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PAPERS

RELATING TO

VILLAGE SANITATION IN INDIA,  
1888—1895.



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# APPENDICES.

## APPENDIX A.

### BOMBAY ACT No. I OF 1889.

#### *The Bombay Village Sanitation Act, 1889.*

WHEREAS, for the purpose of improving the sanitary condition of villages in the Presidency of Bombay, it is expedient to provide for the constitution of Sanitary Committees and Boards having authority over such villages; It is enacted as follows :

#### PART I.

##### PRELIMINARY.

- Short title. 1. This Act may be cited as "The Bombay Village Sanitation Act, 1889."
2. It is applicable to the whole of the Presidency of Bombay, except the city of Bombay, Aden and its dependencies, Perim, and the scheduled district of the Mehwasai Chiefs' villages, as defined in the Scheduled Districts Act, 1874.
- Extent. XIV of 1874.
3. During such time as Part II or Part III and the rules made thereunder shall be in force in any village, the enactments mentioned in the schedule shall, to the extent specified in the third column of the schedule, cease to have any operation in the said village.
- Repeal of enactments.
- Definitions. 4. In this Act, unless there be something repugnant in the subject or context :
- (a) "village" means the site of a village or town, determined for the time being as under section 126 of the Bombay Land-Revenue Code, 1879, together with the area included within a distance of a quarter of a mile from any part of such site, in so far as such site or area is not included within a permanent municipal district or a military cantonment ;
- "Village," Bo. Act V of 1879.
- (b) "prescribed" means prescribed by a rule made under this Act ;
- (c) "chavdi" means, in any village in which there is no chavdi, such place as the Collector directs shall be deemed to be the chavdi for the purposes of this Act.
- "Chavdi."
5. (1) Part II shall come into force in any village to which the Collector extends the same, under the power hereinafter conferred upon him in this behalf, from such date as the Collector shall direct, and shall continue in force, when so extended, until the Governor in Council directs by Notification in the *Bombay Government Gazette* that it shall cease to have operation in such village, or extends Part III to such village.
- Operation of Parts II, III and IV.
- (2) Part III shall come into force in any village to which the Governor in Council extends the same, under the power hereinafter conferred upon him in this behalf, from such date as is directed in this behalf by the Governor in Council, and shall continue in force, when so extended, until the Governor in Council directs by Notification in the *Bombay Government Gazette* that it shall cease to have operation in such village.
- (3) Part IV shall have operation, as far as its provisions apply, in and in respect of every village in which either Part II or Part III is in force.
6. (1) Subject to the control of the Commissioner and of Government, the Collector may at any time extend Part II to any village in his district in which Part III is not in force.
- Part II how to be extended to a village.
- (2) For the purpose of extending Part II to any such village, the Collector shall cause to be published, by posting up copies thereof in conspicuous places in his own office and in the office of the Mamlatdar and of the Mahalkari within whose taluka or mahal the said village is situate and in the chavdi or some other public building in the said village, a proclamation in the language of the district, directing that, unless a proclamation be thereafter issued by him to the contrary, Part II shall extend to the said village on and from a date to be specified in the proclamation, which shall not be less than two months after that on which the proclamation is posted up in the village, and stating that any objection which any inhabitant of the village may desire to make to the said extension will, if submitted to the Collector not later than one month before the said specified date, be received and considered.
- (3) If, after considering any objections which may have been made as aforesaid, the Collector shall be of opinion that good cause exists for not extending Part II to the village, or for not extending it thereto immediately, he may, by proclamation published as aforesaid :
- (a) cancel his previous proclamation ; or
- (b) suspend the extension of Part II to the said village for a specified period.
- (4) If the Collector suspends the extension of Part II to the village, for a specified period, he may thereafter, by proclamation published as aforesaid :
- (c) at any time abandon the proposed extension ; or
- (d) from time to time defer the extension for a further specified period.
7. (1) The Governor in Council may at any time extend Part III to any village in any part of the Presidency to which this Act is applicable, whether Part II is at the time in force in such village or not. Such extension to a village where Part II is in force, shall cause Part II to cease to operate therein.
- Part III how to be extended to a village.
- (2) For the purpose of extending Part III to any such village, the Governor in Council shall, by Notification in the *Bombay Government Gazette*, direct that, unless a Notification be thereafter issued by him to the contrary, Part III shall extend to the said village on and from a date to be specified in the Notification, which shall not be less than three months from the date of the Notification, and stating that any objection which any inhabitant of the village may desire to make to the said extension will, if submitted to a Secretary to Government, or to the Collector, not later than one month before the said specified date, be received and considered.

(3) If, after considering any objections which may have been made as aforesaid, Government shall be of opinion that good cause exists for not extending Part III to the village, or for not extending it thereto immediately, it may, by Notification in the *Bombay Government Gazette*, exercise the like powers with respect to the extension of the said Part as the Collector is authorized to exercise, with respect to Part II by sub-sections (3) and (4) of section 6.

(4) Translations in the language of the district of every Notification issued by Government under this section shall be published by the Collector, without delay, in the manner prescribed in sub-section (2) of section 6 for the publication of a proclamation issued by himself.

## PART II.

### SANITARY COMMITTEES.

8. (1) There shall be a Sanitary Committee in every village to which this Part is extended. The said committee shall consist of three or more adult householders, residents of the village, chosen, with their own consent, by the Collector, of whom the Police Patel shall be one, unless the Collector for reasons recorded in writing in any particular case determines otherwise. For the purpose of aiding him in his choice, the Collector may, in his discretion, procure the nomination or election, by the householders of the village, of qualified persons, in such mode as he shall deem expedient.

(2) The chairman of the said committee shall be nominated by the Collector.

(3) The chairman and other members of the committee shall hold office for the prescribed period.

9. The proceedings of the Sanitary Committee shall be recorded in the prescribed manner (or, until rules are made under section 11, in such manner as the Collector by written order directs), by the village accountant or such other person as the Collector appoints in this behalf, and in the absence of the village accountant or person so appointed, by such other person as the committee may employ for this purpose; and the said record shall be verified by the signature of the chairman or of some other member of the committee authorized by the committee in that behalf, below each day's proceedings.

10. Every Magistrate having jurisdiction in the village may take part in the proceedings of the committee at any meeting thereof at which he is present, and such Magistrate, or if there be more than one, the highest in magisterial rank of such Magistrates, shall for this purpose be deemed to be a member and President of the Committee for the occasion.

11. The Sanitary Committee may from time to time make rules, and repeal or vary the same, with the approval of the Collector:

- (a) for regulating the terms of office of its members and its proceedings;
- (b) for determining the manner in which its proceedings shall be recorded;
- (c) for procuring and preserving for the use of the village an adequate supply of pure potable water;
- (d) for the cleansing of the streets and open spaces of the village;
- (e) for preventing accumulations of offensive and noxious matter in the village;
- (f) for preventing nuisances and indecent or insanitary acts or omissions in the village; and
- (g) generally for giving effect in the village to the purposes of this Act.

12. (1) For not less than three months before any rule which it is proposed to make under section 11 is to come into force, the committee shall exhibit a copy thereof at the chavdi, or some other public building in the village, and there shall be affixed to such copy a notice that objections thereto made in writing to the Collector not later than one month before the date fixed for their coming into force—which date shall be specified—will be received and considered.

(2) Any objections so made shall be considered by the Collector, in conference with the committee. If on such consideration, it shall seem desirable to alter or withdraw the proposed rule, such alteration or withdrawal shall be effected by a notice exhibited as aforesaid. If the Collector deems it expedient to suspend the operation of a rule, it may be suspended for a specified period by a notice exhibited as aforesaid, which shall state that objections thereto, made as aforesaid not later than one month before the expiry of the said period, will be received and considered. Any objection so made shall be considered as aforesaid, and if it then seems desirable to alter or withdraw the rule, the same shall be notified as aforesaid.

(3) Subject to the provisions of sub-section (2), every rule made by the committee, with the approval of the Collector, and notified as aforesaid, shall come into force on the day notified in this behalf.

13. Whenever it shall come to the notice or knowledge of the Sanitary Committee that any person in the village has apparently committed, or is accused of having committed, a breach of any rule made by the committee under section 11, such committee may, by notice in writing, require such person's attendance before the committee.

14. (1) All offences against the rules made by the committee under section 11 shall be cognizable by the committee.

(2) For the purpose of exercising this jurisdiction, the committee shall assemble as often as shall be necessary, or as the Magistrate of the District shall direct at the chavdi or some other convenient place within the village or near thereto.

(3) The committee shall, in the presence of the accused person, or if notwithstanding the service of a notice upon the said person as aforesaid he fails to appear, then in his absence, take evidence as to the alleged offence and any evidence produced by the said person in his defence, and shall thereupon either acquit or convict the accused person and, if he is convicted, may sentence him to such punishment authorized by this Act or by the rules as it thinks reasonable.

15. (1) A person convicted by the committee may, at any time within ten days after sentence is passed against him, appeal to the Magistrate of the District or other Magistrate vested under the Code of Criminal Procedure, with appellate jurisdiction over the place where the sentence is passed, or to such other Magistrate, not being a member of such committee, as the Magistrate of the District may, subject to the orders of Government from time to time, appoint in this behalf.

(2) If such person gives notice of his intention to appeal, and deposits with an officer appointed by the Magistrate of the District in this behalf the amount of the fine inflicted upon him, execution of the sentence shall be suspended until the lapse of ten days from the date of the sentence, or, if an appeal is made, until it is disposed of. If within ten days no appeal is made, the sum deposited shall be appropriated to payment of the fine inflicted.

(3) The Magistrate who hears the appeal may confirm, reverse or modify the decision of the Sanitary Committee and may pass any order as to punishment which it was competent to the committee to pass. His order shall be enforced in like manner as one made by the Sanitary Committee.

(4) The said Magistrate may suspend execution of the sentence pending disposal of the appeal when such suspension shall appear to him necessary or expedient, on such terms as shall seem reasonable.

16. For the purpose of providing for the village an adequate supply of pure potable-water, of cleansing the streets and open spaces thereof, of removing offensive and noxious matter therefrom and for other purposes conducive to the health and comfort of the inhabitants of the village, the Sanitary Committee may utilize, as far as available, the voluntary labour of inhabitants of the village and the services of village servants placed at its command under section 42; and when these means are insufficient, may from time to time, with the approval of the Collector, employ such servants, enter into such contracts, make such deductions and allowances from any rate leviable under its authority, and may authorize the expenditure by the Collector or under his control, of such sums of money as shall be necessary and reasonable, for the purpose aforesaid.

17. The inhabitants of the village may, by voluntary subscription, raise any sum of money for any of the purposes aforesaid, and such sum may be paid to the Mám-latdár or other officer appointed by the Collector in that behalf and shall by him be placed to the credit of an account which he shall keep in the name of the Sanitary Committee, for the defrayal of charges incurred under this Act for the purpose for which the subscription was raised.

18. (1) If any sum of money of which the expenditure is authorized by the committee is not raised by voluntary subscription and is not available from any other source, the same may be recovered by a rate charged on the inhabitants of the village and assessed by the Collector in conference with the Sanitary Committee.

(2) Provided that the aggregate amount to be so charged in any year, on the inhabitants of any village, shall not exceed one-half of the aggregate amount leviable in that year as Local Fund Cess from the inhabitants of such village.

(3) It shall be lawful for the Sanitary Committee, out of any unappropriated balance of money standing to its credit under the provisions hereinafter enacted, to make such contribution on such terms as it shall deem expedient, to the cost of any work under construction by a Local Board, in fulfilment of the duties imposed on it by section 30, clauses (c), (e) and (f) of Bombay Act I of 1884.

### PART III.

#### SANITARY BOARDS.

19. (1) There shall be a Sanitary Board in every village to which this Part is extended, or one such Board for a group of two or more such villages, as Government may direct. Each such Board shall consist of such number of persons appointed by the Collector as Government directs, the said persons being residents within, or near to, the area which is to be subject to the Board's authority and having property therein, and shall ordinarily include the Poljoe Patels. For the purpose of aiding him in his choice, the Collector may, in his discretion, obtain the nomination or election of qualified persons from amongst whom he will select all or some of the members, according to such mode and local distribution, as shall seem expedient.

