

Public (1899) Department.

ORDINARY MS.

G.O., No. 160

Dated 8. 2. 99

INDEXED.

[Despatch Abstract.]

Recovery proceeding & NDep Communicated
with remarks to the officers concerned the memorandum
to the Army Sanitary Commission on the report
of the Sanitary Commissioner for Madras for 1898
and ordering a despatch to be addressed to
the Secretary of State for India on the subject.

BACK PAPERS.

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

FURTHER PAPERS.

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Cms 565/29 (1899) ...

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Government {1899} of Madras. LOCAL AND MUNICIPAL.

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G.O., &c., Nos. 187, 188 L., 26th January 1899.

JANUARY.

Memorandum by the Army Sanitary Commission.

Communicating with remarks to the officers concerned the — on the report of the Sanitary Commissioner for Madras for 1896 and ordering a despatch to be addressed to the Right Honourable the Secretary of State for India on the subject.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following paper :—

From the Right Honourable the Secretary State for India, dated London, 10th November 1898, No. 1, Statistics.

ABSTRACT.—Forwarding, for information, 160 copies of a Memorandum by the Army Sanitary Commission on the report of the Sanitary Commissioner for Madras for 1896.

ORDER—No. 187 L., dated 26th January 1899.

The Memorandum of the Army Sanitary Commission received with the despatch read above will be communicated to the officers concerned.

2. With reference to the remarks of the Commission in paragraph 3 of the Memorandum regarding the low rates of births and deaths registered in this Presidency in 1896 as compared with those recorded in the other Provinces of India, the attention of the Commission will be drawn to paragraph 2 of G.O., No. 1550 L., dated 20th August 1898, in which similar remarks made by it on the statistics for 1895 were fully dealt with.

3. As regards the Commission's remark in the same paragraph, questioning the usefulness of placing the village establishments in the Zamindari tracts under adequate control and of making registration compulsory by law only in the more advanced areas, the Commission will be furnished with a copy of G.O., No. 476, Revenue, dated 21st September 1896, from which the Commission will see that the want of adequate control over the village establishments in the Zamindari tracts has hitherto been one of the chief causes of the imperfection of the returns of vital statistics in this Presidency and that in the opinion of this Government it is not expedient to make registration compulsory throughout the Presidency all at once, having in view the objection that such a step would in backward parts of the country provide easy opportunities for extortion to subordinate officials.

4. The following despatch will be addressed to the Right Honourable the Secretary of State for India :—

[Here enter Despatch, No. 1 L., dated 28th January 1899.]

(True Extract.)

A. E. Edgington
for Secretary to Government.

To the Sanitary Commissioner.
„ the Sanitary Board.
„ the Sanitary Engineer.
„ the Surgeon-General.
„ all Presidents of District Boards.
„ all Chairmen of Municipal Councils.
„ all Collectors.
„ the President, Municipal Commission, Madras.
„ the Public Department.
„ the Revenue Department.

ENDORSEMENT—No. 188 L., dated 26th January 1899.

Copy to the Government of India, Home Department.

H. TREMENHEERE,
Secretary to Government.

MEMORANDUM by the Army Sanitary Commission on the Report of the
Sanitary Commissioner of Madras for 1896.

For the sake of brevity the form of heading hitherto used in dealing with the Report of the Sanitary Commissioner of Madras has been adhered to; but the title of the volume containing the report has undergone considerable alteration: it is now "The First Annual Report of the Sanitary Board, the Thirty-third Annual Report of the Sanitary Commissioner, and the Seventh Report of the Sanitary Engineer, Madras, 1896." It is stated that towards the end of the year the Sanitary Board was reconstituted. It now consists of three members, the Chief Engineer, Public Works Department, the Surgeon-General with the Government of Madras, and a member of the Indian Civil Service. The Chief Engineer is President, and the chief assistant of his office Secretary of the Board. A copy of the rules for conducting the business of this Board is given. From these rules it appears that no sanitary work estimated to cost more than Rs. 200, shall be undertaken by any local board or municipal council without the prior approval of the Sanitary Board. The initiation of sanitary works of any importance will thus require the sanction of the Board. Rule 14 describes the procedure to be adopted in dealing with a major sanitary scheme. In the first place, the Sanitary Commissioner will bring to the notice of the Board the need for such a scheme: the Board will then call on the Sanitary Engineer to report how the scheme can best be carried out: the Engineer's report will be sent to the Sanitary Commissioner for his opinion from a sanitary point of view: should the latter condemn the Sanitary Engineer's scheme, the Board will decide whether the Sanitary Engineer should be required to modify his proposals, or whether the matter should be at once referred for the orders of Government as to the preparation of detailed plans and estimates. With such a system of check there should be little danger of insufficiently considered schemes of sanitary improvement being hastily undertaken in Madras. The report of the Board for 1896 is commendably short. It is contained in less than three pages, and is followed by an appendix of other three pages giving a list of the schemes dealt with by, and a statement giving particulars of works referred to, the Sanitary Board for scrutiny.

