes	...	...
16. South Arcot	39	Chidambaram	1890	.....	Yes	Yes, by P.W.D.	Yes
	40	Cuddalore	29-9-92—S.E.; 28 to 30-11-92—A.S.E.	(1) & (2) 17-11-91.	Yes	Yes	...
17. South Canara	41	Mangalore	1890	(1) & (2) 3-10-90...	...	...	...
	42	Kumbakónam	18 to 21-1-92; 23 to 27-6-92; 1 & 2-10-92—S.E. 1 to 4-12-92—A.S.E.	.....	Yes	...	...
18. Tanjore	43	Mannárgudi	.....	.....	...	...	...
	44	Máyavaram	.....	.....	...	...	...
	45	Negapatam	1890	16-12-90	...	...	...
19. Tinnevely	46	Tanjore	9 & 10-10-92 & 14 to 18-11-92—S.E.	(1) 2-6-90	Yes	Completed	Prepared.
	47	Palamcottah	1891	(1) 25-11-91	...	...	...
	48	Tinnevely	1891	(1) 25-11-91	Yes	Completed	...
19. Tinnevely	49	Tuticoria	8 to 12-8-92—S.E.	(1) 30-11-91	Yes	Completed	...
20. Trichinopoly	50	Srirangam	1890	.....	...	...	...
	51	Trichinopoly	20 to 22-6-92; 3 and 4-10-92; 4 to 6 and 11 to 13-11-92—S.E.	(1) 21-4-90	...	Completed	Prepared.
21. Vizagapatam	52	Anakápallo	.....	.....	Yes	...	...
	53	Bimlipatam	.....	.....	...	...	...
	54	Vizagapatam	20 to 22-2-92—S.E.	(1) & (2) 30-1-91.	Yes	Completed	...
	55	Vizianagram	25-2-92—S.E.	.....	...	...	...

No. 1—continued.

Drainage of District Municipalities during 1892—continued.

supply.		Drainage.				Remarks.
Date on which scheme was forwarded.	Amount of estimate sent in or anticipated cost.	Under survey or not.	Estimate under preparation or not.	Date on which scheme was forwarded.	Amount of estimate sent in or anticipated cost.	
25-3-91	RS. 80,000	...	...	9-2-91	RS. 48,000	Drainage almost completed.
12-12-90	43,000	...	...	...	35,000	Completed.
...	...	...	...	...	...	...
...	...	Completed.	Prepared.	7-9-91	96,000	Funds will be provided in 1893-94 for the execution of the drainage scheme.
9-12-91	3,13,000	...	...	...	2,63,000	Council was asked to finance the scheme.
...	...	...	...	...	...	...
30-9-91	9,98,000	Completed.	...	1890	...	...
...	...	...	...	...	...	...
...	...	...	...	...	...	...
...	...	...	...	...	...	...
...	...	Yes	...	...	...	Schemes for water-supply and drainage will be presented in 1893.
...	...	Completed.	Prepared.	...	1,10,000	Works in progress.
...	...	...	...	...	...	...
...	...	...	...	...	...	...
...	...	Completed.	Prepared.	8-2-92	4,13,000	Works in progress.
2-3-91	3,77,200	...	...	...	...	...
...	...	Completed.	...	...	...	A scheme for water-supply will be presented in 1893.
...	...	...	...	...	...	Works in progress.
8-4-91	4,26,600	...	...	...	...	...
...	...	...	...	...	...	...
...	...	Completed.	...	...	...	A scheme for water-supply will be presented in 1893.
...	...	...	...	...	...	...

TABLE No. 2.

COONNOOR DRAINAGE WORKS.

Statement of work done during the year 1892.

1 No.	2 Main-head.	3 Work done previously.		4 Work done in 1892.		5 Work to be done.		6 Total.		7 Remarks.
		Percent- age.	Value.	Percent- age.	Value.	Percent- age.	Value.	Percent- age.	Value.	
			RS.		RS.		RS.		RS.	
1	Main bazaar drains ...	12	2,255	85	15,597	3	500	100	18,352	Saving ... 3,001
2	Mission hill drains ...	...	...	100	5,761	...	...	100	5,761	Do. ... 277
3	Main bazaar sewer ...	36	1,537	64	2,745	...	...	100	4,282	Do. ... 263
4	Main branch sewer ...	...	...	100	1,026	...	...	100	1,026	Do. ... 388
5	Mission hill sewer ...	15	701	85	4,123	...	...	100	4,824	Excess ... 1,525
6	Outfall pipe ...	...	...	100	2,647	...	...	100	2,647	Saving ... 49
7	Widening lanes and re- vetting slopes.	4	100	72	1,717	24	600	100	2,417	Do. ... 833
8	Contingencies ...	83	2,104	10	257	7	170	100	2,531	Do. ... 2,874
	Total ...	16	6,697	81	33,873	3	1,270	100	41,840	Saving ... 6,160*

Materials at site.										RS.
1	Departmentally collected and paid for	...	...	...	...	...	...	...	...	...
2	Departmentally collected and unpaid for	...	...	...	...	...	...	...	...	...
3	Supplied by contractors and paid for	...	...	...	...	...	...	...	...	...
4	Supplied by contractors and unpaid for	...	...	...	...	...	...	...	...	...
	Total value of the materials collected for the work (items 1, 2, 3 and 4) and re- maining unused on 31st December 1892.	...	...	...	...	...	...	...	...	...
	Total value of work done up to 31st December 1892 (as per table above column 3 & 4 "Work done").	...	...	...	...	...	...	...	...	40,570
(a)	Grand Total	...	...	...	...	...	...	...	...	40,570
(b)	Total estimated cost	...	...	...	...	...	...	...	...	48,000
	† Percentage of work done (inclusive of materials at site, viz., items 1, 2, 3 and 4) ...	99.64	...	...	...	...	...	...	...	...

* Out of the probable saving of Rs. 6,160, about Rs. 3,000 met from Provincial Revenues on account of Supervisor's pay have to be refunded.

† As (a) to (b), i.e., percentage (a) bears to (b).

TABLE No. 3.

WATER WORKS, CUDDAPAH.

Statement of work done during the year 1892.

1 No.	2 Main head.	3 Work done.		4 Work to be done.		5 Total.		6 Remarks.
		Percent- age.	Value.	Percent- age.	Value.	Percent- age.	Value.	
			RS.		RS.		RS.	
1	Filtration gallery ...	14	422	86	2,485	100	2,907	Probable saving 365
2	Engine and boiler house ...	100	1,810	...	...	100	1,810	Do. ... 163
3	Cast iron pipes ...	100	3,007	...	...	100	3,007	Do. ... 1,205
4	Engines and boilers, &c. ...	100	6,450	...	...	100	6,450	Excess ... 50
5	Baling ...	41	412	59	588	100	1,000	...
6	Contingencies ...	24	537	76	1,600	100	2,137	Saving ... 391
	Total ...	73	12,638	27	4,673	100	17,311	Saving ... 2,074

Materials at site.										RS.	RS.
1	Departmentally collected and paid for	...	...	...	...	...	...	...	...	1,241	...
2	Departmentally collected and unpaid for 32' of 12" and 1,690' of 6" stoneware pipes.	...	...	...	...	...	...	...	...	...	...
3	Supplied by contractors and paid for	...	...	...	...	...	...	...	...	...	...
4	Supplied by contractors and unpaid for	...	...	...	...	...	...	...	...	...	1,241
	Total value of material collected for work (items 1, 2, 3 and 4) and remaining unused on 31st December 1892.	...	...	...	...	...	...	...	...	...	12,638
	Total value of work done up to 31st December 1892 (as per table above column 3, "Work done").	...	...	...	...	...	...	...	...	...	13,879
(a)	Grand Total	...	...	...	...	...	...	...	...	...	19,385
(b)	Total estimated cost	...	...	...	...	...	...	...	...	80	...
	† Percentage of work done (inclusive of materials at site, viz., items 1, 2, 3 and 4).	...	...	...	...	...	...	...	...	...	...

* Includes pay of the Supervisor met from Provincial Revenues.
† As (a) to (b), i.e., percentage (a) bears to (b).

TABLE No. 4.

KUMBAKONAM DRAINAGE WORKS.

Statement of work done during the year 1892.

