

Public (1896) Department.

ORDINARY MS.

G.O., No. 949

DATED 3-9-96

INDEXED.

[Despatch Abstract.]

Recording proceedings, L & M Dept.,
communicating the Sanitary Commr's
remarks re: the necessity for
insisting upon the vaccination
of pilgrims to the Haj.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

CURRENT NO. 1173

Nos. 1173, 1174 L., 25TH JUNE 1896.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following paper :—

Proceedings of the Sanitary Board (General Sanitation Branch), No. 220-S.B., dated 18th May 1896.

PRESENT.

Surgeon-Lieut.-Colonel W. G. KING, M.B., C.M., D.P.H., Sanitary Commissioner for Madras.

J. A. JONES, Esq., M.I.C.E., F.R.S.E., Sanitary Engineer to Government

Read—the following papers :—

G.O., No. 359 L., dated 21st February 1896.

„ „ 651 L., „ 4th April 1896.

Resolution.—The Board resolves to submit to Government the Sanitary Report of the Sanitary Commissioner for Madras and the report of the Sanitary Engineer to Government for 1895 bound together in one volume, as directed in the Government orders read above.

2. The diagrams and map appearing in the Sanitary Report will be inserted in the bound copies when issued.

(Signed) W. G. KING, D.P.H., Surgn.-Lieut.-Colonel,
Secy., Genl. Sanitation Branch, Sany. Board.

To the Chief Secretary to Government, Local and Municipal Department.

ORDER—No. 1173 L., dated 25th June 1896.

With its proceedings read above, the Sanitary Board submits the reports of the Sanitary Commissioner and the Sanitary Engineer on the administration of their departments for the year 1895.

2. The Sanitary Board, as reconstituted on the 1st January 1895, consisted of the Chief Engineer, Public Works Department, Roads and Buildings Branch, and the Sanitary Commissioner and the Sanitary Engineer, the first-mentioned officer being the President and the last two the Secretaries to the Board in its branches of Sanitation and Engineering, respectively. The draft rules which the Board was required to submit on the lines laid down by Government were received in July 1895, but orders revising and sanctioning them were not passed until after the close of the year.

GENERAL SANITATION.

3. *Rainfall*.—The total rainfall of the Presidency was 49.40 inches, against 43.25 in the previous year, and 44.92 inches, the average for the ten years ending 1892. The mean quantity of rain registered was 28.61 inches during the South-west monsoon and 16.46 inches during the North-east monsoon, the average for the periods mentioned above being 24.22 and 16.38 inches, respectively. The South-west monsoon continued to be on the whole satisfactory, though in Madras, Chingleput and Kurnool there was a deficiency as compared with the previous year. There was also an improvement in the North-east monsoon in all districts, except in those of the East Coast—North, Nellore and Kurnool. In Ganjám, Vizagapatam and South Arcot the aggregate rainfall exceeded the average of the ten years ending 1892 by more than ten inches in each case.

4. *Prices of Food-grains*.—The following table shows the prices of the principal food-grains as compared with those of the preceding two years and the average for the ten years ending 1892:—

	Number of seers for the rupee.			Average for the ten years ending 1892.
	1895.	1894.	1893.	
Rice	12.8	12.5	11.2	13.9
Ragi	26.5	23.5	20.1	27.4
Cholam	23.5	21.3	18.1	25.2

In spite of the favourable rainfall above referred to, the prices of these grains were still above the average for the ten years ending 1892. Compared with 1894, however, there was a satisfactory decline in all districts except in Anantapur, Coimbatore, Madras, North Arcot and Salem as regards rice, in Madras and Tinnevely as regards cholam and ragi, and in Trichinopoly as regards rice and cholam.