(2) Each meeting of such Board shall be presided over by the Magistrate of highest rank present thereat who is a member, or, in the absence of any such Magistrate, by such member as the Collector, subject to the orders of Government, appoints to be the President of the Board. In the absence of any Magistrate and of the President, a meeting of the Board shall be presided over by such one of the members present as may be chosen by the meeting to be chairman for the occasion.

(3) The President and Members of the Board shall hold office for the prescribed period.

20. The Sanitary Board may from time to time make rules, with the approval of the Collector, and, save as hereinafter provided, shall discharge functions and exercise authority for the area subject to its authority in respect of the same matters, in the same manner, and subject to like provisions, restrictions and conditions as are hereinbefore enacted in the case of a Sanitary Committee.

21. (1) The Collector may, subject to the orders of Government, from time to time, appoint a Sanitary Inspector for any area or any part of the area subject to the authority of a Sanitary Board, and also such other subordinates as shall appear necessary, and determine the amount of salary to be paid to each of such officers. He may dismiss or suspend the said officers.

(2) Such Sanitary Inspector may be a person employed by the Taluka or District Local Board having authority at the place. He may be employed by, or on behalf of, two or more Sanitary Boards.

22. (1) The Sanitary Inspector shall take measures for preventing breaches of the rules in force in the area for which he is appointed, by, from time to time :

(a) posting up and otherwise publishing a general admonition respecting the observance of the said rules ;

or

(b) admonishing any person whom he finds offending against any of the said rules ; or

(c) summoning to appear before the Sanitary Board any person who, from his own observation or from reports made to him by his subordinates, he has reason to think should be prosecuted for offending against any of the said rules.

(2) The Sanitary Inspector shall make such reports and be in such relation to the Sanitary Commissioner, consistent with the duties and obligations imposed on him by this Act or arising out of his position as a servant of a Local or Sanitary Board, as Government may prescribe.

23. The Board may also, by notice in writing, require the attendance before the Board of any person who is accused of having committed, or who, to the knowledge of the Board, has apparently committed, a breach of any rule made by the board under section 20.



24. (1) All offences against the rules made by the Board under section 20 shall be cognizable by the Board, who, for the purpose of exercising this jurisdiction, shall assemble as often as shall be necessary or as the Magistrate of the District shall direct, at some convenient place within or near to the area subject to its authority.
- Cognizance by the Board of offences against the rules.
- (2) The provisions of sub-section (3) of section 14 and of section 15 shall apply, as nearly as may be, to the hearing and decision of cases under this section by a Sanitary Board and to appeals by persons convicted by such Board.
25. (1) The orders of every Sanitary Board shall be carried out and its orders and proceedings shall be recorded in the prescribed manner and preserved by such member of the Board or by such officer of the Board or by such other officer, as the Collector may from time to time nominate in this behalf.
- Sanitary Board's orders by whom to be carried out.
- (2) The person authorized in this behalf shall be bound to keep a true record of the Board's proceedings and orders, under his signature, and truly to prepare all summonses, notices and orders issuing by direction of the Board or of any member thereof, in accordance with this Act or with rules made under section 20.
26. A Sanitary Board may, with the approval of the Collector, contract with any person :
- Sanitary Board may enter into certain contracts.
- (a) for the daily surface-cleansing of the streets and public spaces within the area or any portion of the area subject to its authority, so far as the same cannot be effected by means of the village servants, if any, whose services are placed at its command under section 42 ; or
- (b) for the removal from the said area of sweepings, dust, ashes, refuse, rubbish, carcasses of dead animals and any offensive or noxious matter.
27. Every Sanitary Board may, with the approval of the Collector, cause to be constructed such works and buildings which may be provided by a Sanitary Board as shall be necessary for providing for the area subject to its authority or any part thereof :
- Works and buildings which may be provided by a Sanitary Board
- (a) an adequate supply of water ;
- (b) proper and convenient places for the temporary deposit or final disposal of sweepings, dust, ashes, refuse, rubbish, carcasses of dead animals and other offensive or noxious matter ;
- (c) means for conveying away or removing the several matters and things specified in clause (b).
28. The inhabitants of the area or of any part of the area subject to the authority of a Sanitary Board may, by voluntary subscription, raise any sum of money for any purpose for which the Board may incur expenditure, and such sum may be paid to the Māmlatdār or other officer appointed by the Collector under section 30, and shall by him be placed to the credit of the Board for expenditure within the area in which, and on the purpose for which, the subscription was raised.
- Voluntary subscription may be raised to meet a Sanitary Board's expenditure.
29. Every Sanitary Board shall be bound to provide for or authorize the expenditure necessary for :
- Purposes for which expenditure is to be incurred by Sanitary Board.
- (a) paying the salaries of the Sanitary Inspector and other officers, if any, appointed under section 21 ; and
- (b) providing stationery and other requisites for the use of the Board and of the said Sanitary Inspector and other officers, if any ; and
- (c) fulfilling any contract entered into by it under section 26 ; and
- (d) constructing necessary works and buildings under section 27.
30. (1) A debit and credit account shall be kept by the Māmlatdār or other officer appointed by the Collector in that behalf in the name of each Sanitary Board. To the debit of such account shall be placed all expenditure authorizedly incurred under section 29. To its credit shall be placed all sums raised by voluntary subscription under section 28, all sums realized from any other source for meeting the Board's expenditure and the net proceeds of any rate assessed, as hereinafter provided.
- Sanitary Board's ways and means.
- (2) For the purpose of raising money for expenditure by a Sanitary Board under this Act, the Collector may, subject to the same limit as is by section 18 (2) provided in respect of rates charged under section 18 (1), from time to time, in conference with such Board, charge and assess a rate on the inhabitants of the area or of any part of the area subject to the Board's authority.
- (3) The burden of any rate charged under sub-section (2) shall be distributed over the several parts of the area subject to the Board's authority, in such proportions as the Collector, in conference with the Board, directs, or, if the Collector, in conference with the Board, so determines, shall be placed wholly on one or more such parts.

## PART IV.

## GENERAL PROVISIONS.

31. The Executive Engineer of the district and any subordinate of the Executive Engineer, of the Sanitary Commissioner or of a Local Board, having authority at the place, whom the Collector may appoint generally or specially in this behalf shall have, in relation to a Sanitary Committee or Board, such rights and duties as are assigned to certain officers in relation to Local Boards by the first paragraph of section 33 of Bombay Act I of 1884.
- Certain Government Officers to advise Sanitary Committees and Boards.
32. The Collector may, after recording his reasons for the same, remove from office any member or chairman of a Sanitary Committee and, with the sanction of Government, any member, or president of a Sanitary Board, who appears to be incompetent, or who has been guilty of any misconduct or neglect of duty which appears to render his removal expedient.
- Removal from office of members, etc., of Sanitary Committees and Boards.
33. (1) Whenever for any reason a vacancy occurs or is about to occur in the office of a member, or chairman of a Sanitary Committee or of a member or president of a Sanitary Board, the Collector shall, without delay, appoint a person to fill such vacancy.
- Filling up of vacancies.
- (2) During any such vacancy the continuing members of a Sanitary Committee or Board may act as if no vacancy had occurred.

34. Every question which comes before a Sanitary Committee or Board for decision shall be decided by a majority of votes of the members present and voting at a prescribed meeting of such Committee or Board or at a meeting thereof assembled by direction of the Collector or otherwise after notice duly issued to all the members, the member who presides having a second or casting vote, when there is an equality of votes.

Questions to be decided by majorities.

35. Summonses, notices and orders issued by a Sanitary Committee or Board, or with its authority, may be signed on behalf of the Committee or Board by the member presiding at any meeting of such Committee or Board.

Signing of summonses, etc.

36. A breach of any rule made by a Sanitary Committee or Board under this Act in respect of any matter other than the matters specified in clauses (a) and (b) of section 11 shall be punishable, unless in any case a smaller maximum punishment is prescribed by the said rules, with fine which may extend to ten rupees and in default with confinement in the chāydi for a period which may extend to forty-eight hours and, in the case of a continuing breach, with fine which may extend to two rupees for every day after conviction for the first breach or after receipt of notice from the Committee or Board or from the Sanitary Inspector, to discontinue the breach, during which the breach continues and, in default, with confinement as aforesaid.

Punishment for breach of rules made under this Act.

37. (1) A Sanitary Committee or Board may allow to a person sentenced to pay a fine such time not exceeding four days as it may think proper for payment of the fine, on such terms as to security as it shall seem to the Committee or Board necessary to impose.

Order for levy of fines.

(2) Whenever default is made in the payment of a fine, the Sanitary Committee or Board, which passed the sentence, or on appeal from whose decision the sentence was passed, may in its discretion by written order direct the levy of the amount, although the sentence directs that, in default of payment of the fine, the offender shall be confined and the offender is or has been confined.

38. All fines for the levy of which an order has been issued as aforesaid, all sums assessed on account of any rate under this Act, which are not paid after reasonable notice, shall be leviable by the patel or by such other person as the Collector or the Sanitary Committee or Board, with the Collector's sanction, appoints in that behalf, by distress and sale of any moveable property of the person liable therefor, subject to such exceptions as are enacted in the Code of Civil Procedure in respect of the sale of moveable property in execution of decrees.

Levy of fines and rates.

XIV of 1882.

39. All fines levied in respect of breaches of rules made under this Act shall, after deducting the expenses, if any, of prosecuting the offenders, be paid to the Māmlatdār or other officer appointed by the Collector under section 17 or 30, and shall by him be placed to the credit of the account of the Sanitary Committee or Board having authority over the village in which the breach was committed, for expenditure on any purpose contemplated by this Act.

40. (1) Any district or tāluka Local Board may from time to time assign by way of donation or loan to the Sanitary Committee or Board of any village or group of villages in the area subject to its authority, for expenditure on any purpose contemplated by this Act, such sum out of the portion of the local fund at its disposal as it shall think proper.

Contributions and loans from Local Boards.

(2) Any sum so assigned shall be paid to the Māmlatdār or other officer appointed by the Collector under section 17 or 30, and shall by him be placed to the credit of the account of the Sanitary Committee or Board to which it is assigned.

(3) But no sum shall be so assigned by way of loan, without the sanction of the Collector, and every sum assigned by way of loan with such sanction shall be recoverable by the Collector in such instalments of interest and of principal as shall be agreed upon between the parties, by a rate charged and assessed by the Collector, in conference with the Sanitary Committee or Board, upon the inhabitants of the area subject to the authority of such Committee or Board.

41. (1) Works for the supply of water or for the drainage of two or more villages subject to the authority of different Sanitary Committees or Boards and any other work or measure conducive to the common health or comfort of two or more such villages may, upon request made, with the approval of the Collector, by all such Committees and Boards, or by a majority of them, be executed by, or under the direction of, the Collector, or of such other officer as Government appoints in this behalf.

Execution of works in which two or more Sanitary Committees or Boards are jointly interested.

(2) The cost of any such work or measure shall be divided between the several Committees and Boards in such proportions as shall be agreed upon by them, or in default of such agreement, as the Collector shall determine; and shall be recoverable in the said proportions by a rate charged and assessed by the Collector, in conference with each Committee and Board, upon the inhabitants of the areas subject respectively to the said Committee's and Board's authority: subject to the same limit as is provided by section 18, clause (2) in respect of rates charged under section 18, clause (1).

Recovery of cost of such works.

(3) Where any work undertaken or proposed by a Committee or Board constituted under this Act shall be such as to interfere with or materially affect any work undertaken or proposed by a District or Tāluka Local Board, such latter Board may require the Sanitary Committee or Board to desist from such work as aforesaid, and it shall thereupon be the duty of the District or Tāluka Local Board to make reasonable provision, within reasonable time, for supplying to the area under the authority of the Sanitary Committee or Board, such means of health, cleanliness and decency, or means equivalent thereto, as would have been furnished by the work abandoned in consequence of such requisition as aforesaid.

