

THE FIFTY-FOURTH ANNUAL REPORT OF THE
SANITARY COMMISSIONER,

THE TWENTY-EIGHTH ANNUAL REPORT OF THE
SANITARY ENGINEER

AND

THE TWENTY-SECOND ANNUAL REPORT OF THE
SANITARY BOARD,

MADRAS.

1917.

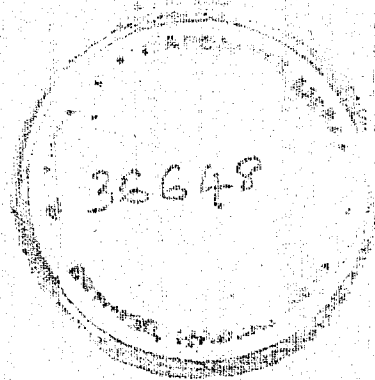
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 * மாதம் 1987 *
 * செப்பிடு முடித்த *
 * மாதம் 1987 *
 * இரா ய்ச்சி உதவியாளர் *
 * உதவியுடல் *

D. No. 2441-S.

OFFICE OF THE SANITARY COMMISSIONER,
 MADRAS, 25th September 1918.

From

MAJOR W. A. JUSTICE, M.B., C.M., D.P.H., I.M.S.,
 Sanitary Commissioner, Madras.

To

THE SECRETARY TO GOVERNMENT,
 LOCAL AND MUNICIPAL DEPARTMENT
 (Through the Secretary, Sanitary Board, Madras).

SIR,

I have the honour to forward herewith my Sanitary Report for the year 1917. The delay in the submission of the report has already been explained.

I have the honour to be,
 Sir,
 Your most obedient servant,

W. A. JUSTICE, MAJOR, I.M.S.,
 Sanitary Commissioner for Madras.

Proceedings of the Sanitary Board No. 412-S.,

THE
FIFTY-FOURTH ANNUAL REPORT
OF THE
SANITARY COMMISSIONER WITH THE GOVERNMENT
OF MADRAS,
1917.

SECTION V.

GENERAL POPULATION.

RAINFALL.

The total registered rainfall of the Presidency during 1917 was 1,246.03 inches against 1,238.71 in 1916 giving a district average of 49.84 inches. This was greater than the district average of the preceding year by only 0.29 inch. The distribution of the district average between the several monsoons during the year was as follows:—

	INCHES.
Inter-monsoon period (January to May)	6.0
South-west monsoon (June to September)	23.69
North-east monsoon (October to December)	15.15
Total	49.84

2. The average district rainfall in all the monsoons was greater than the district average for forty years ending 1909 by 6.23 inches. Compared with 1916, fourteen districts showed an increased and eleven a decreased rainfall, the increase being highest in Nellore (+ 14.80) and the decrease in Kurnool (— 16.83). As compared with the average, all the districts excepting Malabar, North Arcot, South Arcot, Tanjore and Tinnevely showed an excess rainfall, Gōdayari (+ 22.14) heading the list followed by Kistna (+ 20.39) and Nellore (+ 15.32). In five other districts (Anantapur, Bellary, Ganjam, Guntūr and South Kanara), the excess was over 10 inches each. The decreased rainfall was marked in South Arcot (— 10.44).

3. Considered with reference to the monsoons, the inter-monsoon period was favourable throughout the Presidency as a whole, the total rainfall of the season being 149.98 inches against 80.35 inches in 1916 and 134.86, the average of forty years. The increase was shared by all the districts excepting three—Malabar, Salem and South Kanara—where the short-falls amounted to 1.65, 1.0 and 0.38 inches, respectively. The district which had the greatest rainfall during the period was the Nilgiris with 14.56 inches against 8.07 in 1916, 12.82 being the average. During the south-west monsoon

and follow no logical method. Another district which fared worse in this monsoon was Kurnool with a fall of 18.41 inches against 28.75 in 1916. In both these districts, the total rainfall of the year was less than that of the previous year, the deficiency being 12.78 and 16.83 inches, respectively. The south-west monsoon was favourable in 16 districts, Madras (+ 6.86) and Ganjam (+ 4.97) recording the highest increases over the figures of 1916. The north-east monsoon proved almost a failure throughout the Presidency. Only nine districts had an excess rainfall during this season, prominent among them being Nellore showing an increase of 7.61 inches over the previous year's figure and of 6.7 inches over the average. Of the districts which had a low rainfall, South Arcot (— 11.68) headed the list followed by North Arcot (— 10.65). The districts which fared worse in both the north-east and south-west monsoons were Anantapur, Guntur, Kurnool, North Arcot and Vizagapatam.

PRICES OF FOOD-GRAINS.

(+ 17.2) and Villupuram (+ 15.4). Among those which showed a decrease Kosgi (- 36.3) headed the list followed by Pernampattu (- 23.1), Rasipuram (- 21.2), Kallakurichi (- 18.4), Wandiwash (- 18.0), Valavanur (- 17.5), Yadiki (- 16.1) and Ayyampettai (- 15.6). The birth-rates were comparatively high in Kanigiri (75.9), Kavali (74.5) and Koilpatti (71.2). The rates returned by these towns in the previous year were 34.0, 20.1 and 40.3, respectively. In six other towns the rates were also large varying from 50.7 in Kosgi to 67.7 in Namakkal. The rates varied from 50 to 40 per mille in 16 towns and from 40 to 30 in 58 towns. Five towns—Udamalpet (9.7), Vempalli (9.3), Gooty (9.2), Kamudi (7.7) and Samalkot (6.5)—returned rates less than 10

DEATHS IN MUNICIPALITIES.