5. * *Vital Statistics*.—The population for which returns of births and deaths were received was 33,605,784 according to the census of 1891, or 127,337 less than the figure for the preceding two years. The decrease occurs in Vizagapatam, where, the population for which returns were received not being known, the total population of the district was adopted in those years. The system of registration which was in force in previous years underwent no change, but proposals to improve it are still under consideration in the Revenue Department, and since the close of the year a uniform system of registration has been prescribed for all municipalities. The Government is, however, glad to learn that increased attention was bestowed on the subject by the Revenue authorities and that the Sanitary Commissioner and his Deputy undertook to verify registration during their inspections. The report promised in paragraph 9 regarding the suggestion made by the Collector of Coimbatore to utilize the services of Deputy Inspectors of Vaccination in this direction has just been received and will be disposed of separately.

6. *Births*.—The number of births registered during the year was 976,572, or 27.0 per mille of the estimated population against 26.4 in the previous year, and was the highest yet recorded except in the year 1891. Taking the census population, the Presidency rate was 29.1 per mille against 27.7 in 1894, the rates for municipalities, rural towns and rural villages being 35.3, 25.2 and 28.7 per mille, respectively, against 33.2, 25.2 and 27.4 in that year. Municipal towns and rural villages showed some advance, while rural towns remained stationary. In municipalities considerable improvement is stated to have been indirectly effected by the working of the system laid down in G.O., No. 1502 M., dated 19th October 1894,

* The figures given in this paragraph include Europeans and Eurasians numbering some 40,000; the succeeding paragraphs give statistics relating to Natives only. Full particulars regarding Europeans and Eurasians will be found in Appendix XII.

for the better checking of the results of compulsory vaccination. The advance noticeable in rural villages may in a measure be ascribed to the increased attention said to have been bestowed on the subject by Revenue officers. The indifferent results in rural towns, containing over 10,000 inhabitants, is, no doubt, due to the want of a separate staff to attend to the work of registration, and this state of affairs will probably continue until the Local Boards Act V of 1884 is amended—*vide* paragraph 5 of G.O., No. 1210 L., dated 2nd July 1894. Taking the districts individually, there was an advance in all except Anantapur, North Arcot, South Canara, Ganjám, Nilgiris and Salem. Excluding Madras, the highest birth-rate was recorded in Chingleput (38.4 per mille), as in the preceding two years, and in South Arcot, Bellary, South Canara, Kistna, Kurnool, Madras, Salem and Tinnevely the rate was above 30 per mille, while in Gódvári, Malabar and Ganjám it ranged from only 24.3 to 17.3, but in the first two districts there was some improvement as compared with the previous year. Among municipalities, Vániyambádi returned the highest birth-rate (53.0), as in the previous year. The rate was more than 40 per mille in Anantapur, Adóni, Coimbatore, Palghat, Gudiyáttam, Dindigul, Periyakulam, Cannanore and Tiruppattúr, in the last four of which similar results were achieved in 1894 also. In thirty-three towns it was between 30 and 40, while in thirteen others it ranged from 30 to 20, the worst results being reported from Cocanada (20.2), Chicacole (21.6), Cuddapah (22.7), Trichinopoly (23.2), Chidambaram (24.0), and Berhampur (24.2). The remarks of the Sanitary Commissioner in this connection in paragraphs 19 to 22 of his report will be communicated to the municipal councils concerned for very careful attention. The Government trusts that greater energy will be displayed by them in future in prosecuting people for failure to register births—a matter which has been the subject of very frequent remark in the reviews of Municipal Administration reports—and in seeing that the provisions of the Act in this respect are duly observed.

7. *Deaths*.—The annexed statement exhibits the number of deaths per mille of the population recorded during the year under review compared with the figures of the preceding five years:—

	* 1890.	† 1891.	† 1892.	† 1893.	† 1894.	† 1895.
Cholera	1.2	2.9	2.3	1.0	1.3	0.6
Small-pox	1.0	1.2	1.3	0.8	0.3	0.1
Fevers	9.2	7.3	8.3	7.7	8.0	8.3
Dysentery and diarrhoea	0.9	1.0	1.0	0.7	0.7	0.7
Injuries	0.4	0.4	0.3	0.3	0.4	0.3
Other causes	10.1	9.4	9.1	8.8	9.3	9.6
Total	22.8	22.2	22.3	19.3	20.0	19.6

* Calculated on the census population of 1881.