(4) For the purpose of obtaining information as to any work intended or in course of construction, to which the provisions of the preceding clause may apply, it shall be lawful for the Tāluka or District Local Board to call for such report from the Sanitary Committee or Board, through the Collector, as shall be necessary and reasonable, and to cause such inspection and report to be made by any person in its employment, as it shall deem necessary in this behalf, and it shall be the duty of the Sanitary Committee or Board concerned to comply with such requisition and to give reasonable aid and furtherance to any inspection ordered as aforesaid.

Local Boards may call for information in such cases.

42. Village servants who hold land, profits of land or other emoluments by way of remuneration, wholly or partly, for services consisting in, or connected with, cleansing or conservancy may, as to such services, be placed by the Collector, subject to the control of Government, under the command and superintendence of the Sanitary Committee or Board having authority in the place in respect of

Certain village servants to be placed under command of sanitary committee or board.

which the said services are due, and shall be bound to fulfil all reasonable orders of the said Committee or Board, under such reasonable penalties as may be provided in any rule made under this Act.

43. (1) The Collector shall :

(a) determine all questions as to the amount of any payment at any time by custom, or under any settlement mentioned in section 18, 19 or 20 of the Bombay Hereditary Offices Act due to a village servant placed under the command of a Sanitary Committee or Board under the last preceding section; and

(b) if necessary, cause the amount which he determines to be due or the money value thereof at the market-rate of the time being, if the due is payable in kind, to be recovered on behalf of the village servant entitled thereto, free of charge, as if the same were an arrear of land-revenue :—

(2) Provided that the Collector may decline to cause such recovery to be made on behalf of any servant, if, in his opinion, the duty in respect of which the payment is due has not been duly performed by such servant.

44. Any power conferred, or duty imposed, by this Act upon the Collector may, with the sanction of Government, be delegated by him to an Assistant or Deputy Collector.

45. In the discharge of the duties and the exercise of authority assigned to them by this Act, Collectors, Magistrates and other public servants subject to usual control in the exercise of their authority, shall be subject to the like control as in the discharge of their ordinary functions.

46. (1) No Magistrate, Collector, President, or Member of a Sanitary Committee or Board, or Sanitary Inspector, shall be liable to any penalty or to payment of damages for any act by him done in good faith, in pursuance or intended pursuance of any authority or duty conferred or imposed upon him by this Act.

(2) And no public servant or person duly authorized or appointed shall be liable as aforesaid for giving effect in good faith to any order or direction issued with apparent authority by a person empowered in that behalf under this Act, or under any rule made hereunder.

### SCHEDULE.

(See Section 3.)

| No. and year of enactment. | Subject or title.                     | Extent of repeal.  |
|----------------------------|---------------------------------------|--|
| Bo. Act VII of 1867 . . .  | The Bombay District Police Act, 1867. | Sections 33 and 34.  |
| Bo. Act VIII of 1867 . . . | The Bombay Village Police Act, 1867.  | Clauses 2, 3 and 4 (except the first two and the last thirteen words) and 5 of section 16. |

### APPENDIX B.

#### ACT No. VIII of 1895.

*An Act to facilitate the construction of drainage works for improving the sanitary condition of local areas.*

#### PART I.

##### CHAPTER I.

##### *Preliminary.*

Short title, extent and commencement.

1. (1) This Act may be called the Bengal Sanitary Drainage Act, 1895.

(2) Except as hereinafter otherwise provided, it shall extend to all the territories administered by the Lieutenant-Governor of Bengal, which are not included within the limits of any Municipality.

(3) And it shall come into force from the date on which it may be published in the *Calcutta Gazette* with the assent of the Governor General.

Definitions.

2. In this Act, unless there be something repugnant in the subject or context,—

- (a) "cultivating raiyat" shall have the meaning attached to it in the Cess Act, IX (B.C.) of 1880 :
- (b) "estate" shall have the meaning attached to it in the Cess Act, IX (B.C.) of 1880 :
- (c) "holder of an estate or tenure" shall have the meaning attached to it in the Cess Act, IX (B.C.) of 1880 :
- (d) "local area" means the portion of a district or districts within which a rate is to be levied, in order to liquidate the cost of a scheme adopted by a District Board :
- (e) "tenure" shall have the meaning attached to it in the Cess Act, IX (B.C.) of 1880 :
- (f) "the Collector" means, except as hereinafter provided, the officer in charge of the revenue jurisdiction of the district within which the lands, which form the subject of a scheme under this Act, are situated :
- (g) "the Commissioners" means the Drainage Commissioners under this Act :
- (h) "the Engineer" means the District Engineer or any Engineer especially appointed by the Local Government to perform the functions of an Engineer under this Act :
- (i) "tract" means the portion of a district or districts throughout which the Commissioners are authorized to exercise the functions conferred on them under this Act.

## CHAPTER II.

*Appointment of the Commissioners.*

3. (1) Whenever an application is received from a District Board, through the Collector and the Commissioner of the Division, reporting that they believe that the sanitary condition of any tract within their jurisdiction has been deteriorated by the obstruction of drainage, whether from natural or artificial causes, the Local Government may—

- (a) issue, if it think fit, an order indicating approximately the area of the tract affected, and prescribing the appointment of a number of persons, not less than nine, to be the Drainage Commissioners ;
- (b) direct the District Board to elect not less than half of such number from among the members of the District or Local Board as the case may be ;
- (c) appoint the remainder of the Commissioners from among the holders of estates and tenures in the tract affected, or from among the managers on behalf of such holders.

(2) The Commissioners so created shall elect one of their number to act as Chairman.

4. (1) When an affected tract, referred to in the last preceding section, includes lands subject to the jurisdiction of more than one local authority, the Local Government, by an order made on the application of any District Board concerned, may constitute a Joint Committee to be elected by all the local authorities concerned ; the number to be elected by each being determined by the Local Government as far as possible in proportion to the interest of such local authority in the tract affected.

(2) The Local Government may further confer on any Committee so constituted, or on such of them as may be specified in the order, all the powers of a District Board under this Act ; and such order may contain such provisions respecting the proceedings of any such Committee, as may seem proper, and may provide for the payment by the local authorities, represented thereby, of the expenses incurred by any such Committee, and for the audit of their accounts.

5. The Local Government may from time to time accept the resignation of any of the Commissioners, or may add to their number ; and in the event of any Commissioner dying, retiring, or ceasing to reside in the district in which such tract is situated, the vacancy so caused shall thereupon be filled by appointment or by election, as the case may be ; the conditions of the original appointment or election being in each case strictly observed :

Provided that not less than half the number of the Commissioners shall always be members of the District or Local Board, as the case may be.

## PART II.

## CHAPTER I.

*Drainage Scheme.*

6. (1) When the Commissioners have been appointed under section 3 or section 5, they shall, without delay, direct the Engineer to prepare a survey, plans and estimates of the drainage of the tract found by him to be affected, and such survey shall be drawn up in accordance with rules to be framed under section 35 (1a). On the completion of the survey the Commissioners shall, within a period to be fixed by the District Board which made the application (hereinafter called "the District Board"), forward the same to the Collector of the district within which the tract affected, or the principal part of it, is situated, together with a report (hereinafter called "the preliminary scheme") containing—

- (a) a statement descriptive of the proposed undertaking, and showing how the drainage is obstructed, with a map of the tract affected ;
- (b) an estimate of the total cost of the undertaking, including the cost of any land to be acquired under section 16 ;
- (c) an estimate of the annual cost of maintaining the works :

Provided that, if the tract affected includes any municipal area, the estimate to be framed under clauses (b) and (c) of this section shall show separately the portion of the cost under each clause, which will be incurred in respect of such municipal area :

Provided further that, if one or more Municipalities fall within the tract, a separate estimate shall be framed of the cost of constructing and maintaining such portion of the works as lies within the area of any such Municipality.

(2) The Collector shall thereupon cause to be prepared—

- (d) a statement showing the valuation, for cess purposes, of the lands included in the tract affected, and the total amount of cesses actually payable on the same ;
- (e) an estimate showing the rate bearing a definite proportion to the Road Cess payable direct to Government, which would provide for the payment with interest in the course of thirty years of the amount under clause (b) and the capitalized value of the amount under clause (c) of this section, excluding the portion to be incurred in respect of the municipal area, if any.

7. As soon as possible after the receipt of the survey and preliminary scheme, the Collector shall publish in every village in the tract affected a notification in the language of the district, calling for objections. Such notification shall be in the form in the Schedule hereto annexed, and may be published by posting the same at each post-office and police-station within such tract and in some conspicuous part of each village and at the Court of the Munsif within whose jurisdiction such village, or any part thereof, is situated.

8. As soon as practicable after the expiry of the period fixed by such notification, the Collector shall forward to the Commissioners the survey and preliminary scheme, together with the petitions of objection, if any, received by him, and shall call upon them to consider such survey and preliminary scheme together with such objections, and within a specified time to forward such survey and preliminary scheme to the Chairman of the District Board, together with their report upon the objections, if any, as well as upon the state of public feeling in regard to such survey and preliminary scheme, and their advice as to their adoption or rejection.

9. On receipt of such survey and preliminary scheme, the District Board shall, within one month's time, proceed to take them into consideration at a meeting specially called for the purpose.  
 District Board to consider the survey and preliminary scheme.
10. If the District Board reject such survey and preliminary scheme, the cost of such survey and the salary, if any, of the Engineer directed to prepare the same shall be paid by the District Board.  
 Procedure, if survey and preliminary scheme are rejected.
11. If at such meeting, a majority of the members present acting on the advice of the Commissioners, or, with the approval of a majority of not less than two-thirds of such members (such meeting to consist of not less than one-half of the total number of the members of the Board), acting against the advice of the Commissioners, adopt the survey and preliminary scheme, they shall revise the preliminary scheme in the following manner—  
 Procedure, if survey and preliminary scheme are adopted.
- (i) they shall deduct from the aggregate amount estimated under clauses (b) and (c) of section 6 the sums, if any, which have been either anticipated or promised as private subscriptions or contributed by the District Board, or provisionally promised by the Local Government;
- (ii) they shall thereupon submit the preliminary scheme so revised, together with the survey and the report prepared by the Commissioners under section 8, to the Collector.
12. The Collector shall thereupon:—
- (a) calculate the amount, which if expressed as a rate bearing a definite proportion to the Road Cess leviable within the tract affected, would pay off the balance in equal annual instalments within thirty years (such instalments being fixed), so as to provide for the payment of interest on any sums borrowed from Government or the public;  
 Procedure to be followed by the Collector.
- (b) forward such survey and preliminary scheme through the Commissioner of the Division to the Local Government for consideration:
- Provided that, if the instalment so fixed shall exceed the amount annually payable as Road Cess within the tract affected, the Collector shall return such preliminary scheme to the District Board for further consideration.
13. The "survey and preliminary scheme" thus adopted or modified shall be hereinafter called the "scheme," and the tract within which the new drainage rate is to be imposed shall be hereinafter called the "local area."  
 "Scheme" and "local area."
14. The Local Government shall consider the scheme thus adopted or revised, together with the report of the Commissioners, and may approve, modify or reject the same; and if it approve or modify the scheme, it shall thereupon return it, so approved or modified, to the District Board through the Commissioner of the Division, with an intimation of the amount which the Local Government will contribute towards the scheme:  
 Powers of Local Government.
- Provided that, if the modification adds materially to the cost of the operations, the scheme thus modified shall again be laid before the District Board for their consideration.
15. (1) The District Board may, with the previous consent of the Local Government, at any time reconsider the scheme adopted by them, and add to, alter or modify the same; and if any addition, alteration or modification is thereupon made by them, they shall lay before the Local Government the scheme so added to, altered or modified, and the Local Government may sanction the same or any portion thereof; and thenceforth the provisions of this Act shall apply to the scheme as ultimately sanctioned by the Local Government.  
 District Board may reconsider scheme, etc., adopted by them.
- (2) Every material addition, alteration or modification made by the Local Government or by a District Board to, or in, any scheme after the adoption thereof shall be published in the manner provided in section 7, and the provisions of sections 8 to 12 (both inclusive) shall apply.
16. Any land, likely to be needed in carrying out any scheme, sanctioned by the Local Government under this Act, may be acquired under the provisions of the Land Acquisition Act, 1894, or any similar Act for the time being in force for the acquisition of land for public purposes:  
 Land required for drainage works how to be acquired.
- Provided that no compensation shall be paid for land recorded as a water-course in the last Revenue Survey map published under section 4 of Act IX of 1847 or any similar enactment for the time being in force, unless it be proved that such land has been under cultivation for a period of not less than twelve years previous to the acquisition.
17. (1) All works under this Act shall be executed by the District Board, unless the Local Government order such works, or any portion of them, to be executed by more than one District Board, or by an Engineer appointed in that behalf by itself.  
 Local Government may order execution of drainage works by an Engineer appointed by it.
- (2) Any person duly authorized to execute any works under this Act may himself, or by his agents and workmen, enter into or upon any lands forming part of the local area, and carry out such works thereupon as may be required.

