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தமிழ்நாடு அரசு

துறை

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மு. கோப்புத் தாள் என்.

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Vital Statistics.

According to the Sanitary
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in the districts municipalities
of Madras presidency for
March 1899 and ordering their
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27

Vital Statistics.

Recording the Sanitary Commissioner's remarks on the returns of—in the Districts and Municipalities of Madras Presidency for March 1889, and ordering their publication in the Fort St. George Gazette.

GOVERNMENT OF MADRAS.

PUBLIC DEPARTMENT.

READ—the following paper:—

From Surgeon-Major J. A. LAING, Sanitary Commissioner for Madras, to the Chief Secretary to Government, dated Madras, 15th July 1889, No. 924.

I have the honor to submit, for the information of Government and publication in the *Fort St. George Gazette*, the usual abstract statements of births and deaths in the districts and municipalities of the Madras Presidency for the month of March 1889.

2. The period on the whole appears to have been somewhat unhealthier than the preceding month, February, as indicated by a higher mortality. It is satisfactory, however, to note a diminution in the mortality from cholera and bowel-complaints; but small-pox and fevers were more fatal.

3. The total number of births registered was 63,075, against 54,075 in the previous month, of which 4,791 occurred in the municipalities, against 4,152 in February. The total deaths numbered 47,780, inclusive of 4,950 which took place in the towns. The numbers for February were 46,818 and 4,959 respectively.

4. Proportionally considered with the population (27,880,261 inclusive of towns) embraced by registration, the total births represent a ratio of 27·1 per mille per annum in the districts, and in the towns 30·9 on a population of 1,861,508. The total death-rates were 20·5 and 31·9 respectively. In the following table, these results are compared with the past months of the year, the corresponding month of the past year, and the average of five previous corresponding periods; and in the table subjoined the mortality rate of the presidency is contrasted with those of Bengal, North-west Provinces and Punjab:—

	Districts.				Municipalities.			
	Births.	Deaths.	Birth-rate.	Death-rate.	Births.	Deaths.	Birth-rate.	Death-rate.
Average of 5 previous Marches ..	61,847	47,056	26·7	20·3	4,101	4,547	31·2	30·6
March 1888	63,962	47,145	27·8	20·5	4,790	4,703	31·0	20·5
January 1889	63,441	65,584	27·3	28·2	4,623	6,234	29·8	49·1
February	54,075	46,818	23·5	20·3	4,152	4,959	26·7	31·9
March	63,075	47,780	27·1	20·5	4,791	4,950	30·9	31·9

	Death rate per mille per annum.
Bengal	20.7
North-west Provinces	22.8
Punjab	22.2
Madras	20.5

5. How the different sexes and the several classes of the community were affected will be seen from the statement below; as usual, on the whole, the male element predominated:—

	Sexes.			Classes.				Ratio per mille per annum.			
	Males.	Females.	Percentage of males to females.	Christians.	Hindus.	Mahomedans.	Total.	Christians.	Hindus.	Mahomedans.	Total.
<i>Districts.</i>											
Births	32,681	30,394	107.5	1,162	57,876	4,037	63,075	21.5	27.3	26.6	27.1
Deaths	25,227	22,553	111.8	825	44,079	2,876	47,780	15.2	20.8	18.9	20.5
<i>Municipalities.</i>											
Births	2,514	2,277	110.4	361	3,733	697	4,791	35.3	30.3	32.0	30.9
Deaths	2,562	2,388	107.3	285	3,931	734	4,950	27.9	31.9	33.3	31.9

6. Taking each district and town individually, Bellary district stands at the top of the list with the highest birth-rate, 42.7 per mille per annum, and this position it has maintained for time past; while Godávári is at the bottom with only 15.5 per mille. In regard to the death-rates, Madras (town) returned the highest rate, 45.3, and Nellore the lowest, 12.2. Eliminating Madras, Kurnool stands next on the list with 37.3 per mille, and Godávári is next above Nellore with 13.0. There appears to be no improvement in registration in the Godávári district, the defectiveness of recorded in Dindigul, and the lowest in Cuddalore, 11.6. Bezvada returned the highest birth-rate, 51.6, was death rate, 110.5 per mille, and Parlákimedi the lowest, 11.7. The high death-rate in or more than one half of the total (86) having occurred from this cause.