† Calculated on the census population of 1891.

‡ Includes other bowel-complaints also.

8. The mortality in 1895 (658,719) was less than that recorded in any of the preceding four years, except 1893; but if the rates calculated on the estimated population and shown in the table appended to paragraph 26 of the Sanitary Commissioner's report are taken into account, it may be concluded, as stated by that officer, that although there was no decided improvement in the general health of the population, the year was, on the whole, a healthy one and compared favourably with the average of the preceding five years. The mortality among infants under one year of age was 162.3 per mille of the births registered during the year against 160.6 in 1894, but the rate for municipalities rose from 216 to 223. Infantile mortality was very high in the city of Madras (273.9), and the districts of Nilgiris (220.9) and Tanjore (206.1), while in twenty-nine municipal towns against twenty-four in 1894, the rate was more than 200 per mille, Negapatam, as in that year, heading the list with 293.7 per mille. As Dr. King remarks, the higher rate in municipalities may be due to the deaths of infants in rural areas escaping the observation of the subordinates responsible for their registration and to the sanitary condition of the municipal towns being far from satisfactory.

9. Taking the figures individually, the highest death-rate (38.0) was, as usual, recorded in Madras — a result which may be partly ascribed to the greater accuracy of the returns and partly to the insanitary condition of that city. The town was inspected by the Sanitary Commissioner in 1894, and, from the notes then recorded by him, it appears that no substantial improvement has been effected in its sanitary condition. The Commissioners, however, have deferred carrying out the recommendations contained in those notes until the requirements of the water-supply and drainage schemes have been first considered. A sum of four lakhs was borrowed by them for expenditure upon the extension and improvement of the water-supply; a scheme for the purification of the Cooum, and the drainage and water-supply schemes drawn up by Mr. Ellis, forming in reality parts of the schemes proposed by Mr. Cousins in 1893, were approved by Government. Proposals for the more satisfactory disposal of the rubbish of the city by the construction of incinerators were also sanctioned by Government, and a grant of Rs. 3,50,000 was made for this purpose for the purchase of the necessary conservancy plant, and for such other permanent sanitary improvements as may be decided on; preliminary steps were taken with a view to closing burial-grounds within municipal limits; and surveys were made preparatory to opening out streets in some of the most overcrowded parts of the town. It is hoped that the execution of these works will cause a real advance in the sanitary condition of the city. The death-rates were also high in Tinnevely (25.0) and Nilgiris (24.9), while the very low rate reported from Ganjám (13.6) points to inaccurate registration.

10. The average death-rate in rural villages was 19.0 per mille against 19.2 in 1894, the mortality being highest in Nilgiris and Tinnevely (24.8 each), while in eight others—South Arcot, Bellary, Chingleput, Cuddapah, Kurnool, Tanjore, Trichinopoly and Vizagapatam—the rate varied from 20.4 to 22.5. In the remaining districts it was below 20, being lowest in Ganjám (13.2). In rural towns also the rates were generally low, the average being 18.9,—Kayalpatnam, however, returning a rate of 42.9. As already observed in the case of births, this may be due to defective registration, as is evidenced by the

Pithápuram	7.7	rates in the towns marginally noted. The
Samalkot	5.7	Collectors concerned are requested to
Ambur	6.1	report what measures they propose to
Shendamangalam	9.1	adopt to improve registration.
Tiruvannámalai	8.4	

11. Turning to municipalities, where more trustworthy statistics are available, the average rate was 28.9 per mille against 30.0 in the previous year, while the individual rate varied from 37.1 in Periyakulam to 16.5 in Anantapur. It was high in Periyakulam (37.1) and Chidambaram (35.2), in nine towns it was above 30, and in forty-two it ranged from 30 to 20, while in the remaining three—Anantapur, Cocanada and Srivilliputtúr—it was below 20. It is evident that, notwithstanding the frequent remarks of Government on the subject, sufficient care is not always bestowed on this branch of Municipal administration.