## CHAPTER II.

## EXPENDITURE AND APPORTIONMENT.

18. All amounts paid—  
 What amounts should be included in cost of construction.
- (a) as compensation for any lands taken for the purposes of this Act;
- (b) as salaries of the engineer, officers, servants or establishments specially employed by the Collector, the Commissioners or the District Board for the purposes of this Act;
- (c) for any surveys, plans, estimates, valuations and incidental expenses connected therewith, whether antecedent or subsequent to the adoption of the scheme, together with all amounts expended in carrying out the purposes of this Act, shall be included in, and be deemed to constitute, the cost of construction of works.
19. (1) The Engineer shall, once in every three months, until the works shall be finally completed, submit to the District Board a detailed Report showing the progress of the works and the amount expended thereon up to date from the commencement of the work or from the date of the last report; and when the works are completed and the accounts closed he shall submit to the District Board a final Report showing the total cost.  
 Engineer to report progress and completion of works.

(2) If the local area includes areas subject to the jurisdiction of more than one local authority, the proportion of such cost shall be defrayed by each local authority, as far as possible, in proportion to their interest in the work executed.

(3) The District Board shall forward a copy of this Report to the Local Government, through the Commissioner of the Division, with such remarks as to them shall seem fit; and in the event of any local authority objecting to the proposed apportionment, the Local Government shall determine the proportion to be paid by them. The decision of the Local Government thereon shall be final.

Amount to be apportioned how to be determined.

(a) the actual amount expended;

(b) the interest payable on the loans under the Local Authorities Loans Act, 1879, if any;

(c) the capitalized value of the estimated cost of maintenance.

From this sum shall be deducted the amounts subscribed or contributed as contemplated in sections 11 and 14.

20. The total cost of construction mentioned in section 18 shall be ascertained by adding together—

21. On receipt of the final Report mentioned in section 19, the District Board shall require the Collector, within three months, to determine the amount of rate, which shall be collected with the Road Cess annually payable direct to Government within the local area, and shall be sufficient to provide for the payment of the cost of construction as defined in section 20, in the course of not more than thirty years, excluding the portion to be incurred in respect of the municipal area, if any.

The Collector to determine rate.

22. (1) The rate so determined shall be published as provided in section 40 of the Cess Act, 1880; and shall be paid, together with the Road Cess payable by those liable to pay such cess, direct to Government within the local area, until such time as the period of not more than thirty years from the date of publication shall have expired, or the cost of construction of the works has been liquidated.

Rate to be published and to be paid with the Road Cess.

(2) All arrears of such rates shall be recoverable under the law for the time being in force for the recovery of Public Demands.

23. Any holder of an estate or tenure, who shall pay to the Collector any instalment of such rate payable under the last preceding section shall be entitled to recover half the amount of the instalment so paid from the holder of a tenure or cultivating raiyat holding lands within the local area under such holder of an estate or tenure, in the same proportion and in the same manner as he is entitled to recover road cess or public works cess, payable under the provisions of the Cess Act, 1880.

Share to be recovered by estate or tenureholder.

24. Any holder of a tenure, who shall pay to the holder of an estate or tenure the sum due to such holder under the last preceding section, shall be entitled to recover half the sum so paid from the cultivating raiyats holding lands within the local area under such holder of a tenure, in the same proportion and in the same manner as he is entitled to recover road cess or public works cess, payable under the provisions of the Cess Act, 1880.

Amount to be recovered by tenure-holder from raiyat.

25. (1) When the local area includes a municipal area, the amount payable under section 19 shall be defrayed by the Municipality.

Recovery of Municipal portion of cost.

(2) In order to provide for the payment with interest of such Municipal share at the rate payable to Government by the District Board within a period of not less than thirty years, the amount required may be raised by an additional rate to be added to the tax upon persons, or to the rate on the annual value of holdings as the case may be.

### PART III.

#### CHAPTER I.

##### Miscellaneous.

26. All outlets and water-channels, natural or artificial, which shall be cleared, altered, enlarged, excavated or cut under the provisions of this Act, and the construction and maintenance of embankments and dams and works therein or connected therewith, shall be subject to the law, for the time being in force, regulating the construction and maintenance of public embankments, rivers, channels and outlets.

Drainage works subject to laws relating to public embankments.

27. (1) Any person who, without lawful authority, erects, or causes to be erected, any weir or other obstruction in any outlet or water-channel, or cultivates the bed of a water-channel, so as to obstruct natural drainage, shall, upon conviction before a Magistrate, be liable to a penalty not exceeding two hundred rupees for every such offence.

Penalty for constructing weirs, etc., obstructing public drainages.

(2) It shall be in the discretion of such Magistrate to direct any such offender to remove and pay for the entire cost of the removal of any such obstruction.

28. All lands which are taken under the provisions of this Act for the purpose of the construction of works therein or thereon, and all works constructed under the provisions of this Act, as well as all outlets, water-channels, embankments and dams so constructed, cleared, altered, enlarged, excavated or cut, shall be under the control and administration of the District Board.

Lands taken and works constructed under Act to be under District Board.

29. The Commissioners, the Collector, and the Commissioner of the Division shall have all such powers as are conferred on Civil Courts by the Code of Civil Procedure for the purpose of compelling the attendance of witnesses and the production of evidence, and for the purpose of examining witnesses in any enquiry or appeal which they may be empowered to make or entertain under the provisions of this Act.

Powers of the Commissioners, etc., in taking evidence.

30. No proceeding under this Act shall be defeated or invalidated by reason of any defect or omission in the publication or service of any notification, notice or order, unless material injury is done to any person by such defect or omission.

Proceedings not to be invalidated by irregularities.

31. The Local Government may specially empower any person to do all such acts, to discharge all such functions, and to exercise all such powers as may be done, discharged or exercised by a Collector under this Act; and on any person being so specially empowered, such person may do all such acts, discharge all such functions, and exercise all such powers, and such person shall be deemed to be the Collector for the purposes of the scheme, in respect of which he is so specially empowered.

Local Government may empower any person to act for the Collector.

32. (1) The Collector may, with the sanction of the Commissioner of the Division, delegate to any Deputy or Assistant Collector, the performance of any acts, or the discharge of any functions which the said Collector may perform or discharge under this Act.

(2) Upon such delegation, such Deputy Collector or other Officer may do such acts, discharge such functions, and exercise such powers for the performance of the same, as the Collector may exercise under this Act :

Provided that all acts done, functions discharged, and powers exercised by such Officer, shall be done, discharged, or exercised subject to the control and supervision of the Collector.

33. Notwithstanding anything hereinbefore contained, all the proceedings of the Commissioners and of the Collector under this Act shall be subject to the general control and supervision of the Commissioner of the Division, or, when the tract or local area affected comprises lands situated in more than one Division, of such Commissioner as the Local Government may direct.

34. If at any time the Local Government is satisfied that the cost of any scheme of works, including the cost of maintenance, has been erroneously estimated, it may direct that the scheme be no further proceeded with, until the same has been revised.

## CHAPTER II.

### Rules.

35. (1) It shall be lawful for the Local Government, from time to time, to make, and, when made, to alter or repeal rules not inconsistent with this Act for the purpose of—

- (a) prescribing the forms of accounts, surveys, plans, estimates, periodical statements and reports ;
- (b) regulating the conduct of business at the meetings of the Commissioners ;
- (c) regulating the instalments by which, and the mode in which, sums payable under this Act shall be paid ;
- (d) regulating the carrying out and maintenance of works, when one or more local authorities are concerned ;
- (e) ascertaining the capitalized value of the estimated cost of maintenance of drainage works ;
- (f) providing for professional supervision over the preparation of surveys, plans and estimates, and the execution and maintenance of drainage works ;
- (g) allotting the duties of the Collector under this Act among Collectors of different districts as may be convenient ; and
- (h) generally carrying out the purposes of this Act.

(2) The Local Government shall, before making, altering or repealing rules under this section, publish a draft of the proposed rules and alterations and a notification of the proposed repeals, in three consecutive numbers of the *Calcutta Gazette*, and shall specify a date, not less than one month from the date of publication, at or after which such draft and notification will be taken into consideration.

(3) The Local Government shall receive and consider any objection or suggestion which may be made by any person with respect to such draft and notification before the date so specified.

(4) Every rule so made or altered, and every repeal of any such rule under this section shall be thereafter published in the *Calcutta Gazette*.

## SCHEDULE.

(See section 7.)

### BENGAL SANITARY DRAINAGE ACT, 1895.

*To all whom it may concern.*

TAKE notice, that with the object of improving the sanitary condition of the country, it is proposed to restore or improve the drainage in the thanas of.....district.....

Copies of the plans and estimates of the work proposed, which will affect (so many) villages, are now in the office of..... and may be inspected by any persons interested at any time between 11 A.M. and 5 P.M., Sundays and holidays excepted, up to and including the.....day of.....

It is estimated that, if the said drainage scheme is carried out, a rate will be payable by the residents of the villages affected which will be equivalent to.....on every rupee now paid as Road Cess for a period of 30 years from the date of the completion of the works, unless the District Board shall decide to collect the amount within a shorter period.

Any person objecting to the execution of the said works shall submit a petition in writing, duly signed, to the Collector of.....on or before the.....day of.....

Any person who does not object in the manner and within the time mentioned, shall be held to have assented to the execution of the works.

*Collector.*

## APPENDIX C.

### ACT No. II OF 1892.

*An Act to make better provision for sanitation in Villages in the North-Western Provinces and Oudh.*

WHEREAS it is expedient to make better provision for sanitation in villages in the North-Western Provinces and Oudh, it is hereby enacted as follows :—

1. (1) This Act may be called "The North-Western Provinces and Oudh Village Sanitation Act, 1892."
- 2) It extends to the territories for the time being administered by the Lieutenant-Governor of the North-Western Provinces and Chief Commissioner of Oudh.

(3) It shall come into force at once.

Definitions.

2. In this Act, unless there is something repugnant in the subject or context,

- (1) "Village" means an inhabited site, but does not include a municipality or cantonment;
- (2) "Village lands" mean the lands included in the revenue mauza or mauzas in which the village is situated;
- (3) "Well" means a well, the water of which is habitually used for drinking purposes by all or some of the inhabitants of a village;
- (4) "Collector" means any Revenue Officer in independent charge of a district, and any Officer appointed by the Government to discharge throughout any specified local area the functions of a Collector under this Act.
- (5) "Magistrate" means the District Magistrate and any Magistrate empowered by Government, by name or virtue of his office, to exercise the powers of a Magistrate under this Act;
- (6) "Sanitary Commissioner" includes a Deputy Sanitary Commissioner;
- (7) "Proprietors of village lands" mean the proprietors of the mahál or maháls in which the village lands are situated; and, in sub-settled maháls, mean the persons with whom sub-settlement has been made.

3. Part I shall not apply to any village until, by order notified in the Gazette, the Government shall have declared it applicable to the district in which the village is situated.

PART I.