Statement of the work done for 1892.										
2		3		4		5		6		7
No.	Main-head.	Work done previously.		Work done in 1892.		Work to be done.		Total.		Remarks.
		Percent- age.	Value.	Percent- age.	Value.	Percent- age.	Value.	Percent- age.	Value.	
			RS.		RS.		RS.		RS.	
1	Main outfall channel.	6.93	2,323	52.38	17,567	40.69	13,644	100	33,534	
2	Branch channel.	2.30	391	55.34	9,374	42.36	7,175	100	16,940	
3	Street drainage ...	...	...	...	...	100	15,792	100	15,792	
4	Lands ...	100	29,984	...	...	...	...	100	* 29,984	
5	Contingencies ...	59.66	† 8,204	8.45	† 1,162	31.89	4,384	100	13,750	
	Total ...	37.18	40,902	25.55	28,103	37.27	40,995	100	1,10,000	

Materials at site.										RS.
1	Departmentally collected and paid for	...	...	...	...	...	...	...	...	38
2	Departmentally collected and unpaid for	...	...	...	...	...	...	...	...	...
3	Supplied by contractors and paid for	...	...	...	...	...	...	...	...	...
4	Supplied by contractors and unpaid for	...	...	...	...	...	...	...	...	...
	Total value of material collected for work (items 1, 2, 3 and 4) and remaining unused on 31st December 1892.	...	...	...	...	...	...	...	...	38
	Total value of work done up to 31st December 1892 (as per table above column 3 and 4).	...	...	...	...	...	...	...	...	69,005
(a)	Grand Total	...	...	...	...	...	...	...	...	69,043
(b)	Total estimated cost	...	...	...	...	...	...	...	...	1,10,000
	† Percentage of work done (inclusive of materials at site, viz., items 1, 2, 3 and 4).	...	...	...	...	...	...	...	62.73	

* Amount of estimate.

† These do not include Rs. 4,434, pay of the Supervisor, met from Provincial Revenues.

‡ As (a) to (b), i.e., percentage (a) bears to (b).

TABLE No. 5.

WATER WORKS, MADURA.

Statement of work done during the year 1892.

1	2	3		4		5		6
No.	Main-head.	Work done.		Work to be done.		Total.		Remarks.
		Percent- age.	Value.	Percent- age.	Value.	Percent- age.	Value.	
			Rs.		Rs.		Rs.	
1	Filter bed		...	100	35,952	100	35,952	
2	Catch pit and valve house		...	100	8,464	100	8,464	
3	Engine and boiler house	13	3,918	87	26,666	100	30,584	
4	Engine driver's quarters		...	100	6,000	100	6,000	
5	Engines, pumps, &c.		...	100	62,000	100	62,000	
6	Supply and delivery of pipes	86	1,46,109	14	22,891	100	1,69,000	
7	Laying and jointing... ..	11	3,000	89	25,000	100	28,000	
8	Contingencies	3	* 1,541	97	49,459	100	51,000	
	Total	39	1,54,568	61	2,36,432	100	3,91,000	

Materials at site.										Tiles. Filter Bed.	RS.
1	Departmentally collected and paid for	...	...	...	...	...	...	...	...	10,864	7,639
2	Departmentally collected and unpaid for	...	...	...	...	...	...	...	...	488	343
3	Supplied by contractors and paid for	...	...	...	...	...	...	...	...	...	...
4	Supplied by contractors and unpaid for	...	...	...	...	...	...	...	...	...	4,200
	Total value of materials collected for the work (items 1, 2, 3 and 4) and remaining unused on 31st December 1892.	...	...	...	...	...	...	...	...	...	12,182
	Total value of work done up to 31st December 1892 (as per table above column 3 "Work done").	...	...	...	...	...	...	...	...	...	1,54,568
(a)	Grand Total	...	...	...	...	...	...	...	...	...	1,66,750
(b)	Total estimated cost	...	...	...	...	...	...	...	...	...	3,91,000
	† Percentage of work done (inclusive of materials at site, viz., items 1, 2, 3 and 4)	...	...	...	...	...	...	...	43	...	

* This does not include Rs. 4,287, pay of the Assistant Engineer and his staff, paid from Provincial Revenues.

† As (a) to (b), i.e., percentage (a) bears to (b).

TABLE No. 6.

OOTACAMUND SOUTH DODABETTA WATER-SUPPLY SCHEME.

Statement of work done during the year 1892.

1	2	3		4		5		6
No.	Main-head.	Work done.		Work to be done.		Total.		Remarks.
		Percent- age.	Value.	Percent- age.	Value.	Percent- age.	Value.	
			RS.		RS.		RS.	
1	Supply and delivery of pipes and special castings.	98	27,561	...	...	98	27,561	
2	Lead jointing and laying pipes including earth-work.	85	4,065	28	1,236	113	5,301	
3	Sluice, air, scour, equilibrium valves and stand-pipes.	159	3,396	93	2,000	252	5,396	
4	Repairs to lower and upper reservoir bye-wash.	...	...	100	350	100	350	
5	Valve pit arrangement at upper and lower reservoir delivery pipes.	...	...	100	1,000	100	1,000	
6	Fencing barbed wire round margin of reservoir.	...	...	100	500	100	500	
7	Compensation	...	9	...	700	...	709	
8	Contingencies	39	1,864	...	319	...	2,183	
	Total ...	...	36,895	...	6,105	...	43,000	

Materials at site.		RS.
1	Departmentally collected and paid for ...	...
2	Departmentally collected and unpaid for ...	...
3	Supplied by contractors and paid for ...	...
4	Supplied by contractors and unpaid for ...	...
	Total value of material collected for the work (items 1, 2, 3 and 4) and remaining unused on 31st December 1892. Cast iron pipes 879 R. ft.	920
	Total value of work done up to 31st December 1892 (as per table above column 3, "Work done").	36,895
(a)	Grand Total ...	37,815
(b)	Total estimated cost ...	43,000
	* Percentage of work done (inclusive of materials at site, viz., items 1, 2, 3 and 4).	100

* As (a) to (b), i.e., percentage (a) bears to (b).

TABLE No. 7.

MAIN SEWER REALIGNMENT SCHEME.

Statement of work done during the year 1892.

Statement of Work done.

1	2	3		4		5		6
No.	Main-head.	Work done.		Work to be done.		Total.		Remarks.
		Percent- age.	Value.	Percent- age.	Value.	Percent- age.	Value.	
			RS.		RS.		RS.	
1	Realignment of intercepting sewer and sub-soil piping.	90	2,815	...	...	90	2,815	
2	Silt traps and manholes ...	66	2,546	...	...	66	2,546	
3	Diversion of storm surface drainage.	133	967	...	...	133	967	
4	Relaying surface sewers ...	188	766	...	...	188	766	
5	Diversion of main lake channel and reconstruction of Hobart Park bridge and approaches thereto.	107	2,568	39	938	146	3,506	
6	New ovoid surface sewers...	950	247	...	...	950	247	
7	Compensation ...	...	...	...	...	...	...	
8	Contingencies ...	76	453	...	...	76	453	
	Total ...	...	10,362	...	938	...	11,300	

Materials at site.		RS.
1	Departmentally collected and paid for ...	...
2	Departmentally collected and unpaid for ...	...
3	Supplied by contractors and paid for ...	...
4	Supplied by contractors and unpaid for ...	...
	Total value of material collected for the work (items 1, 2, 3 & 4) and remaining unused on 31st December 1892.	10,362
	Total value of work done up to 31st December 1892 (as per table above column 3, "Work done").	10,362
(a)	Grand Total ...	11,300
(b)	Total estimated cost ...	100
	* Percentage of work done (inclusive of materials at site, viz., items 1, 2, 3 & 4).	...

* As (a) to (b), i.e., percentage (a) bears to (b).

TABLE No. 8.

KANDAL (OOTACAMUND) DRAINAGE SCHEME.

Statement of work done during the year 1892.

1 No.	2 Main-head.	3 Work done.		4 Work to be done.		5 Total.		6 Remarks.
		Percent- age.	Value.	Percent- age.	Value.	Percent- age.	Value.	
			Rs.		Rs.		Rs.	
1	Oval surface sewers in concrete, 4".	86	1,956	...	...	86	1,956	
	Do. do. 6"	86	9,830	...	...	86	9,830	
	Do. do. 9"	258	2,336	...	...	258	2,336	
	Do. do. 12"	53	1,525	...	...	53	1,525	
2	Sub-soil sewers stoneware pipes, 6".	93	2,104	...	...	93	2,104	
	Do. do. 9"	98	3,633	...	...	98	3,633	
	Do. do. 12"	98	1,271	...	...	98	1,271	
3	Silt traps with manholes	150	2,260	...	...	150	2,260	
4	Gully pits	103	1,860	...	...	103	1,860	
5	Manholes	30	385	...	...	30	385	
6	Gravelling lanes	239	4,793	...	...	239	4,793	
7	Check channel	113	346	...	...	113	346	
8	Flushing surface sewers	370	1,110	...	...	370	1,110	
9	Sundries	48	1,386	...	...	48	1,386	
10	Compensation	3	25	...	...	3	25	
	Total	...	34,820	...	...	...	34,820	

Materials at site.		Rs.
1	Departmentally collected and paid for	...
2	Departmentally collected and unpaid for	...
3	Supplied by contractors and paid for	...
4	Supplied by contractors and unpaid for	...
	Total value of materials collected for the work (items 1, 2, 3 and 4) and remaining unused on 31st December 1892.	...
	Total value of work done up to 31st December 1892 (as per table above column 3, "Work done").	34,820
(a)	Grand Total	34,820
(b)	Total estimated cost	35,000
	* Percentage of work done (inclusive of materials at site, viz., items 1, 2, 3 and 4).	99

* As (a) to (b), i.e., percentage (a) bears to (b).