12. *Principal Diseases—Cholera.*—The mortality under this head was smaller than that recorded in any year since 1887. The disease was most virulent in January, but in the last three months of the year very few deaths were recorded. All the districts except Gódvári, Kistna and Nilgiris were subject to this scourge, and Tinnevely and South Arcot were the most affected, the number of deaths being 4,649 and 4,307, respectively. Dr. King attributes this in a great measure to contamination of the water-supply in these two districts. The same argument might however be applied to other districts. The average death-rate in municipal and other towns was only 0.8 per mille against 2.1 in 1894, and that in rural tracts 0.6 against 1.2. Among municipalities, Chidambaram headed the list with a rate of 11.6 per mille, and Periyakulam followed with a rate of 7 per mille. The mortality from this cause in twenty-six other towns was below 3.3 per mille, while the remaining municipalities enjoyed perfect immunity. Among rural towns, Ramnad in Madura, Tenkási, Kalladakurchi and Kulasekarapatnam in Tinnevely, and the Chidambaram rural circle fared worst, the rates being 12.1, 9.4, 6.8, 6.8 and 8.7 per mille, respectively.

13. *Small-pox.*—The number of deaths from small-pox was only 5,111, or 0.1 per mille of the population, against 11,207 in the previous year, 27,289 in 1893 and 43,757 in 1892. This continued fall is very satisfactory. The rate of mortality in districts was 0.2 and in municipalities 0.1, against 0.3 and 0.2, respectively, in 1894. The disease was severe in the districts of Anantapur, Bellary and Kurnool, carrying off 0.5, 0.6 and 0.6, respectively, per mille of the population, while in Malabar, where it was very destructive in previous years, the mortality was only 0.03 per mille. The lowest death-rate (0.006) was recorded as usual in Madras, where vaccination is carried on in an efficient and systematic manner. Among district municipalities, Vellore heads the list with a rate of 1.2 and this is followed by Rajahmundry with a rate of 0.9, while twenty-two towns, against fifteen in the previous year, enjoyed perfect immunity from this cause. This subject will be more fully noticed when the vaccination report for 1895–96 is reviewed by Government.

14. *Fevers.*—The mortality under this head again rose from 270,456 to 277,337. The highest death-rates were recorded in the Nilgiris (19.2), Vizagapatam (18.2), Cuddapah (16.0) and Kurnool (15.1), and the lowest in Tanjore (2.3) and Anantapur (2.8). The death-rate in municipalities was, as usual, higher than in rural tracts, a rate of 10 per mille being exceeded in eleven towns. Cuddapah again exhibits the highest rate (18.3) and is followed by Madras with a rate of 14.2. On the other hand, Cocanada (2.6), Ellore (3.9) and Cochin (4.0) were the least affected towns.

15. *Dysentery and Diarrhoea.*—The deaths recorded under these heads numbered 23,937 against 24,801 in the previous year, the rate being 0.7 per mille in districts and 3.4 in municipalities against 0.7 and 3.5, respectively, in that year; the high rate in the latter case is probably due to the causes already mentioned in paragraph 8 above regarding infant mortality. The highest rates were in Chingleput (1.9), Malabar (1.6), South Canara (1.3) and Nilgiris (1.2), and the lowest in Kurnool (0.2). The mortality in municipalities was highest in Vizagapatam (10.4), Karúr (7.6), and Tuticorin (6.2), and least in Anantapur and Adoni (0.1 each). In Madras, the rate fell from 5.3 to 4.9.

16. *Injuries, &c.*—The number of deaths from injuries and suicides fell from 11,332 to 10,357, while those from unspecified causes rose again from 312,583 to 320,805. It is remarkable how constant the death-rate under this head has remained for a series of years.