2. The Sanitary Commissioner's Report, which is submitted to Government by the Sanitary Board, opens with a section on the year's rainfall. The Madras Presidency was no exception to the rest of India in the irregular and unseasonable nature of its rainfall during 1896. Although the northern districts of the east coast received their normal amount of rain during the south-west monsoon, in three out of four of them the north-east monsoon of the last three months of the year was a failure. Likewise in the Deccan districts, which lie within the so-called "famine zone," both monsoons were scanty, the north-east monsoon being practically a failure. The consequences of this insufficient and irregularly distributed rainfall were serious. Failure of crops and of fodder followed, causing much suffering to man and beast. The Sanitary Commissioner, however, shows that crop failure was not the sole cause of the distress; high prices, due to active export of grain to Bombay and the North-Western Provinces, in which famine prevailed, contributed largely to scarcity and privation in Madras.

3. *Vital Statistics.*—In spite of the efforts to improve it, registration of births and deaths is still very defective. During the year "a circular

“ was issued to all municipalities directing their attention to the importance, from a sanitary, economical, and medico-legal point of view, of insisting on prompt registration.” This exhortation, the Sanitary Commissioner believes, had a satisfactory influence. The statement given at page 23 of the report shows that, in the case of 543 births and 407 deaths which failed to be registered in municipalities, prosecutions followed. This is perhaps the most effectual form of exhortation where neglect of registration persists from year to year. The Governor of Madras, in reviewing the report, writes:—“The system of registration continued the same as in the previous year, but in its Order No. 476 (Revenue), dated 21st September 1896, the Government decided to take steps for its improvement:—

- “ (1.) By placing the village establishments in the zamindari tracts under adequate control;
- “ (2.) By initiating legislation with the object of making registration in more advanced areas compulsory by law; and
- “ (3.) By gradually transferring the duty of conducting registration in rural areas from the overworked village accountant to the village headman.”

It is not clear how the first of these steps will operate in improving registration. With regard to the second, it seems late in the day to restrict the improvement of registration to limited areas. Of the influence which the last of the steps mentioned will exercise, it will probably only be possible to judge after the change has had effect for some time. Meanwhile, Madras records a birth-rate for 1896 of 29·9, and a death-rate of 20·6, per mille of population. It may serve as some indication of the state of registration in the Madras Presidency if we compare its birth and death ratios for 1896 with those recorded in the neighbouring Provinces of Bengal, Bombay, and the Central Provinces for the same year :—

	Births.	Deaths.
Bengal	38·03	34·17
Bombay	36·76	31·69
Central Provinces	31·68	49·31
Madras	29·9	20·6

In all of the Provinces mentioned scarcity and famine prevailed, so that the conditions influencing at least the death-rates in all of them were more or less similar. It is impossible to believe that in a year during which scarcity, deepening into famine, afflicted the Madras Presidency over a considerable part of its area, 20·6 can represent even approximately the ratio of deaths per thousand of its population. The comparison of the record of vital statistics with the record given by its neighbours,—and the latter is doubtless far from perfect,—will afford some measure of the incompleteness of registration still prevailing in Madras. It is in rural areas that registration is most defective. In the 57 municipalities the birth-rate for the year under report was 36·1, and the death-rate 30·7, per mille of population: in rural areas the recorded birth-rate for the same year was 26·7 and the recorded death-rate 18·4. The district of Malabar, with a population of 2,636,674, records a birth-rate of only 22·5 and a death-rate of 15·7. It would not perhaps be an exaggeration to estimate the actual number of births and deaths in this district at twice the number registered.