TABLE No. 9.

TANJORE WATER-SUPPLY SCHEME.

Statement of work done during the year 1892.

1 No.	2 Main-head.	3 Work done.		4 Work to be done.		5 Total.		6 Remarks.
		Percent- age.	Value.	Percent- age.	Value.	Percent- age.	Value.	
			Rs.		Rs.		Rs.	
1	Filter bed	0.2	53	99.8	25,072	100	25,125	
2	Catch pit and valve house...	0.6	48	99.4	7,327	100	7,375	
3	Engine and boiler house including store shed and land, &c.	0.4	111	99.6	27,389	100	27,500	
4	Engine, pumps, &c.	...	...	100	70,000	100	70,000	
5	Engine driver's quarters	...	...	100	6,000	100	6,000	
6	Supply and delivery of pipes	...	...	100	1,70,000	100	1,70,000	
7	Laying and jointing pipes	...	...	100	22,000	100	22,000	
8	Contingencies	2.7	* 1,355	97.3	47,845	100	49,200	
	Total	0.4	1,567	99.6	3,75,633	100	3,77,200	

Materials at site.		Rs.
1	Departmentally collected and paid for	...
2	Departmentally collected and unpaid for	...
	Bricks	29,750
	Kunker	3 parts.
3	Supplied by contractors and paid for	...
	Cement, Burham Portland	59½ barrels.
	Mango planks	385 sq. feet
	Do. wood (cuttings)	41 cub. yards
4	Supplied by contractors and unpaid for	...
	Bricks	2,000
	Total value of material collected for work and remaining unused on 31st December 1892.	672
	Total value of work done up to 31st December 1892 (as per table above column 3, "Work done").	1,567
(a)	Grand Total	2,239
(b)	Total estimated cost	† 3,77,200
	† Percentage of work done (inclusive of materials at site, viz., items 1, 2, 3 and 4).	0.6

* This does not include Rs. 1,188, pay of the Assistant Engineer and his staff met from Provincial Revenues.

† As per revised estimate for engine and boiler house, &c.

‡ As (a) to (b) i.e., percentage (a) bears to (b).

TABLE No. 10.

WATER WORKS, TRICHINOPOLY.

Statement of work done during the year 1892.

1	2	3		4		5		6
No.	Main-head.	Work done.		Work to be done.		Total.		Remarks.
		Percent- age.	Value.	Percent- age.	Value.	Percent- age.	Value.	
			RS.		RS.		RS.	
1	Infiltration works	0.24	87	99.76	35,613	100	35,700	
2	Engine and boiler house (main and subsidiary) including store shed.	7.59	2,165	92.41	26,335	100	28,500	
3	Engine driver's quarters	...	...	100	6,000	100	6,000	
4	Engines and boilers (main and subsidiary).	...	...	100	94,000	100	94,000	
5	Pipes, valves, bends, &c.	...	...	100	1,95,000	100	1,95,000	
6	Laying and jointing pipes, &c. ...	0.20	41	99.80	19,959	100	20,000	
7	Contingencies at 12½ per cent. ...	1.81	* 857	98.19	46,543	100	47,400	
8	Pipes, &c., for jail	...	...	100	7,030	100	7,030	
9	Laying and jointing pipes for jail.	...	...	100	986	100	986	
10	Contingencies for jail	...	...	100	1,002	100	1,002	
	Total ...	0.72	3,150	99.28	4,30,468	100	4,35,618	

Materials at site.								RS.
1	Departmentally collected and paid for ...	...	...	...	...	...	...	607
2	Departmentally collected and unpaid for ...	...	...	...	...	...	...	1,159
3	Supplied by contractor and paid for ...	...	...	...	...	...	...	...
4	Supplied by contractor and unpaid for ...	...	...	...	...	...	...	20,421
	Total value of materials collected for the work (items 1, 2, 3 and 4) and remaining unused on 31st December 1892.	...	...	...	...	...	...	22,187
	Total value of work done up to 31st December 1892 (as per table above column 3, "Work done").	...	...	...	...	...	...	3,150
(a)	Grand Total ...	...	...	...	...	...	...	25,337
(b)	Total estimated cost ...	...	...	...	...	...	...	4,35,618
	† Percentage of work done (inclusive of materials at site, viz., items 1, 2, 3 and 4) ...	...	...	...	...	...	5.81	...

* This does not include Rs. 1,352, pay of the Sub-Engineer and staff met from Provincial Revenues.
† As (a) to (b), i.e., percentage (a) bears to (b).

TABLE No. 11.

Statement giving particulars of works of a Sanitary Nature referred to the Sanitary Board for scrutiny from Municipalities.

TABLE

Statement giving particulars of works of a Sanitary Nature referred

Municipalities.	Description of works.	Hospitals and Dispensaries.	Slaughter-houses.	Latrines.	Markets.	Miscellaneous.
Anantapur	Constructing a Municipal Hospital.	1	...	...	...	...
	Collecting metal for drainage works.	...	...	...	...	...
	Improving nulla in front of Municipal office.	...	...	...	...	...
	Improving Katagoodam tank.	...	...	...	...	...
	Improving and cleaning Wodderbundah tank.	...	...	...	...	...
	Excavating four new wells.	...	...	...	...	...
	Removing prickly-pear.	...	...	...	...	...
	Cleaning and deepening wells.	...	...	...	...	...
Bellary	Constructing Chinnasawmy's well.	...	...	...	...	...
	Constructing Havildar's well.	...	...	...	...	...
	Removing silt from Wodderbundah tank in Brucépettah.	...	...	...	...	...
	Converting Bumrappah's well into a draw well.	...	...	...	...	1
	Constructing a Lying-in Hospital.	...	...	...	...	...
	Constructing a latrine.	...	...	...	...	...
Bezvada	Constructing market sheds.	...	...	...	...	...
	Constructing a latrine.	...	...	...	...	...
	Do. a cholera shed.	...	...	...	...	...
	Do. a latrine.	...	...	...	...	...
Chidambaram	Do. a cholera shed.	...	...	...	...	1
	Do. a latrine with six seats.	...	...	...	...	...
	Do. a cholera shed.	...	...	...	...	...
	Do. a syphilitic ward.	1	...	...	...	...
Cocanada	Repairing market shed at Cocanada.	...	...	...	...	...
	Repairing market shed at Jagannakapur.	...	...	...	...	...
Conjeeveram	Provision of cornice works to the rubbish cart-stand at a rate of Rs. 10-8-0 for roofing the above shed.	...	...	...	...	...
	Purchasing a house and land for widening the entrance to the Big Conjeeveram market.	...	...	...	...	...
Coonoor	Constructing a latrine with corrugated iron for sweeper's lines at Coonoor.	...	...	...	...	...
Dindigul	Constructing a tiled shed at the weekly market at Nagalnayakanputty.	...	...	...	...	...
Ellore	Constructing a latrine.	...	...	2	...	...
Erode	Constructing a shed in Rajah's market.	...	...	...	...	...
Gudiyatam	Constructing a Municipal dispensary.	...	...	...	...	...
Guntur	Constructing a market.	...	...	...	...	...
	Constructing a latrine to the market.	...	...	...	...	...
Mannargudi	Repairing the hospital buildings.	...	...	...	...	...

No. 11.

to the Sanitary Board for scrutiny from Municipalities.