4. In any village in which the provisions of Act XX of 1856 are in force, or which contains not less than 2,000 inhabitants, the Collector may cause a local inquiry to be made, through the agency prescribed by rules made under section 20, into the sufficiency and purity of the water-supply of the village, with the view of ascertaining any or all of the following matters:—

- (1) whether the water of any well is contaminated from surface drainage, or from any other cause against which effective measures of protection can be taken;
- (2) whether the water of any well is dangerous to health, and its impurity is due to causes against which effective measures of protection cannot be taken;
- (3) whether the construction of additional wells is necessary for the health of the inhabitants of the village.

Action that may be taken by the Collector on considering the result of the local enquiry.

5. The Collector shall take into consideration the result of the above enquiry, and may—

- (1) by the publication of notice in the manner prescribed, direct that any well be cleaned, improved, repaired, or otherwise protected from contamination, by, or at the expense of, those of the inhabitants of the village who are found on local inquiry to use the well;
- (2) after recording his reasons, condemn any well referred to in section 4 (2);
- (3) by the publication or service of notice in the manner prescribed, direct that one or more additional wells be constructed by the proprietors of the village lands.

6. When a well has been condemned in accordance with the provisions of section 5 (2), the Collector may either cause it to be filled up and closed, or, if it be a masonry well and is used for irrigation, allow it to remain open, on the condition that the inhabitants of the village abstain from using it for drinking purposes.

Publication of order prohibiting the use of a condemned well for drinking purposes.

7. When the Collector allows a condemned well to remain open under section 6, he shall cause the contents of his order to be published within the limits of the village, and shall direct—

- (1) the inhabitants of the village to abstain from using the water of such well for drinking purposes; and
- (2) the proprietors of the village lands to affix and maintain upon, or adjacent to, such well a conspicuous notice or mark indicating that the use of the water for drinking purposes is prohibited.

8. If at any time it be proved to the satisfaction of the Collector that the prohibition issued under the preceding section respecting the use of a well for drinking purposes is disregarded, he may forthwith cause such well to be filled up and closed.

Power of Collector to close a condemned well, if the prohibition issued under section 7 is disregarded.

9. Every notice issued under section 5 shall specify the nature and extent of the work to be executed, its estimated cost, and the period within which it is to be completed:

Contents of notice issued under section 5.

Provided that no notice shall be issued under clause (3) of section 5, if the estimated cost of the work exceeds the limit prescribed by rules made under section 20.

10. On the expiration of the period prescribed in any notice issued under section 5, the Collector shall ascertain whether the direction conveyed by the notice has been satisfactorily complied with; and may in default of such compliance proceed to execute the work himself;

Power of Collector to execute the work himself.

Provided that he may, on sufficient cause being shown, extend the period specified in the notice, or modify or rescind the direction conveyed by it.

11. Whenever notice has been issued under section 5 directing that measures be taken with regard to any existing well, or that a new well be constructed, the persons affected by the notice, or a majority of them, may apply to the Collector for a loan of public moneys for the purpose of executing the work specified in the notice: and the Collector, on being satisfied that the applicants are competent to execute the work, may grant to them in loan a sum not exceeding the amount specified in the notice, and may direct that it be paid to such person among the applicants as they may appoint.

Application to Collector for a loan of public moneys.



12. Whenever the Collector has expended money under section 10, or has made a loan under section 11, he shall forthwith prepare a list of the persons from whom such expenditure or loan is declared to be recoverable under the provisions of the next section.

Preparation of list of persons from whom sums expended or advanced by Collector are recoverable.

13. All sums expended by the Collector under section 10, and all loans made by him under section 11, shall be recoverable in accordance with the following provisions :—

Manner of recovery of sums expended or advanced by Collector.

(1) In the case of a well referred to in section 5 (1) from the persons found by the local inquiry to use the well in proportion to their respective means and circumstances, and in accordance with any rules that may be made under section 20 ;

(2) In the case of a well referred to in section 5 (3) :—

(a) one-quarter from the general provincial fund constituted by Acts III and IV of 1878 ;

(b) one-quarter from the proprietor or proprietors of the village lands in proportion to their respective proprietary shares in those lands ;

(c) one-half from persons, including proprietors of village lands, owning or occupying houses, situated within the village, or if the Collector so determine, situated in that portion of the village which will chiefly benefit from the well, with reference to their respective means and circumstances, and in accordance with any rules that may be made under section 20.

14. The Government may, after previous publication, make rules regulating conservancy, providing for the protection and periodical examination of the water-supply, and defining and prohibiting nuisances in any village in which a local inquiry has been held under section 4.

Additional power of Government to make rules regarding conservancy.

15. (1) In making any rule under the preceding section the Government may direct that a breach of it shall be punishable with fine, which may extend to ten rupees.

Penalty for breach of rules.

(2) All fines recovered under this section shall be applied as the Government shall from time to time direct.

#### PART II.

16. Advances may be made by the Collector for the repair, improvement or construction of wells in any village, whatever be its population, provided that the applicant furnishes sufficient security for the re-payment of the advance.

Advances for the repair, construction or improvement of wells.

17. When the Magistrate and the Sanitary Commissioner, or the Civil Surgeon, acting in concert, have ascertained that a serious epidemic or infectious disease is present in the district, or in any part of the district, and that special preventive measures are required, they may record their reasons in writing, specifying at the same time the tract in which such preventive measures are required. The Magistrate may then, subject to the provisions of any rules made under section 20, take such measures as he may deem necessary for the following purposes in any village, which is situated in the said tract, and in which an outbreak of the disease has either taken place or is apprehended, namely :—

Power to take special measures to prevent outbreak or spread of infectious disease.

(1) the cleansing and conservancy of the site ;

(2) the disposal of corpses by cremation or burial ;

(3) the prohibition of the use for drinking purposes, or the closing of any source of water-supply ; and

(4) the disposal or destruction of materials likely to convey infection.

18. Subject to the rules made under section 20, sums expended by the Magistrate under the preceding section shall be recoverable, in whole or in part, from the proprietors of village lands, and owners and occupiers of houses in the village, with reference to their respective means and circumstances.

Recovery of sums expended under the preceding section.

19. When any hut, shed, clothing, bedding, or other article which is likely to retain infection is destroyed under the provisions of section 17, clause (4), the Magistrate shall pay such compensation, if any, as he may consider reasonable, to any person sustaining substantial loss thereby ; but no person shall be entitled as of right to claim compensation for any loss or damage sustained by him by reason of such destruction.

Compensation to be paid for destruction of materials likely to retain infection.

#### PART III.

Power of Government to make rules.

20. (1) The Government shall make rules consistent with this Act :—

(a) prescribing the agency by which the local enquiry referred to in section 4 shall be conducted ; and

(b) fixing the limit referred to in the proviso to section 9.

(2) the Government may, after previous publication, make rules consistent with this Act

(a) defining the manner in which notices and injunctions shall be published or served ;

(b) determining the rate of interest (if any) to be charged on advances made under this Act, and on sums expended by the Collector under section 10 ;

(c) fixing the period within which, and the instalments by which, such advances and sums shall be re-paid ;

(d) prescribing the manner of keeping and auditing the accounts of the expenditure of such advances and sums, and of the re-payment made in respect of the same ;

(e) prescribing the mode of assessment of sums recoverable under section 13 and the agency by which such sums shall be assessed and recovered ;

(f) prescribing the measures which may be taken under section 17 ;

(g) limiting the sums which may be recovered under section 18 ;

(h) specifying the cases in which any action taken under section 17 shall be reported to the Government ; and

(i) generally for the purposes of giving effect to the provisions of this Act.

21. Any sum becoming due under this Act, and not paid on or before the date fixed for payment, shall be recoverable by the Collector as if it were an arrear of land-revenue.

Recovery of arrears due to Government.

## APPENDIX D.

## ACT No. III of 1894.

*An Act to confer powers and impose duties upon Municipal Authorities in the North-Western Provinces and Oudh for the construction and maintenance of drainage and sewerage works.*

Whereas it is expedient that provision should be made for the construction and maintenance of drainage and sewerage works in the municipalities of the North-Western Provinces and Oudh, and that powers should be conferred, and duties imposed, upon municipal authorities in relation thereto :

It is hereby enacted as follows :—

## CHAPTER I.

## PRELIMINARY.

## Title, extent and commencement.

1. (1) This Act may be called "The North-Western Provinces and Oudh Sewerage and Drainage Act, 1894."

(2) It extends to the territories for the time being administered by the Lieutenant-Governor of the North-Western Provinces and Chief Commissioner of Oudh : and

(3) It shall come into force on such date as the Lieutenant-Governor and Chief Commissioner may, by Notification in the Gazette, fix in this behalf.

2. All acts done before the passing of this Act by a municipal authority in the belief that it had legal authority to do the same, which could have been lawfully done if the Act had been in force, shall be deemed to have been lawfully done.

## Validation of acts done before the passing of the Act.

3. In this Act, unless there is something repugnant in the subject or context,—

## Definitions.

(1) "municipal authority" means—

(a) a Municipal Committee appointed under the provisions of Act XV, 1873 :

(b) a Municipal Board constituted under the provisions of Act XV, 1883 :

(2) "municipality" means a local area to which this Act may be extended under section 5 :

(3) "street" means any street, road, thoroughfare, passage, or place over which the public have a right of way : and includes the surface soil and subsoil of any such street, and the footway and surface drains of any such street, and any bridge, culvert, or causeway forming part of any such street :

(4) "owner" includes the person for the time being receiving the rent of lands and buildings, or either of them, whether on his own account or as agent or trustee for any person or society, or for any religious or charitable purpose, or who would so receive the same if the land or building were let to a tenant :

(5) "sewage" means night-soil and other proper contents of water-closets, latrines, urinals, privies, drains and cesspools :

(6) "drain" includes a sewer, pipe, ditch, channel, or any other device for carrying off sullage, sewage and polluted water, or rain water or subsoil water, together with pail-depôts, traps, sinks, cisterns, flush-tank, and other fittings appertaining thereto :

(7) "nuisance" includes any act, omission, place, or thing which causes or is likely to cause injury, danger or offence to the sense of sight, smell or hearing, or which is, or may be, dangerous to life or injurious to health or property : and

(8) "municipal drain" means a drain belonging to the municipal authority or under its direction, management and control.

4. (1) Nothing in this Act shall affect any provision of the Indian Railways Act, 1890, or any rule made under that Act.

## Savings.

(2) Nothing in sections 22, 29 and 30 shall apply to any factory regulated by the Indian Factories Act, 1881, and the Indian Factories Act, 1891.

## CHAPTER II.

## EXTENSION OF THE ACT AND CONSTRUCTION AND MAINTENANCE OF DRAINAGE AND SEWERAGE WORKS.

5. On an application of the municipal authority of any place, in pursuance of a resolution made at a special meeting, the Government may, by order, extend, on and from a date to be specified in the order, this Act to the area

## Application for an order extending the Act.

included within the limits of such place or to any part thereof :

Provided that no provision of this Act shall be applicable to a railway station, and to buildings and land appurtenant thereto, without the previous sanction of the Governor General in Council.

6. (1) Every order extending this Act to a municipal area shall be notified in the Gazette in English and in any other language the Government may prescribe in that behalf ; and such Notification shall be conclusive

## Publication of order.

proof that the order has been made as required in the preceding section.

(2) The Government may cancel or vary a Notification made under this section.

7. (1) On the extension of this Act to a municipal area, the Municipal authority shall, within such time as the Government may direct, cause to be carried out such a system of sewerage and drainage as may be necessary for effectually draining the municipality, subject to the approval of the Government, and to such alterations as may from time to time be ordered by it.

## Construction of sewerage and drainage works by the Municipal authority.

(2) The cost of carrying out the works under sub-section (1) and of managing and maintaining them after they have been carried out shall be met from the general municipal fund at the disposal of the municipal authority, and shall be deemed to be a proper charge on the fund.