7. The following tables show the birth and death rates returned by each district and town, arranged in the order of sequence:—

Districts.	Birth-rate per mille per annum.	Districts.	Birth-rate per mille per annum.	Districts.	Death-rate per mille per annum.	Districts.	Death-rate per mille per annum.
Bellary	42.7	Kistna	27.7	Madras	45.3	Nilgiris	19.9
Madras	41.0	Tinnevely	27.5	Kurnool	37.3	Tinnevely	19.6
Kurnool	37.9	North Arcot	27.1	Bellary	31.2	North Arcot	19.5
Anantapur	33.7	Tanjore	24.9	South Arcot	27.1	South Canara	19.2
South Canara	33.7	South Arcot	23.6	Ganjam	25.6	Salem	19.1
Malabar	33.1	Chingleput	23.4	Cuddapah	23.8	Kistna	17.5
Coimbatore	32.6	Nellore	20.7	Anantapur	23.5	Coimbatore	16.8
Salem	32.4	Nilgiris	20.3	Tanjore	23.5	Malabar	15.7
Chingleput	31.1	Ganjam	17.2	Trichinopoly	23.3	Vizagapatam	14.6
Madura	30.4	Vizagapatam	17.1	Godávári	21.9	Godávári	13.0
Trichinopoly	28.9	Godávári	15.5	Madura	19.9	Nellore	12.2

Municipalities.	Birth-rate per mille per annum.	Municipalities.	Birth-rate per mille per annum.	Municipalities.	Death rate per mille per annum.	Municipalities.	Death-rate per mille per annum.
Dindigul	51.6	Vizagapatam	28.9	Bezvada	110.5	Karur	27.4
Erode	47.4	Karur	28.7	Kurnool	59.6	Negapatam	27.2
Bezvada	43.7	Cuddapah	28.4	Cuddapah	51.8	Conjeeveram	27.0
Salem	43.5	Vellore	27.8	Cochin	51.2	Palni	27.0
Tuticorin	41.3	Cocanada	27.6	Rajahmundry	50.3	Adóni	26.7
Madras	41.0	Wálajápet	26.5	Madras	45.3	Mayavaram	26.0
Ongole	40.4	Coonoor	25.1	Srirangam	44.3	Tirupatúr	25.2
Coimbatore	40.0	Kurnool	24.2	Bellary	43.3	Calicut	25.0
Mangalore	39.3	Berhampore	23.9	Tuticorin	42.7	Erode	24.3
Cochin	38.9	Rajahmundry	23.9	Wálajápet	41.6	Vellore	22.6
Calicut	38.7	Anakápallo	23.3	Vizagapatam	39.6	Tellicherry	22.5
Palghat	37.3	Vaniyambádi	23.3	Berhampore	35.6	Anakápallo	22.4
Palamcottah	36.8	Guntúr	23.2	Bindipatam	34.9	Ootacamund	22.3
Vizianagrum	35.6	Conjeeveram	22.2	Ongole	33.9	Cocanada	22.0
Bindipatam	34.9	Nellore	21.8	Salem	33.0	Palghat	21.2
Adóni	34.8	Cannanore	21.4	Dindigul	32.2	Periyakulam	21.1
Tellicherry	34.7	Parlákimedi	21.0	Chicacole	32.1	Tirupati	19.9
Tirupatúr	34.4	Negapatam	20.5	Palamcottah	31.4	Nellore	18.7
Madura	32.9	Tanjore	19.3	Mannárgudi	30.9	Gudiyátam	17.2
Bellary	32.9	Masulipatam	19.2	Vizianagrum	30.8	Guntúr	17.1
Anantapur	31.8	Chicacole	19.0	Ellore	29.6	Masulipatam	16.4
Periyakulam	31.4	Mayavaram	18.2	Anantapur	29.3	Tinnevely	15.5
Gudiyátam	30.9	Tinnevely	17.0	Coimbatore	29.2	Trichinopoly	15.0
Palni	30.6	Chidambaram	16.9	Mangalore	29.2	Coonoor	15.0
Srirangam	30.3	Tirupati	16.3	Chidambaram	29.0	Cuddalore	13.5
Kumbakónam	30.2	Ellore	15.8	Madura	29.0	Vaniyambádi	13.5
Ootacamund	30.1	Trichinopoly	14.0	Kumbakónam	28.5	Cannanore	13.2
Mannárgudi	29.0	Cuddalore	11.6	Tanjore	27.8	Parlákimedi	11.7

8. *Principal causes of Death.*—The following table shows the deaths from the principal specified causes:—

	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	All other causes.	Total deaths.
<i>Districts.</i>							
March 1888	4,423	2,562	16,525	1,823	989	20,823	47,145
January 1889	10,555	3,089	19,869	3,236	883	27,952	65,584
February	5,050	3,077	15,065	2,176	793	20,657	46,818
March	3,695	4,128	16,282	2,096	949	20,629	47,780
<i>Municipalities.</i>							
March 1888	412	302	1,087	568	57	2,337	4,703
January 1889	1,682	170	1,171	899	53	2,859	6,234
February	619	193	1,061	618	52	2,416	4,959
March	306	290	1,095	596	55	2,608	4,950