4. *Chief Diseases.*—Cholera prevailed in every district of the Presidency and caused a total of 47,847 deaths during the year, or more than twice the number ascribed to it in the preceding year. As usual, its severity varied greatly in different places and at different times. Whilst in South Canara only 13 persons died from it, in Coimbatore 10,731 deaths are recorded as due to it. So with regard to the season of the year when it was most prevalent, taking the Presidency as a whole, 17,999 deaths

are recorded against it in December and only 272 in March. The Sanitary Commissioner gives a table showing the incidence of the disease according to monsoon periods; but cholera refuses to accommodate its incidence to any law which has yet been discovered. If the district of Bellary is selected from Statement No. VII., Appendix D, it will be seen that its course during the year resembled that common in the more Northern Provinces of India. The three first months and the two last months of the year were those of least cholera mortality; whilst the greatest number of deaths took place in May, June, and July. On the other hand, not a single death was recorded in Coimbatore during the first six months of the year; whilst September and December were the months of greatest cholera mortality. The partial nature of its incidence is as characteristic in Madras as in other parts of India. Although it prevailed in every district of the Presidency, in only 4,390 villages of a total of 44,678 did cases occur, or in about one in every ten. A satisfactory explanation of the reason why the nine villages escaped and the one was attacked is still wanting. In point of their sanitary or insanitary condition there is probably little distinguishable difference between those that suffered and those that escaped. Such sanitary improvements as have been effected in towns have not, so far, placed them in a better position for warding off cholera than villages in which things remain pretty much what they have been from times immemorial. “The mortality in municipalities from this disease was at the rate of 2·1 per mille of population,” as compared with a rate of 1·3 for the Presidency as a whole. Unfortunately, the most effectual of all the hitherto discovered methods of dealing with a cholera epidemic cannot readily be applied to cities and towns. Prompt evacuation of the affected locality, when such prompt evacuation is practicable and properly carried out, has scarcely ever been known to fail in cutting short an outbreak of the disease. Year after year the efficiency of this method is demonstrated in the case of our troops and jail population. The same remedy applies to plague. In the case of neither disease has a remedy been found so successful as the prompt and thorough abandonment for a time of the affected locality. But prevention is better than cure; and perhaps there are few who doubt that in sanitation thoroughly carried out in every detail this prevention will ultimately be found.

5. *Small-pox* was accountable for 9,410 deaths. The returns show that no district enjoyed entire immunity from the disease. Of the total number of deaths, 2,245 occurred amongst infants under one year, and 3,632 amongst children between one and 12 years of age. In some towns, such as Vellore and Gudiyattam, the death-rate was very high, having been 5·3 in the former and 2·1 in the latter. It is evident from these figures that, as stated in the review of the report, compulsory vaccination is not being strictly enforced in these towns. During the year 1896–97 there was an increase of 49,549 cases of vaccination. Primary vaccine operations increased by 52,506; whilst re-vaccination operations decreased by 2,957. The ratio per cent. of total successful cases, according to the statement given in paragraph 9 of the Vaccination Report for 1896–97, is 92·5 in primary vaccination and 80·3 in re-vaccination, showing a slight falling-off as compared with the ratios for the preceding year. This, however, the Inspector of Vaccination thinks is not “to be deplored, as it probably points to greater accuracy in the returns.” Although the returns of vaccination in the Madras Presidency are now being subjected to special scrutiny with a view to preventing a continuance of their falsification, it is evident that the Inspector is not yet satisfied with their accuracy or with the sufficiency of the means at his disposal for the detection and prevention of fraud. He suggests the appointment of two Assistant Inspectors of the Assistant Surgeon class, “whose duty it would be to inspect the verification work of the deputies, and so impose a whole-some restraint on the dishonest practices which at present prevail to too large an extent in the department.” He adds, that the expected

improvement as regards the accuracy of the returns submitted would enable one in future to “get an idea of the actual extent to which the population is really protected, which is impossible at present.” Perhaps, if the Civil Surgeons were to have charge of, and were held responsible for, the work of vaccination in their districts, the improvement of the accuracy of the returns might be effected without the need for appointing extra inspectors. During the year, the number of children under one year of age vaccinated was equal to 33·6 per cent., or one-third of the total number of registered births. From these figures it is evident that, until a very large increase in this proportion comes to be effected, small-pox will not die out from want of susceptible material to keep it alive. In some of the districts the proportion of infants protected by vaccination is altogether insignificant. In the vast district of Malabar, with its population of upwards of two and a half millions, only 1·4 per cent. of the children under one year of age were successfully vaccinated. “Fresh calf vaccine shows, as usual, the “greatest per-centage of success, viz., 97·2; then comes vaccine sent “out in glass without any preservative; then lanaline paste; and lastly “glycerine with 94·6, 94, and 88·9 respectively.” But until the Department has been purified from the fraudulent practices which have hitherto prevailed and, according to the Inspector, still prevail in the preparation of its returns, too much weight need not be given to these or to any of the other figures supplied.