17. *Sanitary Works—Civil.*—The subjects reported upon by the Sanitary Commissioner under this head will be fully discussed in the reviews of the administration reports of the local bodies concerned and in the General Municipal and Local Fund reviews. In the meantime Dr. King's remarks in paragraphs 49 to 54 regarding sewage-farming will be commended to municipal councils for attention.

18. Dr. King's observations in paragraph 80 regarding the necessity for insisting upon the vaccination or re-vaccination of pilgrims proceeding to Mecca will be communicated to the Public Department in continuation of paragraph 19 of G.O., No. 1177 L., dated 8th July 1895.

19. *General Remarks.*—The Sanitary Commissioner and his Deputy visited twenty-eight municipalities and eighty-seven unions and other villages, against fifty-two and forty-five, respectively, in the previous year, the decrease in the former case being due to the inspection of municipalities being now, as a general rule, conducted only every second year, as it was found that the benefits of an annual inspection were not sufficient to justify the expenditure of time required. The District Medical and Sanitary Officers inspected on an average only twenty-four places against forty-seven in the previous year, the decrease being due to their visits being restricted to municipal towns and unions and the villages where the larger fairs and festivals are held. The Government is glad to observe that since June 1895 the Sanitary Commissioner has written notes on 117 sanitary works. The testimony borne by Dr. King to the good work done by Surgeon-Major Mallins is noted with satisfaction.

20. The report, though dated 7th May, was not received in the Government office until the 19th idem. Paragraphs 50 and 69 (I) relating to the Madras town, and paragraphs 70 and 73 to 78 relating to district boards, might have been condensed, as also the information given in paragraphs 99 to 107 regarding cholera and small-pox.

SANITARY ENGINEERING.

21. During the year under review, which is the sixth since the organization of this department, the Sanitary Engineer visited fourteen towns and the Assistant Sanitary Engineer nine, against eleven and sixteen, respectively, in the previous year.

22. Six water-supply works, estimated to cost Rs. 16,87,850 in the aggregate, were under execution, and of these, the Adóni and Tanjore works were completed, while very little remained to be done at Trichinopoly. Fair progress was also made in carrying out the scheme for the water-supply of Dindigul. In Kurnool, however, fresh estimates for the water-works had to be prepared and sanctioned during the year in consequence of a change in the site, and work was not begun until near the end of the year. In the case of Conjeeveram, as no trained Supervisor was available until November 1895, and as by that time the North-east monsoon had begun, nothing beyond the construction of the drivers' quarters was taken in hand.

23. The schemes submitted to Government by the Sanitary Board for the water-supply of Cuddalore and Tirupati were referred to the municipal councils concerned for report as to how they proposed to finance them. Two other schemes for water-supply and two for drainage were submitted by the Sanitary Engineer to the Sanitary Board in the course of the year, all of which are stated to be still under consideration.

24. The improvement of the drainage of Ootacamund received attention, and the Public Works Department has undertaken to carry out the works of filling in the upper lake and draining the portion filled in, and to give effect to the suggestions made by the Sanitary Board for remedying the defects in the intercepting sewer. The Sanitary Board also made certain recommendations for improving the water-supply of Ootacamund, and the services of Mr. Walch, late Chief Engineer for Irrigation, have since been secured for the preparation of the necessary plans and estimates.

25. The department scrutinized plans and estimates for 133 sanitary works—42 municipal and 91 local fund—estimated to cost Rs. 2,69,342 in the aggregate, and furnished new plans and designs wherever necessary. The action of the municipal councils and taluk boards, mentioned in paragraph 146 of the report, in executing works of a sanitary nature, exceeding Rs. 200 in cost, without reference to the Sanitary Engineer, as required in G.O., No. 79 L., dated 16th January 1891, is to be regretted, especially in view of the fact that the special attention of the local bodies was drawn to this matter in the reviews of the last two annual reports. The Government trusts that this irregularity will not be allowed to recur. The taluk boards of Bezwada, Guntur, Masulipatam and Vinukonda will now be requested to state whether they have in all cases complied with the instructions issued in G.O., No. 79 L., dated 16th January 1891, and to explain why they did not reply to the Sanitary Board's Circular, No. 198, dated 22nd January 1896.