9. *Cholera*—caused 3,695 deaths, against 5,050 in the preceding month. Of these, 306 occurred in the towns, against 619. Among the districts, the greatest stress of the disease fell on South Arcot, which returned 925 deaths. Next to it Tanjore suffered the most with 668 deaths, and next to it again Tinnevely with 433. Three districts—Bellary, Anantapur and Nilgiris—returned no deaths. In Ganjam, only 82 cholera deaths were recorded, notwithstanding the existence of scarcity amounting to famine in some portions of the district and the consequent undue prevalence of cholera. According to the season reports, the deaths from the week ending 9th to that ending 30th March amount to 156, and this is exclusive of two days in the beginning and one day at the end of the month. This has been brought to the notice of the Collector of the district for inquiry. Among the towns, Salem suffered the most from cholera, 73 deaths, and then Bezvada, 48. Thirty-three towns escaped with no deaths, while in six only a single death was recorded in each.

10. The deaths from *small-pox* numbered 4,128 in the districts inclusive of towns, against 3,077 in the previous month. In the towns alone, they were 290,

against 193. In no district was the disease ever absent during the month. It caused the greatest mortality in Kurnool, 707; Ganjam, 640; Bellary, 607. In Nilgiris, only a solitary death was recorded. Among the towns, Vizagapatam (40), Bellary, (35), and Berhampore (34), lost the greatest number of persons from small-pox. The disease was entirely absent in twenty-seven towns, and in five only one death was recorded in each.

11. *Fevers*—caused 16,283 deaths, against 15,065 in February, of which 1,095 were returned by the municipalities against 1,061. As usual, all the districts and towns suffered; but the greatest mortality among the districts occurred in Malabar, 1,406; Cuddapah, 1,393; North Arcot, 1,206; and Vizagapatam, 1,197. Nilgiris returned the lowest number, 85. Among the towns, Madras suffered by far the most, 348 deaths, the number next to it being 67, which occurred in Bellary.

12. The mortality from *bowel-complaints* amounted to 2,096 in the districts, against 2,176 in the preceding month. Of these, 596 were recorded in the towns, against 618. Deaths from bowel-complaints occurred in all the districts; the greatest number returned was by Chingleput, 293, and the smallest by Nilgiris, 9. Among the towns, as from fevers so also from bowel-complaints, by far the greatest mortality, 218, occurred in Madras; Madura returned the next highest number, 50. From five towns the returns were *nil*, and nine returned only one death each.

13. *Injuries* were the cause of death in 949 instances in the districts, against 793 in the previous month. In the towns, the deaths numbered 55, against 52. The mortality from "*all other causes*" not specified amounted to 20,629 in the districts, against 20,657 in the month previous. Of these, 2,608 were registered in the towns, against 2,416 in the previous month. Of the deaths from injuries, 211 were self-inflicted, 559 were caused by wounds and accidents, and 179 by snakes and wild beasts.

14. The following tables show the deaths from each of the several specified diseases, arranged in the order of occurrence:—

Districts.	Cholera.	Districts.	Small-pox.	Districts.	Fevers.	Districts.	Bowel-complaints.
South Arcot ..	925	Kurnool ..	707	Malabar ..	1,406	Chingleput ..	293
Tanjore ..	668	Ganjam ..	640	Cuddapah ..	1,393	Malabar ..	265
Tinnevelly ..	432	Bellary ..	607	North Arcot ..	1,206	Madras ..	218
Trichinopoly ..	273	South Arcot ..	361	Vizagapatam ..	1,197	Tanjore ..	182
Kistna ..	227	Malabar ..	294	Coimbatore ..	1,087	Tinnevelly ..	156
North Arcot ..	216	Cuddapah ..	270	Kurnool ..	1,075	South Canara ..	108
Madura ..	191	North Arcot ..	193	South Arcot ..	1,030	South Arcot ..	97
Godavari ..	154	Vizagapatam ..	174	Salem ..	1,009	South Arcot ..	88
Salem ..	149	Salem ..	162	Ganjam ..	927	Coimbatore ..	87
Cuddapah ..	137	Madura ..	153	Godavari ..	856	Madura ..	86
Ganjam ..	82	Tanjore ..	152	Kistna ..	856	Nellore ..	78
Coimbatore ..	60	Anantapur ..	121	Madura ..	589	Salem ..	73
Malabar ..	50	South Canara ..	70	Nellore ..	516	Godavari ..	65
Vizagapatam ..	43	Coimbatore ..	60	Bellary ..	476	Trichinopoly ..	57
Chingleput ..	42	Trichinopoly ..	58	Chingleput ..	464	Cuddapah ..	57
Kurnool ..	17	Chingleput ..	31	Trichinopoly ..	461	Bellary ..	44
South Canara ..	13	Kistna ..	28	South Canara ..	459	Ganjam ..	39
Nellore ..	10	Nellore ..	19	Tinnevelly ..	380	Kistna ..	32
Madras ..	6	Tinnevelly ..	14	Madras ..	348	Kurnool ..	22
Bellary ..	..	Madras ..	10	Anantapur ..	248	Anantapur ..	21
Anantapur ..	..	Godavari ..	3	Tanjore ..	215	Vizagapatam ..	19
Nilgiris ..	..	Nilgiris ..	1	Nilgiris ..	85	Nilgiris ..	9