8. Subject to any special reservation which may be made by the Government, all property of the nature hereinafter in this section specified and situated within the municipality, shall be vested in and belong to the municipal authority, and shall be under its direction, management and control, and shall be held and applied by it for the purposes of this Act : that is to say—

## Property vested in the Municipal authority.

(a) all public streams, springs and works for the supply, storage, distribution and disposal of water for sewerage and drainage purposes, and all bridges, buildings, engines, materials and things connected therewith or appertaining thereto ;

- (b) all public drains, culverts and water-courses in, alongside or under any street, and all works, materials and things appertaining thereto;
- (c) all public manure and sewage depôts.
9. All drains, culverts and water-courses in, alongside or under any street, and all works, materials and things appertaining thereto situated within the municipality other than those specified in section 8, shall, for the purposes of this Act, be under the direction, management and control of the Municipal authority.
- Property under the management of the Municipal authority.
10. The Municipal authority may construct within the municipality and, when necessary, for the purposes of disposal or outfall of sewage, without the municipality, such drains as it may think necessary for keeping the municipality properly cleansed and drained; and may carry such drains through, across, or under any street or place, and after reasonable notice in writing to the owner or occupier, into, through, or under any buildings or lands whatsoever:
- Power to make drains.
- Provided that no drain shall be constructed within the limits of a cantonment without the previous sanction of the Governor General in Council.
11. The Municipal authority may, from time to time, enlarge, lessen, alter the course of, cover in, or otherwise improve any municipal drain, and may discontinue, close up, or destroy any such drain that has in its opinion become unnecessary, on condition of providing a drain as effectual for the use of any person who may be deprived in pursuance of this section of the lawful use of any drain.
- Power to alter and discontinue Municipal drains.
12. The municipal authority may close temporarily any street or any part thereof for the purpose of constructing, repairing, altering, or cleansing any drain.
- Power to close streets.
13. The Municipal authority may cause any municipal drain to communicate with, and be emptied into, such place as may be fit and necessary within the municipality, and, if necessary for the purposes of disposal or outfall of sewage, without the municipality, but not so as to create a nuisance; and may cause the sewage therefrom to be collected for sale, or for the improvement of land, or for incineration, or for any purpose whatsoever, but not so as to create a nuisance.
- Disposal of sewage.
14. The Municipal authority may remove or otherwise deal with as it may think fit any street, building, wall, or other structure made or constructed or tree planted over any municipal drain without its permission in writing, and the expenses thereby incurred shall be paid by the person by whom the street, building, wall, or other structure was made or constructed.
- Unauthorized buildings, etc., over Municipal drains.
15. The Municipal authority may erect upon any premises, or affix to the outside of any building, or to any tree, any such shaft or pipe as it may deem necessary for the proper ventilation of the municipal drains, and such shaft or pipe shall be carried to a height of not less than six feet above the highest part of the highest adjacent house and erected so as not to cause any nuisance or inconvenience to any house in the neighbourhood.
- Affixing of shafts or pipes for ventilation of drains.
16. Subject to rules made by the Government, the municipal authority shall provide and maintain—
- Construction and maintenance of basins, reservoirs, depôts, etc., and public latrines, etc.
- (1) such basins, reservoirs, depôts, receptacles, or other works as may be required in connection with the drains belonging to it; and
- (2) such public latrines, privies and urinals as may be reasonably required for the public accommodation.
17. The Municipal authority shall cause the Municipal drains to be constructed, covered, ventilated, repaired, inspected and kept so as not to be a nuisance, and to be properly cleansed, flushed and emptied.
- Maintenance and cleaning of Municipal drains.
18. All drains not belonging to the Municipal authority shall be maintained and repaired by the owners and, subject to such other arrangement as may be made by the Municipal authority in this behalf, shall be flushed, cleansed and emptied by the occupiers of the buildings or lands for the sole use and benefit of which the said drains were constructed.
- Maintenance and cleaning of private drains.

## CHAPTER III.

## DRAINAGE OF PREMISES.

19. (1) Subject to such rules as the Municipal authority may prescribe under Chapter V and to such directions and conditions as it may specify in each case, the owner or occupier of any building or land may cause his drain to connect with a municipal drain.
- Power of owners and occupiers of buildings and lands to drain into Municipal drains.
- (2) The Municipal authority may close, demolish, alter, or re-make any connection made in contravention of the preceding clause of this section, and may recover the expenses thereby incurred from the person offending.
20. (1) When any building or land situated within one hundred feet of a municipal drain is at any time not drained to the satisfaction of the municipal authority by any or a sufficient drainage-connection with such drain, the Municipal authority may, by notice, require the owner or occupier of such building or land to make and maintain a drainage-connection with the drain in such manner as the Municipal authority may, subject to rules made under section 33, sub-section (3), direct.
- Power of Municipal authority to enforce drainage-connection with Municipal drains.
- (2) The provisions of sections 40 and 41 shall apply to any default in compliance with any such requisition, notwithstanding that part of the land through which the said drainage-connection is required to pass may not belong to the person so making default, unless he shall prove that the default was caused by the act of the owner or occupier of such last-mentioned land, and he has made application to the Municipal authority under section 21.
21. (1) The Municipal authority may, on application made to it, or on its own motion, call upon the owner of any building or land abutting on, or having a drain connected with, the Municipal drains, to show cause why the drain of an adjoining building or land, which has no direct access to the Municipal drains, should not be carried through or under his building or land, or should not be connected with his drain.
- Carrying drain of one person under the land of another.
- (2) If the Municipal authority, after hearing the objections, if any, made by the person on whom the notice was served, considers that the drain or drainage-connection should be made, it may record an order to this effect,

and if the parties concerned fail to agree, within the period stated in the order, as to the construction of the said drain or connection, may itself construct it, recovering the cost from the person by whom the application was made or on whose behalf action was taken under sub-section (1).

(3) The order shall set out, in writing, the respective responsibilities of the parties concerned for the maintenance, repair and cleansing of the drain or connection, and shall fix the sum (if any) in the form of an annual rent or otherwise, payable by the person by whom the application was made, or on whose behalf action was taken under sub-section (1), to the owner of the land or building through or under which the connection or drain is to pass.

(4) If the sum so awarded take the form of a lump payment, the Municipal authority shall recover it along with the costs of construction, and shall pay it to the person to whom it is due. If a recurring rent has been awarded, the person to whom it is due may recover it by suit in any Civil Court having jurisdiction.

22. (1) The Municipal authority may, by notice, require the owner or occupier of any building or land to remove or provide any drain, privy, cess-pool, or other receptacle for filth, or to provide any additional drains, privies, cess-pools, or other receptacles as aforesaid, which should in its opinion be provided for the building or land, of such description and in such manner as the Municipal authority may direct.

(2) The Municipal authority may, by notice, require any person employing more than twenty workmen or labourers to provide such latrines and urinals as it may think fit, and to cause the same to be kept in order and to be daily cleansed.

(3) The Municipal authority may, by notice, require the owner or occupier of any building or land to have any privy provided for the same shut out by a sufficient roof and wall or fence from the view of persons passing by or dwelling in the neighbourhood, or to remove or alter, as the Municipal authority may direct, any door or trap-door of a privy opening on to any street or drain.

23. (1) The Municipal authority may, by notice, require the owner or occupier of any building or land to repair, alter, put in good order or close any drain, water-closet, privy, latrine, urinal or cess-pool.

(2) The Municipal authority may, by notice, require any person who may construct any new drain, water-closet, privy, latrine, urinal or cess-pool in contravention of any provision of this Act, or of any rule prescribed under Chapter V, or of any specific direction given by the Municipal authority, or who may construct, re-build, or open any drain, water-closet, privy, latrine, urinal or cess-pool which it has ordered to be demolished or stopped up or not to be made, to demolish the drain, water-closet, privy, latrine, urinal or cess-pool, or to make such alteration therein as it may think fit.

24. The Municipal authority may, by notice, require any owner or occupier on whose land any drain, privy, latrine, urinal, cess-pool or other receptacle for filth or refuse for the time being exists within fifty feet of any spring, well, tank, reservoir or other sources from which water is or may be derived for public uses, to remove or close the same within one week from the service of such notice.

25. The Municipal authority may require that there shall be one drain for sewage, sullage and polluted water, and an entirely distinct drain for rain water or sub-soil water.

26. The Municipal authority may, by notice, require the owner or occupier of any land or building to cleanse, repair, cover, fill up, or drain off any private well, tank, reservoir, pool, depression or excavation therein which may appear to the municipal authority to be injurious to health, or offensive to the neighbourhood :

Provided, that if for the purpose of effecting drainage under this section, it should be necessary to acquire any land not belonging to the same owner, or to pay compensation to any person, the Municipal authority shall provide such land or pay such compensation.

27. The Municipal authority may, by notice, require the owner or occupier of any building to remove or alter any projection or structure, added to, or placed against, the building without the written permission of the Municipal authority, which covers, overhangs, projects into, or encroaches on any municipal drain.

Provided that, in the case of any projection or encroachment lawfully in existence at the commencement of this Act, the Municipal authority shall make reasonable compensation for any damage caused by the removal or alteration.

28. When the occupier of any building or land has, in compliance with a notice issued by a Municipal authority, executed any work for which the owner of such building or land is responsible, either in pursuance of the contract of tenancy or by law, he shall be entitled to recover from the owner, by deduction from the rent payable by him or otherwise, the reasonable cost of such work.

#### CHAPTER IV.

##### POWERS OF ENTRY AND INSPECTION.

29. The Municipal authority shall provide for the systematic inspection of all drains, privies, latrines, water-closets, urinals, cess-pools and other receptacles for filth not belonging to it.

30. (1) The Municipal authority, by any person authorized by it in this behalf, may, between sunrise and sunset, enter into any building or upon any land, and inspect any drains, privies, water-closets, latrines, urinals, cess-pools and other receptacles for filth therein or thereon, and may cause the ground to be opened where such person as aforesaid may think fit for the purpose of preventing or removing any nuisance likely to arise or arising therefrom.

(2) If, on such inspection, it appears that the opening of the ground was necessary for the prevention or removal of a nuisance, the expenses thereby incurred shall be paid by the owner or occupier of the land or building; but if it is found that no nuisance exists, or but for such opening would have arisen, the ground or portion of any building, drain or other work, if any, opened, injured or removed for the purpose of such inspection shall be filled in, re-instated, and made good by the Municipal authority.

(3) No building other than a latrine or urinal shall be entered under this section until six hours' notice in writing has been given to the occupier, if any, of the building by the Municipal authority, or by the person authorized by the Municipal authority to make the entry.

31. The Municipal authority, by any person authorized by it in this behalf, after giving twenty-four hours notice to the occupier, or, if there be no occupier, to the owner, of any building or land, may at any time between sunrise and sunset—
- (a) enter on and survey and take levels of any land ;
  - (b) enter into any building or on any land for the purpose of examining works under construction, of ascertaining the course of drains or of executing or repairing any work which it is by this Act empowered to execute or maintain.
  - (c) enter, inspect and measure any building or land for the purpose of valuation.
32. When any building used as a human dwelling is entered under this Act, due regard shall be paid to the social and religious sentiments of the occupiers, and before any apartment in the actual occupancy of any woman, who according to custom does not appear in public, is entered under this Act, notice shall be given to her that she is at liberty to withdraw, and every reasonable facility shall be afforded to her for withdrawing.