No. of estimates received for scrutiny.	Amount.	No. of plans received for scrutiny.	Amount of revised estimate.	Description of new plans furnished.	No. and Date of Sanitary Board's Proceedings.	Purport of the Proceedings.
1	RS. 8,940	2	RS. ...	1 sketch	1753, 1-9-92 ... 2851, 12-12-92.	} Returns plans and estimates for revision.
1	15,388	...	...	...	827, 13-5-92	Assigns reasons for not approving the estimate.
1	2,000	...	...	...	Do.	Approved.
1	5,000	...	...	...	Do.	Approved.
1	8,000	...	...	...	Do.	Assigns reasons for not approving the estimate.
1	11,824	...	...	...	Do.	Approved.
1	16,000	...	...	...	Do.	Wants explanation for high rates.
1	4,500	...	...	...	Do.	Approved.
1	380	1	...	...	1893, 14-9-92	} Approved.
1	210	1	...	...	Do.	Approved.
1	242	...	...	...	1220, 30-6-92	Approved.
1	520	1	...	1 sketch	1988, 22-9-92	Draws the attention of Chairman to the remarks made by the Sanitary Board.
1	5,809	1	...	...	2247, 15-10-92.	Requires revised plan for approval.
1	1,850	1	...	...	2607, 28-11-92.	Requests the Chairman to state if the latrine or any portion of it has already been constructed.
1	2,000	1	...	...	2895, 19-12-92.	Approved with remarks.
1	900	1	...	...	1091, 13-6-92	Approved with remarks.
1	355	1	...	...	11, 5-1-92	Approved.
1	250	1	...	...	995, 31-5-92	Requests the Council to submit a new design.
1	390	1	...	1 sketch	1635, 22-8-92	Withholds sanction until a reply is sent to this proceeding.
1	315	1	...	...	1645, 22-8-92	Inform to modify the plan according to particulars given.
1	425	1	...	...	2403, 2-11-92	Suggests certain alterations to the plan.
1	1,315	1	...	1 type design of ward.	1394, 23-7-92	Recommends Sanitary Board's design.
1	415	...	...	...	1426, 26-7-92	} Approved.
1	227	...	...	...	Do.	Approved.
2	701	2	...	...	133, 15-1-92	Approved.
1	300	1	...	...	2721, 1-12-92	Assigns reasons for not approving the estimate.
1	320	1	...	...	1377, 21-7-92	Approved.
1	500	1	...	...	2040, 29-9-92	Approved.
1	375	1	750 & 650	2 latrines.	319, 17-2-92	Recommends Sanitary Board's design.
1	340	1	...	...	1765, 1-9-92	Approves the estimate in certain respects.
2	4,170	3	...	...	801, 9-5-92	Returns the plan to be altered and the estimate to be revised according to the remarks made by the Sanitary Board.
1	8,300	1	...	...	1375, 21-7-92	} Approved with remarks.
1	380	1	...	...	Do.	Approved.
1	2,750	1	...	...	1522, 10-8-92	Approved.
Total...	1,05,391					

TABLE

Statement giving particulars of works of a Sanitary Nature referred

Municipalities.	Description of works.	Hospitals and Dispensaries.	Slaughter-houses.	Latrines.	Markets.	Miscellaneous.
Negapatam	Repairing the slaughter-house at Negapatam.	...	...	...	...	...
	Repairing the slaughter-house at Nagore.	...	...	...	...	...
Nellore	Digging a well for the use of the slaughter-house.	...	...	...	...	...
	Constructing a road to slaughter-house.	...	...	...	...	...
	Constructing a reservoir	...	...	...	...	...
	Oiling the wood-work in new slaughter-house.	...	...	...	...	...
Ongole	Constructing a market	...	...	...	1	...
Ootacamund	Laying a 1" branch pipe a distance of 995 feet to lock end.	...	...	...	...	...
	Constructing a latrine at the cart-stand at Ootacamund.	...	...	...	...	...
Pálghat	Constructing a market	...	...	...	1	...
	Repairing the hospital and out-houses at Pálghat.	...	...	...	...	...
Palni	Repairing a slaughter-house	...	1	...	...	...
	Re-erecting female latrine in Ponnammappet on bucket system.	...	...	...	...	...
	Re-erecting female latrine near Shandypett at Shevapet.	...	...	...	...	...
Salem	Re-erecting female latrine in H. Division.	...	...	...	...	...
	Constructing a market at Ammapet.	...	...	...	...	...
	Constructing a sheep's slaughter-house at Ammapett.	...	...	...	...	...
Srirangam	Constructing three road tunnels.	...	...	...	...	1
	Repairing the drain at Police Ramasawmy Naick's Lane.	...	...	...	...	...
	Repairing drains in Silk Weavers' Street in the Municipality of Tanjore.	...	...	...	...	...
Tanjore	Reconstructing the southern wall of Harepandithar tank in Municipality of Tanjore.	...	...	...	...	...
	Repairing the half portion of the floor and the roof, &c., of the dry fish stalls in the market place.	...	...	...	...	...
	Erecting a tiled vegetable shed in the Victoria market.	...	...	...	...	...
Tirupati	Constructing stalls for sale of mutton.	...	...	...	...	...
Tirupatúr	Constructing a double iron latrine with 12 seats.	...	...	...	...	...
Trichinopoly	Repairing the buildings of Fort Municipal Hospital.	...	...	...	...	...
	Constructing two market sheds.	...	...	...	...	...
	Annual repairs of the Municipal Hospital.	...	...	...	...	...
Tuticorin	Constructing a cholera shed at Tuticorin.	...	...	...	...	1
Vániyambádi	Constructing double iron latrine of 12 seats.	...	...	...	...	...
Vizagapatam	Constructing a bullock slaughter-house.	...	1	...	...	...

No. 11—continued.

to the Sanitary Board for scrutiny from Municipalities—continued.

No. of estimates received for scrutiny.	Amount.	No. of plans received for scrutiny.	Amount of revised estimate.	Description of new plans furnished.	No. and Date of Sanitary Board's Proceedings.	Purport of the Proceedings.
1	RS. 1,05,391 410	...	RS. ...	...	2039, 29-3-92 ...	} Approved.
1	210	...	...	...	Do. ...	
1	130	...	...	...	1332, 16-7-92 ...	Approved.
1	170	...	...	...	Do. ...	States that this is not a work of a sanitary nature.
2	588	...	...	...	1437, 27-7-92 ...	Approved.
1	30	...	...	...	2514, 16-11-92.	Approved.
...	...	1	4,500	Market with 1 sketch.	271, 8-2-92 ...	Recommends Sanitary Board's design.
1	330	...	...	...	220, 1-2-92 ...	Approved with remarks.
1	270	1	...	...	2741, 3-12-92 ...	Approved.
...	...	1	13,500	Market ...	1378, 25-7-92 ...	Furnishes the Council with a plan of a market and a detailed estimate.
1	450	...	...	...	2852, 12-12-92.	Approved.
1	1,748	1	1,350	Slaughter house.	94, 11-1-92 ...	Recommends Sanitary Board's plans.
1	1,229	1	...	...	2172, 14-10-92.	} Approved with remarks.
1	1,134	1	...	...	Do. ...	
1	1,222	1	...	...	Do. ...	
1	365	1	...	...	Do. ...	
1	547	...	...	...	Do. ...	} Approved with remarks.
3	945	2	...	1 sketch ...	2404, 2-11-92 ...	
1	400	1	...	...	1204, 28-6-92 ...	
2	480	2	...	...	2538, 19-11-92...	
2	1,782	2	...	...	Do. ...	Approved.
1	384	1	...	...	2390, 1-11-92 ...	Approved.
1	477	1	...	...	Do. ...	States certain informations are not given.
1	465	1	...	...	2932, 22-12-92...	Communicates to the Council certain remarks.
1	800	1	...	...	1352, 19-7-92 ...	Approved with certain remarks.
1	467	...	...	...	1078, 11-6-92 ...	Approved with certain remarks.
1	340	...	...	...	39, 7-1-92 ...	Approved.
1	1,000	1	...	...	1110, 14-6-92 ...	Approved with certain remarks.
1	400	...	...	...	1766, 2-9-92 ...	Approved.
1	600	1	1 estimate without rates.	Plan of cholera shed.	2874, 15-12-92...	Requests to submit a revised estimate for approval.
1	467	...	...	...	1132, 17-6-92 ...	Approved with certain remarks.
1	2,450	1	2,300	Bullock slaughter-house.	363, 1-3-92 ...	Recommends Sanitary Board's design.
Total...	1,25,681					