Municipalities.	Cholera.	Municipalities.	Small-pox.	Municipalities.	Fevers.	Municipalities.	Bowel-complaints.
Salem ..	73	Vizagapatam ..	40	Madras ..	348	Madras ..	218
Bezvada ..	48	Bellary ..	35	Bellary ..	67	Madura ..	50
Negapatam ..	32	Berhampore ..	34	Kurnool ..	49	Tanjore ..	35
Cochin ..	29	Adoni ..	22	Madura ..	36	Negapatam ..	33
Ellore ..	25	Calicut ..	19	Vellore ..	29	Kumbakonam ..	18
Rajahmundry ..	22	Vizianagram ..	18	Trichinopoly ..	24	Calicut ..	18
Cuddapah ..	21	Kurnool ..	15	Rajahmundry ..	23	Cocanada ..	11
Palamcottah ..	11	Tanjore ..	12	Tanjore ..	23	Conjeeveram ..	11
Tuticorin ..	9	Madras ..	10	Coimbatore ..	23	Rajahmundry ..	10
Madras ..	6	Chicacole ..	8	Kumbakonam ..	22	Chidambaram ..	10
Cuddalore ..	5	Mannargudi ..	8	Negapatam ..	21	Trichinopoly ..	10
Palni ..	5	Vellore ..	8	Salem ..	20	Mangalore ..	10
Mannargudi ..	4	Kumbakonam ..	7	Vizagapatam ..	18	Srirangam ..	9
Chidambaram ..	3	Coimbatore ..	7	Vizianagram ..	17	Mayavaram ..	9
Karur ..	3	Cuddalore ..	6	Chidambaram ..	17	Tuticorin ..	9
Masulipatam ..	2	Cannanore ..	6	Cuddapah ..	17	Mannargudi ..	8
Tanjore ..	2	Anakapalle ..	5	Berhampore ..	16	Palamcottah ..	8
Berhampore ..	1	Bezvada ..	5	Mangalore ..	15	Cuddapah ..	8
Vizianagram ..	1	Chidambaram ..	5	Tellicherry ..	15	Ongole ..	7
Guntur ..	1	Trichinopoly ..	5	Conjeeveram ..	14	Berhampore ..	6
Nellore ..	1	Palni ..	4	Srirangam ..	14	Bezvada ..	6
Mayavaram ..	1	Negapatam ..	2	Chicacole ..	13	Tinnevelly ..	6
Calicut ..	1	Gudiyatam ..	2	Tuticorin ..	13	Salem ..	6
Chicacole ..	..	Salem ..	2	Tirupati ..	13	Coimbatore ..	6
Parlakimedi ..	..	Bimlipatam ..	1	Calicut ..	13	Vizagapatam ..	5
Vizagapatam ..	..	Rajahmundry ..	1	Ellore ..	12	Ellore ..	5
Bimlipatam ..	..	Dindigul ..	1	Nellore ..	12	Walajapet ..	5
Anakapalle ..	..	Walajapet ..	1	Cuddalore ..	12	Karur ..	5
Cocanada ..	..	Erode ..	1	Tirupatūr ..	12	Ootacamund ..	5
Ongole ..	..	Parlakimedi ..	..	Palghat ..	12	Palghat ..	6
Conjeeveram ..	..	Cocanada ..	..	Parlakimedi ..	11	Periyakulam ..	4
Trichinopoly ..	..	Ellore ..	..	Periyakulam ..	11	Dindigul ..	4
Srirangam ..	..	Masulipatam ..	..	Adoni ..	11	Vellore ..	4
Kumbakonam ..	..	Guntur ..	..	Vaniyambadi ..	11	Bimlipatam ..	3
Madura ..	..	Nellore ..	..	Bezvada ..	10	Vizianagram ..	3
Periyakulam ..	..	Ongole ..	..	Gudiyatam ..	8	Gudiyatam ..	3
Dindigul ..	..	Conjeeveram ..	..	Mayavaram ..	7	Tellicherry ..	3
Tinnevelly ..	..	Srirangam ..	..	Dindigul ..	7	Cochin ..	3
Kurnool ..	..	Mayavaram ..	..	Karur ..	7	Chicacole ..	2
Bellary ..	..	Madura ..	..	Walajapet ..	6	Anakapalle ..	2
Adoni ..	..	Periyakulam ..	..	Ootacamund ..	6	Nellore ..	2
Anantapur ..	..	Tinnevelly ..	..	Anakapalle ..	6	Kurnool ..	2
Vellore ..	..	Palamcottah ..	..	Masulipatam ..	5	Guntur ..	1
Gudiyatam ..	..	Tuticorin ..	..	Guntur ..	5	Cuddalore ..	1
Walajapet ..	..	Cuddapah ..	..	Ongole ..	5	Palni ..	1
Tirupati ..	..	Anantapur ..	..	Mannargudi ..	5	Bellary ..	1
Vaniyambadi ..	..	Tirupati ..	..	Anantapur ..	5	Adoni ..	1
Tirupatūr ..	..	Vaniyambadi ..	..	Cochin ..	5	Tirupatūr ..	1
Coimbatore ..	..	Karur ..	..	Bimlipatam ..	4	Erode ..	1
Erode ..	..	Palni ..	..	Coonoor ..	4	Coonoor ..	1
Ootacamund ..	..	Ootacamund ..	..	Cocanada ..	3	Cannanore ..	1
Coonoor ..	..	Coonoor ..	..	Erode ..	3	Parlakimedi ..	..
Mangalore ..	..	Tellicherry ..	..	Cannanore ..	3	Masulipatam ..	..
Tellicherry ..	..	Palghat ..	..	Tinnevelly ..	2	Anantapur ..	..
Palghat ..	..	Cochin ..	..	Palamcottah ..	2	Tirupati ..	..
Cannanore ..	..	..	..	..	..	Vaniyambadi ..	..