## CHAPTER V.

## POWERS FOR MAKING RULES.

33. The Government may, after previous publication in accordance with section 7 of the North-Western Provinces and Oudh General Clauses Act, 1887, make rules consistent with this Act—
- Rules by the Government.
- (1) as to the preparation and submission by the Municipal authority of plans, estimates and specifications for a drainage scheme, and as to the agency by which they shall be prepared and the work carried out ;
  - (2) as to the size and nature of the drains and other works which a Municipal authority may construct under Chapter II ;
  - (3) as to the size and nature of the works which owners and occupiers may be required by Municipal authority to construct under Chapter III ;
  - (4) as to the agency to be employed by any person in executing any work under this Act, and as to prohibiting the employment of any other agency.
  - (5) as to the issue and service of notices under this Act or the rules made under it ; and
  - (6) generally as to the powers and duties of the Municipal authority under this Act.
34. The Municipal authority may from time to time at a special meeting, with the sanction of the Government and after previous publication as aforesaid, make rules consistent with this Act—
- Rules by the Municipal authority.
- (1) as to the regulation and control, in any matter not specifically provided for by rules under section 33, of drains, ventilation shafts and pipes, water-closets, privies, latrines, urinals, cess-pools and other drainage works, in respect of their construction, alteration, maintenance, preservation, cleansing and repair ;
  - (2) as to the regulation or prohibition of the discharge into drains or deposit therein of sewage, sullage, polluted water and other offensive or obstructive matter ;
  - (3) as to the regulation or prohibition of the construction of streets, buildings, walls or other structures over municipal drains and of the alteration and removal thereof.
  - (4) as to the collection and removal by municipal or private agency of sewage from private premises to the basins or other receptacles established by the Municipal authority in connection with the Municipal drains ;
  - (5) as to the appointment by owners of buildings or lands in the Municipality, who are not resident in the Municipality, of persons residing within or near the Municipality to act as their agents for all or any of the purposes of this Act or any rule thereunder ; and
  - (6) generally as to carrying out the purposes of this Act.
35. (1) The Government, in making any rule under clauses (3) and (4) of section 33, and the Municipal authority in making any rule under section 34, may direct that a breach of it shall be punishable on conviction by a Magistrate with fine which may extend to fifty rupees, and when the breach is a continuing breach, with a further fine, which may extend to five rupees for every day after the first during which the breach continues.
- (2) In lieu of, or in addition to, such fine, the Magistrate may require the offender to remedy the mischief (if any) so far as is within his power.

## CHAPTER VI.

## OFFENCES.

36. Whoever in contravention of any rule made, or direction or condition specified under this Act makes or causes to be made any connection of a drain belonging to himself or to some other person with any Municipal drain, shall be punishable with fine, which may extend to fifty rupees.
37. Whoever disobeys any lawful direction given by the Municipal authority by public notice, or any written notice lawfully issued by it, or fails to comply with the conditions subject to which any permission was given by the Municipal authority, shall, if the disobedience or omission is not an offence punishable under any other section, be punishable with fine, which may extend to fifty rupees, and in the case of a continuing breach, with a further fine which may extend to five rupees for every day after the first during which the breach continues :
- Provided that when the notice fixes a time within which a certain act is to be done, and no time is specified in this Act, it shall rest with the Magistrate to determine whether the time so fixed was a reasonable time within the meaning of this Act.
38. Whoever obstructs or molests any person employed by, or under contract with, the Municipal authority under the Act in the performance of his duty, or in the fulfilment of his contract, or removes any mark set up for the purpose of indicating any levels or direction necessary to the execution of works authorized by this Act, shall be punishable with fine, which may extend to fifty rupees.

## CHAPTER VII.

## SUPPLEMENTAL.

39. Where any land, whether within or without the limits of the Municipality, is required for the purposes of this Act, the Government may, at the request of the Municipal authority, proceed to acquire it under the provisions of the Land Acquisition Act, 1894: and on payment by the Municipal authority of the compensation awarded under that Act, and of the charges incurred by the Government in connection with the proceedings, the land shall vest in the Municipal authority.

Acquisition of land.

40. (1) When any notice under this Act requires any act to be done for which no time is fixed by this Act, it shall fix a reasonable time for doing the same.

Execution of acts required to be done by any notice.

(2) Whenever it is provided by this Act that any such notice may be given to the owner or occupier of any land or building, and the owner and occupier are different persons, such notice shall be given to the one of them primarily liable to comply with such notice, and in case of doubt to both of them:

Provided that in any such case, where there is no owner resident within the Municipality, the delivery of such notice to the occupier shall be sufficient.

(3) Whenever the terms of any such notice have not been complied with, the Municipal authority may, after six hours' notice, by its officers, cause the act to be done.

41. (1) Where, under this Act, the owner or occupier of property is required by the Municipal authority to execute any work, and default has been made in complying with the requirement, and the Municipal authority has executed the work, the Municipal authority may recover the cost of the work from the person in default

Recovery of costs of execution.

(2) As between themselves and the Municipal authority both owner and occupier shall be deemed to be in default for the purposes of this section, but that one of them shall be deemed to be primarily in default, upon whom, as between landlord and tenant, the duty of doing the required act would properly fall either in pursuance of the contract of tenancy or by law.

(3) When the person primarily in default is the owner, and the Municipal authority has recovered the whole or any part of the cost from the occupier, or he has paid the same upon its demand, he may deduct the sum so recovered or paid from the rent, from time to time becoming due from him to the owner, or otherwise recover it from such owner:

(4) Provided that no occupier shall be required to pay under sub-section (3) any sum greater than the amount for the time being due from him to the owner, either in respect of rent due at the date of such demand as aforesaid or thereafter accruing, unless he has refused on application to him by the Municipal authority truly to disclose the amount of his rent and the name and address of the person to whom it is payable.

The burden of proving that the sum so demanded by the Municipal authority from the occupier exceeds the rent due at the time of the demand, or which has since accrued due, shall lie on the occupier.

(5) Nothing in this section shall affect any contract between an owner and an occupier.

(6) In this section the "cost of the work" includes any compensation paid by the Municipal authority under section 42.

42. (1) The Municipal authority may make compensation out of the Municipal fund to any person sustaining any damage by reason of the exercise of any of the powers vested in the Municipal authority, its officers and

Compensation out of Municipal fund.

servants, under this Act, and shall make such compensation where the person sustaining the damage was not himself in default in the matter in respect of which the power was exercised.

(2) If any dispute arises touching the amount of any compensation which the Municipal authority is required by this Act to pay for injury to any building or land, it shall be settled in such manner as the parties may agree, or, in default of agreement, it shall be referred to the Collector for decision.

(3) Any person dissatisfied with the Collector's decision may within three months of the date thereof institute a suit in the Civil Court. Subject to the result of such suit, if any, the Collector's decision shall be final.

43. (1) A Railway Administration, aggrieved by any order of a Municipal authority under the powers conferred on it by this Act, may appeal within thirty days from the date of such order to the Government, which may confirm, set aside or modify the order appealed from.

Appeal by Railway Administration.

(2) The Government may, if it shall think fit, extend the period allowed by sub-section (1) for appeal.

(3) When an appeal has been instituted under sub-section (1) against an order of the Municipal authority, all proceedings to enforce such order shall be suspended pending the decision of the appeal.

44. Prosecutions under this Act, or the rules made under it, may be instituted by the Municipal authority, or any person authorized by it in this behalf, and not otherwise.

Authority for prosecutions.

45. Any sum due to the Municipal authority under this Act on account of the expenses of any work executed, or of any measure taken or thing done by or under the order of the Municipal authority, may be recovered either by suit or on the order of a Magistrate having jurisdiction within the limits of the Municipality, or in any other place where the person from whom the money is claimable may for the time being be resident, by the distress and sale of any movable property within the limits of his jurisdiction belonging to such person.

Recovery of arrears due to the Municipal authority.

Disposal of fines.

46. All fines realized under this Act shall be placed to the credit of the general Municipal fund.

47. A Municipal authority may, at a special meeting, delegate to one or more of its members, by name or by office, any of the powers vested in it by sections 12, 15, 20, 21, 22, 23, 26 and 27.

Delegation of powers.

## APPENDIX E.

## ACT No. XIX OF 1889.

*An Act to make better provision for sanitation in Villages in the Central Provinces.*

WHEREAS it is expedient to make better provision for sanitation in villages in the Central Provinces; It is hereby enacted as follows:—

Title, extent and commencement.

1. (1) This Act may be called the Central Provinces Village-Sanitation Act, 1889.

(2) It extends to the territories for the time being administered by the Chief Commissioner of the Central Provinces; and

(3) It shall come into force at once.

2. (1) When the sanitary condition of a village containing not less than one hundred inhabited houses and not being a Municipality is, in the opinion of the Deputy Commissioner of the District in which the village is situate, such as to be injurious to the health of the inhabitants, he may, by an order in writing, published in such manner as the Local Government may by rule prescribe, declare that the village is in an insanitary state.

(2) After the publication of the order, the Local Government may—

(a) on the application of the mukaddam and ten or more other inhabitants of the village, or,

(b) if no such application is made within three months after the date of the publication of the order, on the application of the Deputy Commissioner, by Notification in the official Gazette, extend to the village the provisions of this Act from such date as may be specified in the Notification.

3. In every village to which this Act is extended a panchayat shall be formed, consisting of the mukaddam and such number of representatives of the village-community, not being less than four, as the Local Government may by rule prescribe, who shall be chosen by election from among the inhabitants of the village.

Election of village-panchayat.

Powers of the panchayat.

4. The panchayat shall, subject to the approval of the Deputy Commissioner, determine the sum which is annually required for the following purposes:—

(a) the proper cleansing and conservancy of the village;

(b) the provision and maintenance of a supply of wholesome water for the inhabitants of the village and their cattle;

(c) the maintenance of the roads in the village.

5. (1) The sum determined to be necessary under the last foregoing section shall be raised by the panchayat by an assessment on the houses and lands within the village with reference to the circumstances of, and property possessed by, the owners or occupiers of such houses and lands.

Mode of raising funds.

(2) An assessment shall not be valid until it has been sanctioned by the Local Government.

Powers of Local Government to make rules.

6. (1) The Local Government shall make rules—

(a) defining the limits of villages for the purposes of the Act;

(b) regulating the mode of election and the proceedings of the panchayats, the term of office of members of a panchayat and the circumstances under which, and the authority by whom, they may be removed;

(c) limiting the amount of tax and regulating its assessment, realization, safe custody and application, and the auditing of the accounts thereof;

(d) regulating the village-conservancy and defining and prohibiting public nuisances; and,

(e) generally, for giving effect to the purposes of this Act.

(2) The Local Government may, in making such rules, direct that the breach of any provision thereof shall be punished with fine, which may extend to ten rupees.

(3) Arrears of taxes imposed under this Act may, subject to the rules, if any, made under this section, be realized by the Deputy Commissioner as arrears of land-revenue.

7. The Local Government may direct that the provisions of this Act shall cease to have operation in any village from a date to be fixed by the Local Government, and may make over any moneys in the hands of the panchayat to the District Council or Local Board having authority under the Central Provinces Local Self-Government Act, 1883.

Withdrawal of Act.  
I of 1883.

village from a date to be fixed by the Local Government, and may make over any moneys in the hands of the panchayat

8. While the provisions of this Act are in force in any village, the authority of the District Council or Local Board under section 9 of the Central Provinces Local Self-Government Act, 1883, shall be suspended in respect of all matters made over to the management of the panchayat.

Exclusion of authority of District Council and Local Board.  
I of 1883.

Board under section 9 of the Central Provinces Local Self-Government Act, 1883, shall be suspended in respect of all

## APPENDIX F.

### RULES FOR VILLAGE SANITATION IN BURMA.

*Notification by the Commissioner No. 33, dated 30th August 1895.*

UNDER the provisions of section 5 (1) of the Upper Burma Village Regulation the Commissioner of the Eastern Division, with the sanction of the Local Government, frames the following rules regarding Village Sanitation in the Kyaukse, Meiktila, Yamethin, and Myingyan districts in the Eastern Division.

1. The headman shall not allow any house or land in any village under his control to be, or to be kept, in a filthy or insanitary condition, or to be overgrown with weeds or rank vegetation.

2. The headman shall not allow the corpse of a human being, unless embalmed or unless enclosed in an airtight coffin, to be kept unburied or uncremated for more than 48 hours on any house or land in any village under his control, without the special sanction in each case of the Civil Surgeon, Subdivisional Officer, or Township Officer. Provided that between the first day of November and last day of February inclusive corpses may be kept unburied or uncremated for 72 hours.

3. The headman shall not allow the corpse of a human being who has died of cholera, smallpox, or other infectious or contagious disease, to be kept for more than six hours unburied or uncremated on any house or land in any village under his control.

4. The headman shall not allow the burning or burying of the corpse of a human being in, or the depositing of the same at, any place in any village under his control, except a public burial-ground, or a place set apart for that purpose by the Township Officer.