TABLE

Statement giving particulars of works of a Sanitary Nature referred

Taluk Board.	Description of works.	Hospitals and Dispensaries.	Slaughter-houses.	Latrines.	Markets.	Miscellaneous.
Bellary	Constructing a tank at Sholapur.	...	...	...	...	...
Calicut	Constructing a well at Beypore...	...	...	...	...	...
Cocanada	Constructing a well at Marrivada.	...	...	...	...	...
	Constructing a drain in the market at Pittapur.	...	...	...	...	1
	Constructing a well at Bingarayapettah.	...	...	...	...	...
	Constructing a well in the market at Pittapur.	...	...	...	...	...
Chittur	Enlarging a well in Moram village.	...	...	...	...	...
	Repairing the well in the Rama Kuppam market.	...	...	...	...	...
	Repairing a drinking-water pond at Ayapettai.	...	...	...	...	...
	Repairing a drinking-water pond at Ulliripattah.	...	...	...	...	...
	Repairing a drinking-water pond at Thondamanatham.	...	...	...	...	...
Cuddalore	Repairing a drinking-water pond at Sedapolium.	...	...	...	...	...
	Repairing a drinking-water pond at Valecherepolium.	...	...	...	...	...
	Repairing a drinking-water pond at Kallan Kuppam.	...	...	...	...	...
	Repairing a drinking-water pond at Parvathipuram.	...	...	...	...	...
Kumbakonam	Constructing flight of steps to the tank at Poundrigapuram.	...	...	...	...	...
	Repairing tank at Uthamanathapuram.	...	...	...	...	...
	Repairing tank at Tirumalavasel.	...	...	...	...	...
	Repairing tank at Kivilangui.	...	...	...	...	...
Madura	Constructing a well in Vadevelkarai village.	...	...	...	...	...
Musiri	Repairing a well in Nadenpur village.	...	...	...	...	...
	Repairing a tank at Malayadepatty.	...	...	...	...	...
	Deepening and improving Etticudy tank.	...	...	...	...	1
	Deepening and improving Agraharam tank at Pattur.	...	...	...	...	...
	Deepening and improving Tiruvasal tank at Vadiyacherry.	...	...	...	...	...
Negapatam	Deepening the tank and constructing an outlet to Adam-bayore tank.	...	...	...	...	...
	Deepening the tank and constructing an inlet to Sennavore tank.	...	...	...	...	...
Pollachi	Repairing the Teppacolam at Tirupur, Palladam Taluk.	...	...	...	...	...
	Repairing tank at Intur.	...	...	...	...	...
	Repairing tank at Modukur.	...	...	...	...	...
	Constructing a brick well at Intur.	...	...	...	...	...
	Constructing a fresh-water well in the village of Adipudi, Bapatla taluk, Kistna district.	...	...	...	...	...
Répallo	Constructing a drinking-water well at Mannava.	...	...	...	...	...
	Repairing tank at Madaverapalem.	...	...	...	...	...
	Repairing tank at Vangipuram.	...	...	...	...	...
	Repairing tank at Daggupadu.	...	...	...	...	...
	Strengthening a portion of the east bund and providing a new bund on the southern side to the Répallo taluk.	...	...	...	...	...

No. 11—continued.

to the Sanitary Board for scrutiny from Taluk Boards.

No. of estimates received for scrutiny.	Amount.	No. of plans received for scrutiny.	Amount of revised estimate.	Description of new plans furnished.	No. and Date of Sanitary Board's Proceedings.	Purport of the Proceedings.
1	RS. 2,756	1	RS. ...	...	630, 5-4-92	Approved with certain remarks.
1	345	1	...	...	1473, 1-8-92	Approved with certain remarks.
1	270	1	...	...	24, 6-1-92	Approved.
1	570	4	...	1 sketch.	43, 7-1-92	Recommends a semi-ovalshaped drain.
1	400	1	...	...	430, 15-3-92	Approved with certain remarks.
1	280	5	...	...	455, 17-3-92	Approved with certain remarks.
1	270	1	...	...	746, 22-4-92	States that for certain reasons the estimate cannot be checked.
2	380	1	...	...	1877, 12-9-92	Approved.
1	222	1	...	...	6, 5-1-92	Disapproved for reasons stated.
1	209	1	...	...	Do.	
1	300	1	...	...	Do.	
1	250	1	...	...	1134, 17-6-92	Approved.
1	225	1	...	...	Do.	
1	252	1	...	...	Do.	
1	250	1	...	...	Do.	Approved.
1	320	1	...	...	1135, 17-6-92	
1	620	1	...	...	Do.	
1	400	1	...	...	Do.	Approved.
1	350	1	...	...	Do.	
1	418	1	...	...	2308, 22-10-92.	
1	210	...	...	...	12, 5-1-92	Approved with certain remarks.
1	390	1	...	...	1508, 5-8-92	Approved.
1	740	1	...	1 sketch.	961, 26-5-92	Approved.
1	380	1	...	...	Do.	
1	500	1	...	...	Do.	
3	1,330	3	...	...	2474, 11-11-92.	Approved with certain remarks.
2	630	2	...	...	Do.	
1	1,000	1	...	...	980, 23-5-92	
1	250	1	...	...	323, 18-2-92	Approved with certain remarks.
1	320	1	...	...	Do.	
1	410	1	...	...	Do.	
2	273	...	...	...	1059, 9-6-92	Approved.
1	400	1	...	...	1280, 8-7-92	Approved.
1	660	1	...	...	1308, 12-7-92	Approved.
1	800	1	...	...	Do.	
1	300	...	...	...	Do.	
1	200	1	...	...	2476, 11-11-92	Approved with certain remarks.
Total ...	17,880					

TABLE

Statement giving particulars of works of a Sanitary Nature referred

Taluk Boards.	Description of works.	Hospitals and Dispensaries.	Slaughter-houses.	Latrines.	Markets.	Miscellaneous.
Répalé—cont.	Constructing a masonry water ghat at Kollur.	...	...	...	...	...
	Extending the Tungabhadra tank at Ponnur and providing a sluice for it in the south bank.	...	...	...	...	...
	Repairing the bund of a tank at Ballukanipalem, Bapatla taluk.	...	...	...	...	...
	Constructing a brick well for Vuyyuravipalam hamlet of Kammarazu gadda.	...	...	...	...	...
Saidápet	Sinking a brick well at Zelavaru.	...	...	...	...	...
	Constructing a well at Mambalam.	...	...	...	...	...
	Diverting from the Rajan Kulam the portion of the town drainage that flows into it.	...	...	...	...	...
	Repairing the drinking-water pond at Ayyar Agaram village.	...	...	...	...	...
	Repairing the drinking-water pond at Poyyapankum village.	...	...	...	...	...
	Deepening the drinking-water pond at Kodabarikuppam village.	...	...	...	...	...
	Deepening the drinking-water pond at Kunnam village.	...	...	...	...	...
	Repairing the Tertakolam at Tindivanam.	...	...	...	...	...
	Repairing the drinking-water pond at Ayur Agaram.	...	...	...	...	...
	Repairing the drinking-water pond at Poyapankum village.	...	...	...	...	...
	Repairing the drinking-water pond at Kerasore.	...	...	...	...	...
	Repairing the drinking-water pond at Nariapatti.	...	...	...	...	...
	Repairing the drinking-water pond at Valungananthai.	...	...	...	...	...
	Repairing the drinking-water pond at Turingivaram.	...	...	...	...	...
	Repairing the drinking-water pond of Maddanlongolam.	...	...	...	...	...
Tindivanam	Repairing the drinking-water pond at Sorakolathur.	...	...	...	...	...
	Deepening and improving the Mylam pond.	...	...	...	...	...
	Clearing silt, removing prickly-pear and constructing a road culvert for the supply channel to the drinking-water pond at Vikravandi.	...	...	...	...	...
	Deepening the drinking-water pond at Puthupokam.	...	...	...	...	...
	Repairing the drinking-water pond at Athipody in Tiruvannamalai taluk.	...	...	...	...	...
	Repairing the Pappankolam in Villupuram.	...	...	...	...	...
	Diverting the town drainage beyond the supply channel to the drinking-water pond at Tindivanam.	...	...	...	...	...
	Digging a drinking-water pond at Mambalapet in the Villupuram Taluk.	...	...	...	...	...
	Repairing drinking-water pond at Ayyunam.	...	...	...	...	...
	Repairing drinking-water pond at Karikkalambadi.	...	...	...	...	...
	Repairing drinking-water pond at Rayampettai.	...	...	...	...	...
	Repairing the Teppakolam at Maiparai in Sankaranainarkoil Taluk.	...	...	...	...	...
Tinnevely	Repairing the Teppakolam in Kurinjakolam in Sankaranainarkoil Taluk.	...	...	...	...	...

No. 11—continued.

to the Sanitary Board for scrutiny from Taluk Boards—continued.