15. *Towns of 25,000 inhabitants and upwards.*—The registered events in these towns (Ootacamund included) in a population of 906,380 amounted in March to 2,077 births and 1,945 deaths, yielding ratios of 27·5 and 25·7 per mille per annum respectively. Compared with the registered results of the twenty-eight great towns of England and Wales and the first-class towns of Bengal, they stand thus:—

	Birth-rate per mille per annum.	Death-rate per mille per annum.
Twenty-eight great towns of England and Wales ..	30·3	19·0
First-class towns of Bengal	20·9	21·9
Do. of Madras	27·5	25·7

16. The following table gives the particulars for each of the towns:—

	Popula- tion.	Cholera.	Small- pox.	Fevers.	Bowel- complaints.	Injuries.	All other causes.	Total deaths.	Total births.
Trichinopoly	84,449	..	5	24	10	3	64	106	99
Madura	76,847	..	..	36	50	3	97	186	211
Salem	59,631	73	2	20	6	3	60	164	216
Calicut	57,085	1	19	13	18	4	64	119	184
Tanjore	54,745	2	12	23	35	..	55	127	88
Negapatam	53,776	32	2	21	33	..	34	122	92
Bellary	53,460	..	35	67	1	1	89	193	147
Kumbakonam	50,098	..	7	22	18	..	72	119	126
Cuddalore	43,545	5	6	12	1	..	25	49	42
Vellore	40,958	..	8	29	4	..	36	77	95
Coimbatore	38,967	..	7	23	6	1	58	95	130
Conjeeveram	37,275	..	..	14	11	1	58	84	69
Palghat	36,339	..	..	12	5	..	48	65	113
Masulipatam	35,056	2	..	5	..	1	40	48	56
Mangalore	32,099	..	..	15	10	1	52	78	105
Cocanada	30,441	..	..	3	11	..	42	56	70
Vizagapatam	30,291	..	40	18	5	1	36	100	73
Nellore	27,505	1	..	12	2	4	24	43	50
Cannanore	26,386	..	6	3	1	..	19	29	47
Ellore	25,092	25	..	12	5	..	20	62	33
Ootacamund	12,335	..	..	6	5	..	12	23	31
Total	906,380	141	149	390	237	23	1,005	1,945	2,077

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2. The returns will be published in the *Fort St. George Gazette*.

(True Extract.)

J. F. PRICE,
Chief Secretary.

To the Revenue Department.

„ Board of Revenue.

„ Surgeon-General with the Government of Madras.

„ Sanitary Commissioner for Madras.

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Vital Statistics.

Recording the Sanitary Commissioner's remarks
on the returns of—in the Districts and Muni-
cipalities of Madras Presidency for March 1889,
and ordering their publication in the *Fort St.*
George Gazette.

PUBLIC DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

letter from the Sanitary Commissioner, dated 15th July 1889 No. 924

READ the following

ORDER THEREON, 31 July 1889 No. 641

Recorded.

The returns will be published in the Fort
St. George Gazette.

To the Revenue Department.

„ Board of Revenue.

„ Surgeon-General with the Government of Madras.

„ Sanitary Commissioner. 27

H. E.

PUBLIC DEPARTMENT.

(Sanitary).

No. 642 of 1889.

To

THE UNDER SECRETARY OF
STATE FOR INDIA.