6. *Fevers* were less fatal than during the preceding year, but the ratio of deaths per mille of population recorded to have been due to them was slightly higher than the mean ratio for the previous five years. An examination of Table IX. in Appendix D. shows that, as Dr. King remarks, “the incidence of fever on the population varies but slightly, from year to year.” The shortness of the rainfall, which resulted in crop failure and scarcity in the Deccan districts, was no doubt at the same time the cause of a sensible decrease in the prevalence of malarial fevers in three out of the four of those districts. Increased mortality, which almost invariably accompanies or follows privation due to scarcity, seems thus to have been to some extent compensated for by decreased mortality arising from the cause which brought about the scarcity. Regarding the increase of mortality from fever in the town of Karúr, the Sanitary Commissioner writes:—“In this case the sub-soil of the “town is saturated with soakage from cesspools, and as typhoid is a “recognised disease in this town, it need not be assumed that solely “malarial fever was dealt with.”

7. *Sanitary Works*.—Progress is being made in the direction of providing the larger towns with water-supplies. “Four water-supply “works were in progress during the year. Of these, the Trichinopoly “and Dindigul works were completed and handed over to the Municipal “Councils concerned, and fair progress was made in carrying out the “schemes for the water-supply of Kurnool and Conjeeveram.” In addition “nine surveys were completed and five water-supply “schemes were prepared and submitted to the Sanitary Board during “the year, while the estimates for five other water-supply schemes “underwent revision.” Excluding the city of Madras, which has a separate sanitary report for itself, the estimated income of the other municipalities of the Presidency for 1896–97 was just over thirty-three and a quarter lakhs of rupees; and of this amount close upon half, or 18·1 per cent., was allotted for sanitary purposes. Of the sum so allotted, over four lakhs were expended on conservancy, nearly three lakhs on improvement of water-supply, and close on two lakhs in improving village sites. From this it will appear that the main want is the want of money for improving the sanitary state of the towns of Madras as of the other towns of India. The funds available for sanitary purposes in the Madras Municipalities are obviously out of all proportion insignificant in amount, when the requirements of the municipalities are taken into account. As Dr. King remarks:—“It

“cannot be said that the rate of sanitary progress in municipalities is “such as to render the sanitarian sanguine, still progress is apparent, “and, this being so, it may be assumed that reforms will be introduced “in an ever-increasing ratio as one improvement is almost necessarily “followed by another with the object of securing full results.”

8. A table is given at page 46 of the report, showing the effect of public water and sewerage works in the case of the nine towns already provided with water-supplies. In only three of these towns are drainage works completed. A comparison of the death-rates recorded before, with those recorded after, the completion of these works constrains the Sanitary Commissioner to admit that the results acquired so far are not striking. He adds:—“No other than a mediocre result from sanitary “works in this Presidency can, however, be expected, so long as “they are not constructed so as to involve, not the major portion of “towns but the whole, so long as the facilities afforded are not such as “to permit free use of the water by the inhabitants in all parts of the “town and at all times of the day; and above all, so long as the “municipal councils persist in retaining the old wells and tanks which “the public water-supplies should have replaced.”

9. On sanitary works carried out by district boards, an account is given of the sums expended in the table on page 50. The total amount of the sanitary allotment for the 21 districts for the year 1896–97 was considerably under seven lakhs of rupees, showing again that want of funds, rather than want of wish to make improvements, retards progress.

10. Briefly told, the year was an unfortunate one for those who depend on the land for their livelihood, and these constitute the vast majority of the population of upwards of 35 millions. The rainfall was scanty as well as irregular in its distribution, and followed by extensive failure of crops, more especially in the Deccan districts and in the Northern Circars. This failure pressed hard on the people; but if failure of crops and scarcity followed deficient rainfall and drought, so also did decrease of diseases due to malaria follow the same causes. Cholera prevailed in every district of the Presidency at some period during the year. Its history in 1896 cannot be said to have added much to our knowledge of its causation. The mortality from fever in Madras varies but little from year to year. Although small-pox was widespread, the number of deaths due to it was not excessive. Of new sanitary works, the most important were those in connection with water-supply. No definite conclusion can yet be come to regarding the influence which the execution of these works has exercised on the public health. In the first place, the water-supplies provided are not exclusively used by the inhabitants, many of the old wells and tanks being still resorted to; and in the second place the registration of vital statistics is still so defective as to form an unsafe basis on which to rest deductions. The report is shorter than usual, but seems to omit nothing which it should include.

12th October 1898.