No. of estimates received for scrutiny.	Amount.	No. of plans received for scrutiny.	Amount of revised estimate.	Description of new plans furnished.	No. and Date of Sanitary Board's Proceedings.	Purport of the Proceedings.
	RS.		RS.			
1	17,880 370	...	...	...	1449, 28-7-92	Wants plans to check estimates.
2	200	...	...	...	Do.	Wants plans to check estimates.
1	252	...	...	...	1523, 11-8-92	Wants plans to check estimates.
1	345	...	...	...	1656, 23-8-92	Wants information to check the estimate.
1	261	...	...	...	2093, 7-10-92	Wants plan to check estimate.
1	290	...	...	...	665, 11-4-92	Returns the estimate with certain remarks.
1	670	1	...	...	524, 19-3-92	Approved.
1	300	...	...	...	789, 5-5-92	States that for certain reasons the estimates cannot be checked.
1	250	...	...	...	Do.	States that for certain reasons the estimates cannot be checked.
1	300	...	...	...	793, 6-5-92	Approved with certain remarks.
1	300	...	...	...	Do.	Approved with certain remarks.
1	350	...	...	...	T 25, 24-6-92	Approved.
1	300	...	...	...	T 26, 24-6-92	Approved.
1	250	...	...	...	Do.	Approved.
1	300	1	...	...	1333, 16-7-92	...
1	260	1	...	...	Do.	...
1	250	1	...	...	Do.	Approved with certain remarks.
1	300	1	...	...	Do.	...
1	300	1	...	...	Do.	...
1	300	1	...	...	Do.	...
1	1,110	...	...	...	1470, 1-8-92	Wants plans to check the estimates.
1	400	1	...	...	1477, 2-8-92	Approved with certain remarks.
1	250	1	...	...	1644, 22-8-92	Approved.
1	250	1	...	...	1774, 2-9-92	Approved.
1	300	1	...	...	1781, 2-9-92	Approved.
3	915	1	...	...	1985, 22-9-92	Approved.
1	2,000	1	...	...	2293, 21-10-92	Approved.
1	300	1	...	...	2571, 23-11-92	...
1	300	1	...	...	Do.	Approved.
1	250	1	...	...	Do.	...
1	670	1	...	...	2406, 2-11-92	Approved.
1	680	1	...	...	2497, 14-11-92	Communicates certain remarks of the Sanitary Board.
Total	31,453					

TABLE

Statement giving particulars of works of a Sanitary Nature referred

Taluk Boards.	Description of works.	Hospitals and Dispensaries.	Slaughter-houses.	Latrines.	Markets.	Miscellaneous.
Trichinopoly	Repairing a drinking-water tank in Kilekulakudy village.	...	...	...	...	...
	Constructing a dispensary with a latrine and a well at Iluppur.	...	...	...	...	...
	Improving the Kambar Urini at Iluppur in Trichinopoly taluk.	...	...	...	...	...
Tirupatūr	Constructing a well	...	...	...	...	...
	Improvement of village-site at Uttankarai.	...	...	...	...	...
	Repairing a well at Sathiam village, Vriddhachalam taluk.	...	...	...	...	...
	Repairing a pond at Pattakurchi village, Vriddhachalam taluk.	...	...	...	...	...
	Repairing a pond at Kolakudi village, Chidambaram taluk.	...	...	...	...	...
	Repairing the Pottakolam at Udayargudi.	...	...	...	...	...
Vriddhachalam	Filling up the Alukuttai in Kasba Vriddhachalam taluk.	...	...	...	...	...
	Repairing a drinking-water pond at Acheputti.	...	...	...	...	...
	Repairing the drinking-water pond at Perumola, Vriddhachalam taluk.	...	...	...	...	...
	Repairing the drinking-water pond at Gopurapuram.	...	...	...	...	...

No. 11—continued.

to the Sanitary Board for scrutiny from Taluk Boards—continued.

No. of estimates received for scrutiny.	Amount.	No. of plans received for scrutiny.	Amount of revised estimate.	Description of new plans furnished.	No. and Date of Sanitary Board's Proceedings.	Purport of the Proceedings.
	RS.		RS.			
1	31,453	1	...		1761, 1-9-92	Approved.
1	2,500	3	...		1938, 17-9-92	States that the design sent by the Taluk Board requires certain modifications.
1	420	1	...		1997, 23-9-92	Approved.
1	250	1	...		250, 3-2-92	Approved.
1	640	...	...		256, 4-2-92	Certain information called for.
1	285	1	...		118, 12-1-92	
1	250	1	...		Do.	Approved.
1	300	1	...		Do.	
1	372	1	...		535, 23-3-92	Approved.
1	620	1	...		762, 27-4-92	Approved.
1	300	1	...		1412, 25-7-92	Approved.
1	200	1	...		2506, 15-11-92	Approved.
1	400	1	...		2631, 29-11-92	Approved.
Total	38,240					

TABLE

Statement giving particulars of works of a Sanitary nature referred

District Boards.	Description of works.	Hospitals and Dispensaries.	Slaughter-houses.	Latrines.	Markets.	Miscellaneous.
Arcot, North	Repairing the ancient and the head spring of the supply channel to Peshkar's tank at Rénigunta. Repairing the Peshkar's tank and supply channel. Constructing a bugga to the tank. Constructing a Lying-in Hospital.	...	...	...	...	1
Arcot, South	Repairing the pond at Yellakur Railway Station. Digging a pond at Killai in Chidambaram. Constructing a latrine at Rowtalam.	...	...	1	...	...
Bellary	Constructing a latrine at Alfar ... Deepening and improving well in Chellakurki village. Deepening and improving well in Veerapur village. Constructing a tank at Tuggaparty. Improving the Gosayee well in Rayadrug taluk.	...	...	...	...	1
Coimbatore	Constructing a new market at Pollachi.	...	...	...	...	...
Cuddapah	Extending Madanapalle town ... Constructing an hospital building at Peddapur.	...	...	...	...	...
Godavari	Constructing an hospital at Bhimavaram. Deepening a portion of a drinking-water tank at Kankipad. Sinking six wells in Bhirangiparam.	1	...	...	...	...
Kistna	Constructing a drinking-water ghat at Kallur, Répalle taluk. Improving a well at Sennampatty.	...	...	...	...	...
Madura	Constructing a drinking-water well at Kalavaya.	...	...	...	...	...
Nellore	Constructing Horbury's patent privy of ten seats at Gúdalúr. Constructing a well at Tippacadu.	...	...	...	...	...
Núlgiris	Exterpating Lantana in Gúdalúr. Constructing a well ... Executing masonry repairs to the feeder channel and the bed of the Kamalayam-tank at Námakal.	...	...	...	...	...
Salem	Constructing a draw well to the big Teppakulam at Tiruchengód.	...	...	...	...	...

No. 11—continued.

to the Sanitary Board for scrutiny from District Boards.

No. of estimates received for scrutiny.	Amount.	No. of plans received for scrutiny.	Amount of revised estimate.	Description of new plans furnished.	No. and Date of Sanitary Board's Proceedings.	Purport of the Proceedings.
1	RS. 370	1	RS. ...	...	2024, 28-9-92	Invites the attention of the District Board to the remarks of the Sanitary Board.
1	4,552	2	...	...	Do.	
1	710	1	...	1 sketch ...	Do.	
1	10,060	4	...	...	2338, 25-10-92 2815, 8-12-92 2545, 21-11-92	Informes that the Sanitary Board is not inclined to modify its requirements. Approved with certain remarks.
1	290	1	...	...	816, 12-5-92	Approved.
1	300	1	...	...	817, 12-5-92	Recommends Sanitary Board's design.
1	450	1	...	Standard design of latrine on dry-earth system.	...	
1	450	1	...	...	Do.	Recommends Sanitary Board's design.
1	1,872	1	...	...	1998, 23-9-92	Approved.
1	875	1	...	1 sketch ...	Do.	Recommends Sanitary Board's sketch.
1	2,255	1	...	...	2003, 23-9-92 2448, 7-11-92 2449, 7-11-92	Approved and recorded.
1	446	1	...	...	...	Approved.
8	14,100	5	...	...	2756, 5-12-92	Returns the plans and estimates with remarks.
1	...	1	...	...	315, 12-5-92	Returns the plan for want of information.
1	1,070	1	...	...	1829, 7-9-92	Disapproved for reasons stated.
7	4,490	7	...	1 sketch ...	1954, 19-9-92	Communicates certain remarks of the Sanitary Board.
2	1,080	2	...	...	2004, 23-9-92	Approved.
1	3,000	1	...	...	2478, 11-11-92	Wants certain information and alterations in the estimate.
1	...	1	...	...	2985, 30-12-92	Approved with remarks.
1	372	1	...	...	1517, 9-8-92	Approved with remarks.
1	250	1	...	...	272, 9-2-92	Approved with remarks.
1	700	1	...	...	1894, 14-9-92	Approved.
1	250	1	...	...	2002, 23-9-92	Communicates certain remarks to the District Board.
1	500	...	...	...	2508, 15-11-92	Approved.
1	550	1	...	...	327, 9-2-92	Approved with certain remarks.
2	1,484	...	...	...	417, 15-3-92	Returns the estimates with remarks.
1	3,331	1	...	...	632, 5-4-92	Returns the plan and estimate with remarks.
Total...	53,787					

HORMUSJI NOWROJI, B.C.E.,
Asst. Sanitary Engineer,
for Sanitary Engineer to Government.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following papers:—

From HORMUSJI NOWROJI, Esq., B.C.E., Assistant Sanitary Engineer to Government, in charge of Sanitary Engineer's office, to the Chief Secretary to Government, dated Fort St. George, 23rd February 1893, No. 354.