SIR,

I AM directed to forward, for the information of the Right Honorable the Secretary of State for India, copy of the Proceedings of this Government, No. 642 Public, of to-day's date, recording the Sanitary Commissioner's remarks on the returns of vital statistics in the several districts in this Presidency, for the month of

March 1889.

2. The statistics are annexed.

Chief Secretary.

Public Department

From

Surgeon Major J. A. Loring

Sanitary Commissioner

for Madras

To

The Chief Secretary
to Government

Public Department

Dated 15th }
Supd 20th } July 1889
Recd

No. 924

Encl. 1

Subject

Submits Vital Statistical
Reports of the districts and
municipalities of the Madras
Presidency for March 1889.

	Population	Cholera	Small-pox	Fever	Bowel com-plaints	Erysipels	All other causes	Total deaths	Total births
Trichinopoly	84449	.	5	24	10	3	64	106	99
Madura	76847	.	.	36	50	3	97	186	211
Salem	59631	73	2	20	6	3	60	164	216
Calicut	57085	1	19	13	18	4	64	119	184
Tanjore	54745	2	12	23	35	.	55	127	88
Vengalpatam	53776	32	2	21	33	.	34	122	92
Bellary	53460	.	35	67	1	1	89	193	147
Kumbakonam	50098	.	7	22	18	.	72	119	126
Andalore	43545	5	6	12	1	.	25	49	42
Kellore	40958	.	8	29	4	.	36	77	95
Coimbatore	38967	.	7	23	6	1	58	95	130
Carpeveram	37275	.	.	14	11	1	58	84	69
Palghat	36339	.	.	12	5	.	48	65	113
Masulipatam	35056	2	.	5	.	1	40	48	56
Mangalore	32099	.	.	15	10	1	52	78	105
Goanada	30441	.	.	3	11	.	42	56	70
Vizagapatam	30291	.	40	18	5	1	36	100	73
Kellore	27505	1	.	12	2	4	24	43	50
Channore	26386	.	6	3	1	.	19	29	47
Ellore	25092	25	.	12	5	.	20	62	33
Cotacamund	12335	.	.	6	5	.	12	23	31
Total	906380	141	149	390	237	23	1005	1945	2077

I have the honor to be

Sir

your most obedt servant

Jas. Anderson *Surgeon Major*

15 Towns of 25000 inhabitants and upwards. The registered events in these towns (Cotacamund included) in a population of 906,380 amounted in March to 2077 births and 1945 deaths, yielding ratios of 27.5 and 25.7 per mille per annum respectively. Compared with the registered results of the twenty-eight great towns of England and Wales and the first class towns of Bengal they stand thus:-

	Birth rate per mille per annum	Death rate per mille per annum
Twenty-eight great towns of England and Wales	30.3	19.0
First class towns of Bengal	20.9	21.9
— of Madras	27.5	25.7

16 The following table gives the particulars for each of the towns.

the districts against 793 in the previous month. In the towns the deaths numbered 55 against 52. The mortality from "all other causes" not specified amounted to 20,629 in the districts against 20,657 in the month previous. Of these 2,608 were registered in the towns against 2,416 in the previous month. Of the deaths from injuries 211 were self-inflicted, 559 were caused by wounds and accidents and 179 by snakes and wild beasts.

14 The following tables show the deaths from each of the several specified diseases arranged in the order of occurrence.

most 348 deaths, the number next to it being 67 which occurred in Bellary.

12 The mortality from bowel-complaints amounted to 2096 in the districts against 2176 in the preceding month. Of these 596 were recorded in the towns against 618. Deaths from bowel-complaints occurred in all the districts; the greatest number returned was by Chingleput 293 and the smallest by Nilgiris 9. Among the towns as from fevers so also from bowel-complaints by far the greatest mortality, 218, occurred in Madras; Madurai returned the next highest number 50. From five towns the returns were nil and nine returned only one death each.

13 Injuries were the cause of death in 949 instances in the

was the disease ever absent during the month. It caused the greatest mortality in Kurnool 707, Ganyam 640, Bellary 607. In Nilgiris only a solitary death was recorded. Among the towns Vizagapatam, 40, Bellary, 35, and Berhampore, 34, lost the greatest number of persons from small-pox. The disease was entirely absent in twenty seven towns and in five only one death was recorded in each.

11 Fevers caused 16,283 deaths against 15,065 in February, of which 1095 were returned by the municipalities against 1,061. As usual all the districts and towns suffered, but the greatest mortality among the districts occurred in ^{Malabar 140} Cuddalore 1393, North Arcot 1206 and Vizagapatam 1197. Nilgiris returned the lowest number 85. Among the towns Madras suffered by far the most

the existence of scarcity, amounting to famine in some portions of the district and the consequent undue prevalence of cholera. According to the Season Reports the deaths from the week ending 9th to that ending 30th March, amount to 156 and this is exclusive of two days in the beginning and one day at the end of the month. This has been brought to the notice of the collector of the district for enquiry. Among the towns Salem suffered the most from cholera 73 deaths and then Bellary 48. — Thirty three towns escaped with no deaths while in six only a single death was recorded in each.