26. Type plans and estimates for hospital and dispensary buildings, for which rough sketches were furnished by the Sanitary Board in 1895, have not yet been prepared by the Consulting Architect to Government, but it is understood that the matter is engaging his attention, and it is hoped that the work will be completed without further delay. Type designs for nine sanitary works were issued by the Sanitary Board.

27. The report of the Sanitary Engineer could have been considerably reduced by the omission of many of the letters and proceedings which have been reproduced *in extenso*, although the majority of the former have already been before Government; a brief summary of them would have been quite sufficient. He should bear this in mind in future. The remarks of the Sanitary Engineer in paragraphs 162 to 166 are, in the opinion of Government, out of place in an administration report.

28. The Government notes with pleasure the testimony borne by the Sanitary Engineer to the services rendered by the several officers referred to in paragraph 168 of the report.

(True Extract.)

W. H. Phillips
Under Secretary, P.W.D.
for Chief Secretary.

To the Sanitary Commissioner.
" the Sanitary Engineer.
" the Sanitary Board.
" the Surgeon-General.
" the Public Works Department.
" the Public Department.
" the Revenue Department.
" the Lieutenant-General Commanding the Forces, Madras.
" 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, Municipal Commission, Madras.
Editors' Table.

ENDORSEMENT—No. 1174 L., dated 25th June 1896.

Copy to the Government of India, Home Department.

J. F. PRICE,
Chief Secretary.

Public Dept

Pulse RN 895 225 755

Govt. of {1896} Madras.
LOCAL AND MUNICIPAL.

Issued

Recd.

Encl.

Regd 16-7-96

G.O., &c., Nos. 1173, 1174 L.,
25th June 1896.

JUNE.

Reports.

Reviewing the — of the Sanitary Commissioner
and the Sanitary Engineer for 1895.

asked for a copy of the report

NOTE FOR THE CHIEF SECRETARY.

Public Dept

C. N. 2277

Need this go
the H. M. please?

7513

The local and municipal
has communicated the Sanitary
Commissioner's report remarks
in para 80 of his report for 1895.
In para 79 of the report D. King
gives extracts from the Evidence
of certain pilgrims who had
returned to this presidency from
Mecca. One man it will be seen
complains of the treatment he
received at Kamaran. He states
that the firewood and water
were bad and the latrines foul.
Another states that
no medical inspection was
made before the pilgrims
embarked, and that two men
died of small-pox at Kamaran.
A third reported that small-pox
and diarrhoea were the only
diseases from which the pilgrims
suffered.

D. King brings these matters
to notice and gives prominence
to the fact ^{that} no ruling exists
for insisting on the vacci-
nation or revaccination
of all that may embark.
He would apparently insist
on vaccination before embarking
but failing that would have
a vaccinator present previous to
embarkation who should offer to
perform the operation gratis
on all who are willing to
undergo it.

It is submitted
that the Govt of India
will not be at all likely
to insist on vaccination or

The departure of the
pilgrimage ship would un-
-doubtedly be delayed
if all the passengers had
to be vaccinated before
embarkation.

20/8/96

30B
31/7/96

There is nothing I submit
to be done. India will
see Dr K's report and
can take action on it had
he had had it. The President
has so little concern with
the Hedberg business that there
seems no need for the emergency
in this matter.

I repeat that this paper has been with
me for some time but I have been

to much the like that I have
not been able to attend to
20/8/96

Pilgrims to Mecca

No. 949 & 384.96

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119/96

28.8.96

27.8.96

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DATED

CURRENT No.

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LETTER OF GOVERNMENT.

STATEMENT WITH DITTO.

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