I have the honour to forward four advance copies of the administration report of this department for the year 1892.

2. The report was written by Mr. J. A. Jones, Sanitary Engineer to Government, just before going on leave.

3. The report will, as usual, be bound with that of the Sanitary Commissioner when ready.

From Surgeon-Lieutenant-Colonel J. A. LAING, Sanitary Commissioner, Madras, to the Chief Secretary to Government, dated Fort St. George, 1st June 1893, No. 1367-S.

I have the honour to forward four stitched copies of my sanitary report for 1892.

2. Two copies have, as usual, been forwarded to the Sanitary Commissioner with the Government of India.

3. The title page, table of contents, cholera map and the diagrams will be inserted in the bound copies.

ORDER—dated 23rd June 1893, No. 1394 L., Local and Municipal.

With the letters read above the Sanitary Commissioner and the Sanitary Engineer submit the reports on the administration of their departments during the year 1892.

2. The constitution of the Sanitary Board and the rules for the conduct of its business continued the same as in the two years preceding.

GENERAL SANITATION.

3. *Rainfall and Prices of Food-grains.*—The mean quantity of rain registered was 58.43 inches and was below the average in the districts of Chingleput, Coimbatore, Madras, Madura, Nellore, North Arcot, Nilgiris, Salem, South Arcot, Tanjore, Tinnevely and Trichinopoly, the decrease being most marked in Madras, South Arcot and Tanjore. The west coast districts of Malabar and South Canara received, respectively, 30 and 42 inches above the average of the ten years ending with 1889. In future, means for the whole Presidency should be calculated with reference to the monsoon currents, the districts being grouped according as the heaviest periods of rainfall occur in them during the south-west or the north-east monsoon, and a separate mean struck for each group. Where, as in the case of Nellore, part of the district

is affected by one and part by the other current, a division by taluks should be made. A mean into which such different elements as the rainfall in Wynaad and that in South Nellore enter can be of no conceivable use for any purpose.

Notwithstanding the heavy rainfall referred to above, the prices of food-grains, which had been steadily rising since 1887, continued at a high level and advanced on the failure of the north-east monsoon. The prices of the principal grains during the three years beginning with 1890 and the average for the last five years are shown below:—

	Number of saers for the rupee.			Average for the last five years.
	1892.	1891.	1890.	
Rice	10.3	11.3	12.7	13.8
Ragi	17.3	22.4	26.2	27.1
Cholum	16.1	21.1	21.6	24.6

The prices were above the average of the ten years ending with 1889 in all districts except Chingleput, where the price of cholum was slightly below it. Compared with 1891, however, there was a slight improvement in Tinnevely and Malabar as regards rice, while there was a marked rise in Ganjám and Vizagapatam.

4. *Vital Statistics.*—The total population for which returns of births and deaths were received rose by 10,000 and such records are now obtained in the case of all but 1,944,000 of the inhabitants of the Presidency. It has not been yet found possible to arrange for vital statistics in the zamindari tracts of Madura and in the Vizagapatam agency.

5. *Births.*—The number of births registered during the year was less than that of the three preceding years and the decrease is ascribed to the distress which prevailed in the Presidency during the past two years. If, however, the large variations in the birth-rates reported from the several districts, ranging from 17.8 per mille in Ganjám to 36.8 per mille in Madras are considered, it is probable that the fall in the number is also due in great measure to defective registration. In comparison with the previous year, there was a fall in all districts except South Canara, Tinnevely and Gódvári. In no district was the supposed standard rate of 40 per mille reached. The rate was above 30 in Madras, Bellary, South Canara and Kurnool, and below 20 in Ganjám. The returns from Malabar (20.4), Vizagapatam (21.5), Nellore (21.9), Gódvári (22.1), and North Arcot (22.6) were unsatisfactory; the figures in the last-named district were, however, the result of the bad season of the previous year. The special attention of the Collectors concerned is again drawn to the matter. The birth-rate exceeded the death-rate in fifteen out of the twenty-two districts. The death-rate exceeded the birth-rate most in Madras and Gódvári, a high mortality from fevers, dysentery and diarrhoea in the former and the prevalence of cholera and small-pox in the latter district being the causes.

The average birth-rate for all District Municipalities was 29.9 per mille against 30.0 in 1891. In Dindigul and Vaniyambádi alone the rate exceeded 40 per mille; in 33 towns it was between 30 and 40; in the remaining 20 it was less than 30, while in Trichinopoly and Vizianagram it was only 20.9. This great variation in the rates clearly evidences defective registration, although the Sanitary Commissioner states that he has found on personal inspection some improvement on the whole. The average rural birth-rate for the Presidency was lower than the urban, 24.9 against 28.3. In six districts, however, the rural exceeded the urban rate, while in Ganjám and Malabar the difference between the two was very marked. Such inequalities very probably are due in part to the untrustworthiness of the returns.

6. *Deaths.*—The following statement exhibits the number of deaths per mille and those according to the returns of the previous five years:—

	1887.*	1888.*	1889.*	1890.*	1891.†	1892.†
Cholera	1.0	2.1	2.7	1.2	2.9	2.3
Small-pox	0.7	0.8	1.0	1.0	1.2	1.3
Fevers	8.6	7.8	8.2	9.2	7.8	8.3
Bowel-complaints	0.9	1.0	1.0	0.9	† 1.0	† 1.0
Injuries	0.6	0.4	0.4	0.4	0.4	0.3
Other causes	9.8	9.8	10.2	10.1	9.4	9.1
Total	21.6	21.4	23.5	22.8	22.2	22.3

* Calculated on the census of 1881. † Calculated on the census of 1891. ‡ Dysentery and diarrhoea only.

The number of deaths registered during the year was larger than that recorded in any year since 1878, the increase occurring chiefly under fevers, which carried off 280,627 persons against 247,029 in 1891 and an average of 223,427 for the preceding ten years. In comparison with that of 1891, however, the total mortality of the year did not show much difference, as the increase under fevers was counterbalanced to some extent by a decrease under cholera. The year was generally an unhealthy one in consequence of the distress which prevailed over a considerable portion of the presidency. The mortality among infants under one year of age amounted to 173.9 per mille of the children born during the year against 167.4 in 1891. The high rate of infantile mortality may be ascribed to the general prevalence of insanitary conditions in combination with the other causes enumerated by the Sanitary Commissioner in the twenty-fourth paragraph of the report.

Taking the districts individually, the highest mortality (46.5 per mille) was recorded, as usual, in Madras. As observed in the reviews of the reports for the past two years, this is attributable partly to increased accuracy in registration and partly to the extremely insanitary condition of the place. The city was inspected by the Sanitary Commissioner during the year and a full report submitted which is now in the hands of the Municipal Commissioners.

The death-rate was also high in Kurnool (35.1 per mille), Bellary (27.5), Kistna (27.5) and Gódvári (27.1), while it was below 20 in Madura, South Arcot, North Arcot, Salem and Coimbatore, and in Ganjám, only 14.3. The accuracy of the Ganjám returns in particular may be doubted, and the great inequalities observable in the rates are doubtless due for the most part to the incompleteness of registration. The Collectors of the districts named are requested to report the steps they propose to take for improving matters in this direction. It is observed that the report called for in this connection from the Collector of South Canara in paragraph 6 of G.O., dated 9th July 1892, No. 1596 L., has not been received. This omission should now be supplied.

The average death-rate for the District Municipalities was 29.4 per mille or 7.5 higher than the district rate, while the individual rate varied from 55.2 in Kurnool to 18.2 in Salem. The high mortality in Kurnool is ascribed to the prevalence of cholera and that (50.3 per mille) in Cochin to the large number of deaths registered under small-pox. The death-rate in the towns noted in the margin was in every case, excepting Chicacole, below the figure for 1891. In the absence of any other reasonable explanation, there can be no doubt that this is the result of neglected registration, and the Municipal Councils concerned should give the matter their attention.