10 The deaths from Small-pox numbered 4,128 in the districts inclusive of towns against 3,077 in the previous month. In the towns alone they were 290 against 193. In no district

was

8. Principal causes of death:- The following table shows the deaths from the principal specified causes.

		Cholera	Small-pox	Fever	Bowel complaints	Dysentery	All other causes	Total deaths
<u>Districts</u>								
March 1888		4423	2562	16525	1823	989	20823	47145
January 1889		10555	3089	19869	3236	883	27952	65584
February		5050	3077	16865	2176	793	20657	48818
March		3695	4128	16283	2096	949	20629	47780
<u>Municipalities</u>								
March 1888		412	302	1087	508	57	2337	4703
January 1889		1082	170	1171	899	53	2859	6234
February		619	193	1061	618	52	2416	4759
March		306	290	1095	596	55	2608	4950

9 Cholera caused 3695 deaths — against 5050 in the preceding month. Of these 306 occurred in the towns — against 619. Among the districts, the greatest stress of the disease fell on — South Arcot, which returned 925 deaths. Next to it Tanjore suffered the most — with 668 deaths and next to it again Tirunelveli 432. Three districts Bellary, Anantapur and Nilgiris returned no deaths. In Ganjam only 82 cholera deaths were recorded, notwithstanding the

Municipalities	Birth rate per mille per annum	Municipalities	Death rate per mille per annum
Dundigol	51.6	Bezwada	110.5
Brook	47.4	Kurnool	59.6
Bezwada	43.7	Cuddalore	57.8
Salem	43.5	Cochin	57.2
Tuticorin	41.3	Rajahmundry	50.3
Madras	41.0	Madras	45.3
Ongole	40.2	Srirangam	44.3
Chimbatore	39.2	Bellary	43.3
Mangalore	39.3	Tuticorin	42.7
Cochin	38.9	Malapet	41.6
Calicut	38.7	Vizagapatam	39.6
Palghat	37.3	Buchampore	35.6
Palameottah	36.8	Bimlipatam	36.9
Vizianagaram	35.6	Ongole	33.9
Bimlipatam	34.9	Salem	32.0
Adoni	34.8	Dundigol	32.2
Tellicherry	34.7	Chitradurga	32.1
Triplicane	34.4	Palameottah	31.4
Madras	32.9	Manamangudi	30.9
Bellary	32.9	Vizianagaram	30.8
Anantapur	31.8	Ellore	29.8
Periyakulam	31.4	Anantapur	29.3
Hydrabad	30.9	Chimbatore	29.2
Palghat	30.6	Mangalore	29.2
Srirangam	30.3	Chelumburam	29.0
Kumbakonam	30.2	Madras	29.0
Chitradurga	30.1	Kumbakonam	28.5
Manamangudi	29.0	Tanjore	27.8
Vizagapatam	28.9	Kanur	27.4
Kanur	28.7	Nagapattinam	27.2
Cuddalore	28.4	Chitradurga	27.0
Vellore	27.8	Palghat	27.0
Koanada	27.6	Adoni	26.7
Malapet	26.5	Mayavaram	26.0
Coimbatore	25.1	Triplicane	25.2
Kurnool	24.2	Calicut	25.0
Buchampore	23.9	Brook	24.3
Rajahmundry	23.9	Vellore	22.6
Anakapalle	23.3	Tellicherry	22.6
Vaniyambadi	23.3	Anakapalle	22.6
Guntur	23.2	Chitradurga	22.3
Chitradurga	22.2	Coimbatore	22.0
Ellore	21.8	Palghat	21.2
Mayavaram	21.4	Periyakulam	21.1
Parlakimedi	21.0	Triplicane	19.9
Nagapattinam	20.5	Vellore	18.7
Tanjore	19.3	Hydrabad	17.2
Chitradurga	19.2	Guntur	17.1
Chitradurga	19.0	Chitradurga	16.4
Mayavaram	18.2	Tirunelveli	15.5
Tirunelveli	17.0	Tirunelveli	15.0
Chelumburam	16.9	Coimbatore	15.0
Triplicane	16.3	Cuddalore	13.5
Ellore	15.8	Vaniyambadi	13.5
Tirunelveli	14.0	Chitradurga	13.2
Cuddalore	11.6	Parlakimedi	11.7

accounted for by a comparatively heavy mortality from cholera - 48 deaths, or more than one half of the total, 86, having occurred from this cause.

7. The following tables show the birth and death rates returned by each district and town arranged in the order of sequence.