20. Deaths registered in municipal towns during the year numbered 102,188 and showed an increase of 16,392 over those of the previous year, the annual ratios being 37.2 and 31.2 per mille, respectively, against the quinquennial average of 33.4 per mille. The increase was due to a larger number of deaths recorded under "Cholera" and "Plague"—the two diseases which were very severe during the year under report. Highest death-rates were returned by Hospet (79.6), Bellary (77.4) and Adoni (67.9) all in the Bellary district where plague prevailed in an unusually severe form, the annual death-rates from this cause alone being 39.5, 30.6 and 41.2 per mille, respectively, against 1.0, 0.03 and nil per mille in 1916. The death-rates were also comparatively high in Palni (60.7) due to "Cholera," "Smallpox" and "Dysentery and Diarrhoea" and in Salem (56.2) due to "Cholera," "Plague" and "Dysentery and Diarrhoea." Rates varied from 50 to 40 per mille in 12 towns and

simpler system of concentrating attention only on known preventive measures, the chief of them being rat destruction. The life and habits of the *Mus rattus* is still so obscure that in my opinion, until this is thoroughly worked out, our efforts at their extermination will be severely handicapped. A fresh set of regulations has accordingly been issued (G.O. No. 331 P., dated 11th July 1918) and under the existing orders, these should be regarded only as temporary for a period of five years from 15th July 1918. Their working will be watched. Although the year under report is marked by an increase in the number of deaths from plague, it should be noted that at no time during the last twenty years has this Presidency suffered in any way like the other provinces of India. The policy of leaving well alone is a good one for this country and I cannot but express regret that this policy should have been abandoned with regard to our plague regulations.

40. A total of 89 deaths from plague (Bellary 16, Coimbatore 22 and Salem 51) against 85 in 1916 was recorded during the year under report among persons who have been previously inoculated with anti-plague vaccine.

ALL OTHER CAUSES.

54. Under this head were recorded 475,173 deaths against 419,731 in 1916 and these represent annual ratios of 11.9 and 10.5 per mille, respectively. Nearly one-half of the total number of deaths registered in the Presidency during the year appear under this all-absorbing head. A proposal to subdivide this head so as to give separately numbers of deaths from more important diseases such as tuberculosis, typhoid, malaria, etc., is now under consideration. The difficulty, however, is to find suitable registrars of births and deaths to properly diagnose these diseases and to correctly classify them. But the experiment may be tried and the result watched. The death-rate from these causes exceeded 10 per mille in 17 districts. Of the eight districts which showed a death-rate of below 10 per mille, comparatively fewer deaths were registered in Ganjam and Vizagapatam (1.8 each), Cuddapah (6.8) and Kurnool (7.0), while the death-rates recorded in these districts under "fevers"—another convenient head for bringing in cases whose correct diagnosis is difficult to determine—were proportionately higher.

APPENDIX.

VITAL STATISTICS OF THE GENERAL POPULATION.

No. I.—Statement showing the Births registered in the districts of the Madras Presidency during the year 1917.

Number.	2			Districts.	4			5			6			7	8	9	10		
	Population (exclusive																		

(Comparative table showing percentage of mortality to total mortality from year to year under each head of death causation.)

1 Name of municipality.	2 Date of completion of works of		3 Average annual death-rate since the introduction of drainage system or water-supply.		4 Percentage of deaths to total mortality under each head of death causation.						5 Average annual death-rate for the five-year period preceding the introduction of drainage system or water-supply.	
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(Comparative table showing percentage of mortality to total mortality from year to year under each head of death causation.)

1 Name of municipalty.	2 Date of completion of works of	3		4			5		6
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10. The following schemes were under preparation or under investigation during the year:—

- | | |
|---|-----------------------------------|
| (1) Bellary drainage. | (20) Ongole water-supply. |
| (2) Bezvada drainage. | (21) Poddapuram water-supply. |
| (3) Berhampur drainage. | (22) Parlakimedi water-supply. |
| (4) Binlipatam drainage. | (23) Parlakimedi drainage. |
| (5) Calicut drainage. | (24) Tenali drainage. |
| (6) Cocanada drainage. | (25) Tiruvannamalai water-supply. |
| (7) Water-supply to the Police Recruit School and Jail, Coimbatore. | (26) Do. Kalyani well. |

Nos. 1518, 1518-A L., 12TH NOVEMBER 1918

15. The popular health lectures which commenced towards the end of 1916 were continued in 1917 and achieved considerable success.

(True extract)

N. E. MARJORIBANKS,
Acting Secretary to Government.

To the Sanitary Board.
 „ the Sanitary Engineer.
 „ the Sanitary Commissioner.
 „ the Surgeon-General.
 „ the Assistant Quartermaster-General (with C.L.).
 „ the Inspector-General of Police.
 „ the Inspector-General of Prisons.
 „ the Accountant-General.
 „ the Director of Public Instruction.
 „ all Collectors.
 „ all Presidents of district boards.
 „ all Chairmen of municipal councils.
 „ the President