	1892.	1891.
Mannárgudi	24.2	24.5
Nellore	19.7	36.0
Ongole	24.3	28.8
Cuddalore	18.8	28.1
Chidambaram	24.5	35.4
Dindigul	20.5	40.0
Palni	21.4	49.7
Salem	18.2	28.3
Tiruppattúr	19.2	36.9
Erode	21.7	33.6
Karúr	23.1	38.2
Chicacole	23.8	19.1
Parlákimedi	22.9	23.2

7. *Principal Diseases—Cholera.*—The mortality from this disease, though smaller than that recorded in 1891, was larger than that of any previous year since 1882. The disease was most virulent in January, July and August. In the last three months of the year very few cases were recorded. No district in the presidency was free from this scourge, while in nine it prevailed throughout the year. Godávári, Kurnool and Tanjore suffered the most, the death-rates being respectively 6.5, 6.0 and 4.1 per mille of the population, while in Ganjám the deaths registered were only 0.2. The average death-rate from cholera in municipal areas was 3.2 and that in the districts 2.3 per mille. Of the 55 District Municipalities, only two, Palni and Ootacamund, were free from this disease; while Periyakulam and Anantapur, with a mortality of 14.7 and 11.5 respectively headed the list.

8. *Small-pox.*—The number of deaths from small-pox was 43,757 against 41,322 in 1891 and was the highest on record since 1885. The Sanitary Commissioner ascribes the great increase in the mortality from this disease in 1891 and 1892 to deficiency of rainfall in the years immediately preceding and states that a copious rainfall is accompanied by immunity from the epidemic. The proportion of the mortality among children under 12 years of age to the total number of deaths from small-pox, which had fallen from 66 to 54 per cent. in 1891, declined to 47 per cent. The disease was very severe in Malabar, Kistna and Godávári; the lowest death-rate occurred, as usual, in Madras, where vaccination is carried on in a very efficient and satisfactory manner. The table in the 51st paragraph of the report is of much interest as tending to show the efficacy of compulsory vaccination when really enforced. Among Municipalities, Cochin heads the list with a rate of 19.9 per mille and is followed by Palghat, Tellicherry and Calicut, all in the Malabar district where it ranged between 9 and 5 per mille. The Collector of Malabar and the Chairmen of the Municipal Councils concerned are requested to report the steps which they propose to take for the spread of vaccination in the areas under their charge. The results achieved in the remaining Municipalities were generally fair, and 8 towns enjoyed perfect immunity. This subject will be more fully dealt with when the vaccination report for 1892-93 is reviewed.

9. *Fevers.*—The mortality under this head was greater than in any year since 1880 and numbered 280,627 against 247,029 in 1891. This large increase is attributed to the heavy rainfall of the year and also to the rise in the prices of food-grains and the consequent distress which prevailed. The highest death-rate occurred, as in the previous year, in Kurnool (22.8 per mille), followed by Nilgiris (17.7), Cuddapah (16.8), Vizagapatam (16.5) and Madras (15.6). The least affected district on the other hand was Tanjore (2.2), Tinnevely and Trichinopoly coming next with 3.1 and 4.0 per mille respectively. The death-rate in municipal areas was, as usual, lower than that in rural tracts, a ratio of 10 per mille having been reached in only 10 towns. The town of Kurnool, like the rest of the district, recorded the highest mortality (31.4 per mille). It is to be regretted that the health of Coonoor, which had improved in 1891, again declined in the year under review, the rate of deaths from fever having risen from 8.4 to 17.7 per mille. A similar result is also observable in Cuddapah, the rate having risen from 13.3 to 16.9 per mille.

10. *Dysentery and Diarrhoea.*—The deaths recorded from these causes numbered 32,293 against 34,223 in 1891. The average rate for the districts was only 1.0 per mille; the individual proportion ranged from 8.9 in Madras to 0.3 in Anantapur. The district municipalities returned an average rate of 3.4 per mille, the list being headed by Bimlipatam (10.7), followed by Tanjore (8.3), Vizagapatam (6.8) and Bezwada (6.0). The lowest rate (0.3) was registered in Dindigul and Vaniyambádi.

11. *Injuries, &c.*—There was a small increase (770) in the number of deaths attributed to injuries, but the deaths from unspecified causes decreased from 315,664 to 303,733.

12. *Sanitary improvements carried out by Municipal Councils and District Boards.*—The subjects dealt with by the Sanitary Commissioner under these heads will be noticed at length in the reviews of the administration reports of the local bodies concerned and in the general Municipal and Local Fund reviews, and do not at present call for remark.

SANITARY ENGINEERING.

13. The Sanitary Engineer's report for 1892, which is the third of its kind, is a record of considerable progress both in the execution of works and in the preparation of schemes. In the course of the year the Sanitary Engineer visited 18 and the Assistant Sanitary Engineer 10 towns.

14. Nine water-supply and drainage works estimated to cost Rs. 14,61,000 in the aggregate, were in course of construction during the year, while schemes for the improvement of water-supply in 5 towns and for that of drainage in another, estimated to cost some Rs. 24,18,000, were submitted to Government. Of the nine works under execution, the Kandal drainage and south water-supply schemes in Ootacamund were carried out, while the Coonoor drainage and the Ootacamund main-sewer-realignment schemes were in a fair way towards completion. Satisfactory progress was also made in the Madura and Cuddapah water-supply works and in the drainage scheme of Kumbakonam, the expenditure thereon at the close of the year having amounted to 39, 73 and 63 per cent. respectively of the estimated cost. Very little was, however, done with respect to the Trichinopoly and Tanjore water-supply schemes, as the works could not be taken in hand until late in the year. Tables 2 to 10 appended to the report exhibit the details of the works executed up to the end of the year. Of the six new schemes submitted to Government for sanction, the Bellary, Cocanada and Coimbatore water-supply projects have been abandoned as beyond the means of the Municipal Councils and the others are still under consideration. With reference to the Sanitary Engineer's remark in paragraph 24 of his report, it is observed that his proposal to improve the water-supply of Chicacole has not found favour with the Municipal Council, which has allotted Rs. 500 for cleansing and repairing the existing sources of supply, which are considered sufficient for the needs of the town.

15. The Sanitary Engineering department also scrutinised 165 plans and 202 estimates for sanitary works of the value of Rs. 2,17,708, and furnished plans and designs wherever necessary. In addition to this, the Sanitary Engineer deputed his Assistant to report on the drainage and water-supply of Chittoor (North Arcot) and on the suggestion to convert the Ammankulam tank in Tiruchengód (Salem) into a drinking-water reservoir. The report furnished regarding Chittoor was referred to the Taluk Board for information as to what action it intended to take. The scheme for the improvement of the water-supply of Tiruchengód was reported to be impracticable.

GENERAL REMARKS.

16. During the year under review, the Sanitary Commissioner or his Deputy visited 128 minor towns and villages in the presidency and the reports thereon submitted to Government in many cases show that although much yet remains to be done, sanitation is engaging the attention of the district authorities and that an improvement has been effected in all districts. The inspection work done by the District Medical and Sanitary officers was very satisfactory, as they visited 51 places each, on an average, against the prescribed minimum of 40. The medical officers of Cuddapah, Coimbatore, Chingleput, Nellore and Salem were specially energetic as they visited from 146 to 61 villages each, while those of Anantapur, Malabar and Vizagapatam appear not to have fulfilled as they should have done, this important part of their duties. In the district last named only six villages were inspected. It is not stated how far this was due to the absence of an Assistant Surgeon during a portion of the year. The Surgeon-General is requested to report on the point. The subject of sewage farming seems to have received but scant attention, but the Sanitary Commissioner explains that this is due to want of proper drainage systems for towns. The farm started at Salem two years ago is reported to have been abandoned, as the owner of the land declined to lease it out. Some other ground should, if possible, now be selected and operations renewed. A good beginning is reported to have been made in Tanjore with a farm 65 acres in extent which has been leased, to the benefit of municipal revenues, for Rs. 1,950. The progress of this scheme will be watched with interest. The Government is pleased to note the testimony borne by the Sanitary Commissioner to the

good services of Surgeon-Major Dymott, the Deputy Sanitary Commissioner, and by the Sanitary Engineer to those of Mr. Hormusji Nowroji, the Assistant Sanitary Engineer.

(True Extract.)

J. F. PRICE,
Chief Secretary.

To the Sanitary Commissioner.

„ the „ Engineer.
„ the „ Board.
„ the Surgeon-General.
„ the Public Department.
„ the Military „
„ the Revenue „
„ the Inspector-General of Police.
„ the „ of Jail.
„ the Accountant-General.
„ all Collectors.
„ all Presidents of District Boards.
„ all Chairmen of Municipal Councils,
„ the President, Municipal Commission, Madras.
Editors' Table.

ENDORSEMENT—dated 23rd June 1893, No. 1395 L., Local and Municipal.

Copy to the Government of India, Home Department.

J. F. PRICE,
Chief Secretary.

Ed. C.M. Brisson.

Govt. of {1893} Madras.

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Encl.

G.O., &c., 23rd June 1893,
Nos. 1394, 1395 L.

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Reports.

Reviewing the Sanitary Commissioner's and
the Sanitary Engineer's — for 1892.