Districts	Birth rate per mille per annum	Districts	Death rate per mille per annum
Bellary	42.7	Madras	45.3
Madras	41.0	Kurnool	37.3
Kurnool	37.9	Bellary	37.2
Anantapur	33.7	South Arcot	27.1
South Canara	33.7	Ganjam	25.6
Coimbatore	33.4	Chingleput	25.8
Salem	32.6	Buddalore	23.5
Chingleput	32.4	Anantapur	23.5
Madura	31.1	Tanjore	23.3
Trichinopoly	30.4	Trichinopoly	21.9
Buddalore	28.9	Madura	19.9
Kistna	27.7	Nilgiris	19.9
Tinnevely	27.5	Tinnevely	19.6
North Arcot	27.1	North Arcot	19.8
Tanjore	24.9	South Canara	19.2
South Arcot	23.6	Salem	19.4
Malabar	23.4	Kistna	17.5
Nellore	20.7	Coimbatore	16.8
Nilgiris	20.3	Malabar	15.7
Ganjam	17.2	Vizagapatam	14.6
Vizagapatam	17.1	Godavari	13.0
Godavari	15.5	Nellore	12.2

6 Taking each district and town individually, Bellary district stands at the top of the list with the highest birth rate 42.7 per mille per annum, and this position it has maintained for some past; - while Godavari is at the bottom with only 15.5 per mille. In regard to the death rates Madras (town) returned the highest rate 45.3 and Nellore the lowest 12.2. Eliminating Madras, Kurnool stands next on the list with 37.3 per mille and Godavari is next above Nellore with 13.0. There appears to be no improvement ^{in registration} in the Godavari district, the defectiveness of which has already been noted. Among the towns the highest birth rate, 51.6, was recorded in Dindigul and the lowest in Buddalore 11.6. Bezwada returned the highest death rate 110.5 per mille and Parlakimedi the lowest 11.7. The high death rate in Bezwada is accounted

Presidency is contrasted with those of Bengal, North-west Provinces and Punjab:-

	Districts				Municipalities			
	Births	Deaths	Birth rate	Death rate	Births	Deaths	Birth rate	Death rate
Average of five previous months March 1888	61847	47056	26.7	20.3	4101	4547	31.2	30.6
March 1888	63902	47145	27.9	20.5	4790	4703	31.0	30.5
January 1889	63441	46584	27.3	28.2	4623	6234	29.8	40.1
February	54075	46818	23.5	20.3	4152	4959	26.7	31.9
March	63075	47780	27.1	20.5	4791	4950	30.9	31.9

	Death rate per mille per annum
Bengal	20.7
North-west Provinces	22.8
Punjab	22.2
Madras	20.5

5 How the different sexes and the several classes of the community were affected will be seen from the statements below:- As usual, on the whole, the male elements predominated.

	Sexes			Classes				Ratio per mille per annum			
	Males	Females	Percentage females	Christians	Hindus	Mahomedans	Total	Christians	Hindus	Mahomedans	Total
Districts											
Births	32681	30394	107.5	1162	57876	4037	63075	21.8	27.3	26.6	27.1
Deaths	25227	22553	111.8	825	44079	2876	47780	18.2	20.8	28.9	20.5
Municipalities											
Births	2514	2277	110.4	361	3733	697	4791	35.3	30.3	32.0	30.9
Deaths	2562	2388	107.3	285	3931	734	4950	27.9	31.9	33.3	31.9

small-pox and fevers were more fatal.

3. The total number of births registered was 63,075 against 54,075 in the previous month, of which 4,791 occurred in the Municipalities against 4,152 in February. The total deaths numbered 47,780 inclusive of 4,950 which took place in the towns. The numbers for February were 46,818 and 4,959 respectively.

4. Proportionally considered with the population (27,880,261 inclusive of towns) embraced by registration the total births represent a ratio of 27.1 per mille per annum in the districts and in the towns 30.9 on a population of 1,861,518. The total death rates were 20.5 and 31.9 respectively. In the following table these results are compared with the past months of the year, the corresponding months of the past year and the average of five previous corresponding periods; and in the table subjoined the mortality rate of the Presidency

Office of Sanitary Commr.

No 924

Madras 15th July 1889

From

Surgeon Major J. A. Laing

Sanitary Commissioner for Madras

To

The Chief Secretary to Government
Public Department

Sir,

I have the honor to submit for
the information of Government and
publication in the Fort Saint George
Gazette the usual abstract statements
of births and deaths in the districts and
municipalities of the Madras Presidency
for the month of March 1889.

2 The period on the whole appears
to have been somewhat unhealthier than
the preceding month, February, as
indicated by a higher mortality. It
is satisfactory, however, to note a
diminution in the mortality from
cholera and bowel-complaints, but
small-pox