5. The headman shall at once send a report to the nearest police-station or outpost of the occurrence in any village under his control of cholera or smallpox, if two cases occur in close succession.

6. When a corpse is interred, it shall be buried at a depth of at least 5 feet, and not within 30 yards of any well, tank, or stream, or of any dwelling-house; and the headman, exercising control over the village where the interment takes place, shall be bound to satisfy himself that this is done.

7. The headman shall not allow any latrine or cess-pit on any house, enclosure, or land in any village under his control to be kept in a filthy or insanitary condition. Cess-pits should be closed periodically.
8. The headman shall set apart in each village under his control one or more wells for drinking purposes and shall cause to be constructed round each well either a parapet 2 feet high or a substantial hedge, and shall not allow bathing or washing of clothes within 10 yards of any such well, and shall not allow the ground within 10 yards of such well to be defiled by filth, rubbish, or otherwise. If the water-supply is from tanks, the headman shall reserve one tank for drinking purposes only, shall keep clean the banks thereof, and shall not allow bathing, washing of clothes, or watering of cattle in it.
9. The headman shall take measures in order that all latrines and cess-pits in each village under his control may be screened by sufficient walls from the view of passers-by or persons residing in the neighbourhood.
10. The headman shall cause the streets and lanes in each village under his control to be kept free from weeds, in good order, and in a sanitary condition.
11. The headman shall mark out a place near—but outside—each village under his control, where rubbish may be deposited, and shall cause the rubbish to be burnt or worked into the land at ploughing time.
12. The headman shall not allow a new house to be built in any village under his control within 20 feet of the front or back, or 6 feet of the side, of any existing house.

*Directions regarding the prevention of fire.*

1. The headman should advise each house-owner or occupier in each village under his control to maintain two hooked bamboos, two fire-beaters, and pots filled with water in number corresponding to the front posts of such house. But he cannot legally punish persons who neglect to take his advice in this matter.
2. The headman should see that fires or lights are not ignited, handled, or used in any village under his control in such a manner as to be dangerous to life or property. In really serious cases, or where a fire results from careless action on the part of any of the villagers, he should send a report of the matter to the nearest Magistrate or Police Officer.

APPENDIX G.

VILLAGE SANITATION IN INDIA.

*By Deputy Surgeon-General T. G. Hewlett, C.I.E.*

Among other questions which affect the welfare of the 200 millions of Her Imperial Majesty's subjects in India there is none of greater urgency, or which demands more earnest attention, and at the same time more careful handling, than the introduction of Sanitary Reform into the villages. The necessity for this measure is apparent, even to the most casual visitor to the country; but although earnest representations on the subject have, during the last 20 years, been repeatedly made, as well by the Army Sanitary Commission in England as by the Officers of the Sanitary Department in India, it has not, until quite recently, attracted much attention, even from Government, and still less from the general public.

The fact is that Government has not cared, and wisely so, to take this important question up, until the people themselves showed that they felt the need of sanitation, and this, owing to the spread of education, they are only just beginning to do, and that by no means, at present, generally. Nor is such ignorance on the part of the villagers to be wondered at, when it is remembered that from time immemorial Village Life in India has gone on in one fixed groove, which nothing seemed to alter. Wars and tumults might sweep over the land and be followed by their gaunt handmaids Famine and Pestilence, but the villagers who survived their ravages did not perceive the lessons they taught, and resumed their slow life and passed their days in the same immobile way as their forefathers through countless generations had done before them.

But the exigencies of those turbulent times, which preceded the era of British rule, required as a measure of safety, and in order to guard against the incursions of bands of predatory dacoits, that not only should each village be, if possible, surrounded by a high mud wall, but that the streets inside it should be narrow, and that the walls of the houses facing them should have no external openings through which a midnight marauder might force his stealthy way, whilst the houses were crowded together so that mutual assistance might be the more quickly rendered, and customs regarding the performance of the offices of nature, etc., were established which are and must ever have been most dangerous to health. The result is that now when the *Pax Britannica* has spread throughout the land—when there is no danger, as in the old days, in going outside the village enclosure, the habits ingrained by the practices of thousands of years cannot be eradicated in a day, and the absence of cleanliness is not recognized by the villagers as an evil, any more than the necessity for fresh air or light in the dwelling is felt by them, and they see nothing wrong in living under conditions which are utterly opposed to all sanitary teaching and experience.

It will be impossible in a pamphlet of this kind to give a detailed description of all the debasing conditions in which the rural population at present habitually, and I fear I must add contentedly, lives. Suffice it to say that the ground-surface of every village in India, as well within the habitable area as without, is everywhere loathsomely foul; that the drinking water-supply is too frequently polluted, and that the very air is tainted by sickening emanations from human ordure, filth of all kinds and misplaced trade processes; that there is no drainage; that the subsoil is not only impure, but damp; that, in fine, almost every sanitary fault exists that could exist; and that every law of decency and of health is grossly violated. This is no exaggerated description of actual conditions to be seen in every village, and when the imagination really grasps what these mean, neither wonder nor astonishment can be felt that such a persistent defiance of the laws of Nature is followed by the outbreak of the most terrible epidemics of cholera and small-pox; whilst bowel complaints are rife, and fevers, produced by the impure, undrained, and consequently very damp condition of the subsoil around habitations are of an extremely malignant and deadly type, and annually slay their hundreds of thousands of victims. As might be expected, the waste of infant life is also in such conditions literally appalling. In one town in the Bombay Presidency I could name, in 1886—an exceptionally healthy year when there was no cholera or small-pox in movement—the death-rate among infants under one year of age reached the excessive rate of 462 per 1,000, so that nearly half the children who were born died before they were a year old, whilst in another it actually amounted to 617 per 1,000!! The cause of these deaths was traced to insanitary conditions, and indeed no fact has been more clearly demonstrated than that the heavy mortality, which year by year takes place, is, for the most part, entirely preventable.

Foreign Nations undoubtedly view the insanitary conditions of the towns and villages in India as a standing danger to the civilized world; but their action with the view of preventing what they consider possible, *viz.*, the importation of cholera into Europe, is based on entirely erroneous principles, for cholera is not a contagious disease, nor can it be carried about by persons; but instead of taking effective sanitary measures, and thereby rendering the introduction of any filth poison into their maritime or other cities a matter of impossibility, they are dominated by panic and try to save themselves from the results of their own want of cleanliness by imposing quarantine on all vessels arriving at Suez from India; and this principle is carried to such an outrageous extent



that they do not even differentiate between epidemic seasons and times when the disease is at its minimum intensity; for even in a year like 1886, during which there were only 17 deaths from cholera in the City of Bombay, all vessels arriving at Suez from that Port were at certain seasons of the year placed in quarantine!

The Government of India has, however, at length taken the subject up in earnest, and a Resolution in the Home Department (Sanitary) No. 212-225, dated 27th July, 1888, deals with the whole question in a comprehensive spirit, and evinces a most just appreciation of its importance. It points out that "the main obstacles which have hitherto impeded sanitary improvement in India lay in the ignorance of the masses and their dislike to any change of custom, and the want of efficient executive agencies, and last, though not least, in the want of funds," and states that although their assistance and co-operation are essential, "district officers have neither the time nor the technical knowledge, nor the opportunities requisite for a comprehensive survey of the entire field of activity which is necessary for initiating and carrying approved sanitary measures into effect," and it therefore appears to be eminently desirable "that there should be established in each province a Sanitary Board, through which the Local Government can operate, and to which, subject in all respects to the orders of the Local Government, shall be entrusted the control and supervision over sanitary works, whether undertaken in urban or rural areas," and these Sanitary Boards are not only to be recognized "as a Consultative Body but also as the executive agency through which the Government acts in the Sanitary Department." The Resolution then refers to the orders issued by the Home Department on Municipal and Local Board Reports for 1885-86, which laid down that "a sanitary survey of each municipality and rural area should be undertaken, and that plans and estimates should be prepared of all the improvements necessary to provide each town or village with an efficient system of water supply, drainage, and conservancy," and further orders "the provision in every province of simple rules for the regulation of Village Sanitation," and says "It is now in contemplation to render such rules more efficient by legislation. Whenever the existing law makes no provision or insufficient provision for the enforcement of necessary sanitary measures in rural areas, there should be no hesitation in taking the necessary power by legislation," and it calls "attention to the valuable remarks made in 1879 by the Army Sanitary Commission on the practical application of sanitary principles to towns and villages in India."

Speaking as an Officer, who was one of the first pioneers of sanitary reform in India, and who has had much practical sanitary experience in that country, I cannot over-estimate the immense importance of such an enlightened Resolution, and I think I am not taking too sanguine a view when I say that the above orders of the Government of India, if they are carried out in the same spirit as they have been conceived, will to the utmost certainty produce results which will not only astonish the world, but will benefit the natives more materially than any of the many blessings already conferred on them by English Rule.

As I have retired from the Service it is no longer my privilege to address Government in an official capacity, but my long experience in the Sanitary Department in India emboldens me to offer some suggestions which I hope may be useful, both as regards the principles, which in my opinion would, if followed, ensure the success of an Act to provide sanitation in the villages in India, and also with reference to what is absolutely important, *vis.*, the provisions which the Village Rules, if they are to have any practical effect on the public health, ought to contain.

It will be observed that the Government of India lays stress on the ignorance of the masses, and their dislike to any change of customs, as being among the formidable obstacles to sanitary reform in India. It therefore seems to me to be most absolutely essential that a Sanitary Act should comprise more than a dry exposition of the law, and it is my strongest opinion that in order to set the minds of the rural population at rest regarding the intentions of Government, it should define in plain and unmistakable language the purposes for which the Act is passed, and especially the Village Rules should be drawn up in such a way as to instruct the people and show them exactly what the Government wishes them to do, as well as exactly what it forbids them to do.

It must also be remembered that any Sanitary Act in its endeavour to raise the people out of their present debased conditions, and to make them exchange their filthy habits for those in accordance with the demands of decency and health, must contain provisions which must necessarily interfere with their established customs, and consequently with their comfort. It must, for example, provide a cleansing establishment which must invade, if not the interior of the house, at least its environments. Now speaking from my experience as the first Health Officer of Bombay, where it was my duty to organize the Health Department in that City and to put into force the provisions of the first Municipal Act, I know that this procedure on its first introduction must necessarily create a certain amount of irritation, and that a certain amount of odium will attach itself to any Government official who works it; for I found at first that this Act was extremely distasteful to the people, as they did not understand what our action meant, or that we were working for their own good, and they regarded the enforcement of measures so foreign to their habits, and our not permitting them to follow the traditions of their forefathers as an act of *zoolum* on the part of the Government. Now what took place in Bombay is perfectly certain to occur up-country, and in an intensified form, because there cannot there be European supervision to enquire into every case of complaint made against the Cleansing Department; and though no one is more anxious than I am to see sanitation introduced into the villages in India, yet I say deliberately, and with all the force I can, that I would rather see things go on as they are, than that a Coercive Act to effect this object should be passed, especially if it is to be worked by Government officials, for such a procedure would, I am convinced, ensure the failure of any hope of effecting the one great object of my life, and indeed, such an Act, if honestly worked, would create so much irritation among the rural population, that it could not fail to cause serious uneasiness to Government.

I should not speak so decidedly if I had not the strongest grounds for so doing, but when in India I mixed much with villagers, and know, at least those in the Presidency of Bombay well, and what they think and feel about the matter; I always encouraged them to speak out openly, which they did much more freely than if I had been an Officer of the Revenue Department, and I very respectfully but very emphatically warn the Government, what my experience teaches me must ensue, if any such measure is passed. The rural population in the Presidency of Bombay at all events is easy to lead, but it will not be driven, and any attempt to *force sanitation* on them will, I am convinced, be followed by widespread discontent, and the people will be brought to the very verge of disloyalty.

Surely, from every point of view, it would be better that the villagers should be systematically taught to identify themselves with the Government in this matter, and this can only be done by explaining to them the necessity for the movement and by giving them a direct interest in its working. Such action is in present circumstances the more especially needful, as the villagers know quite well that the boon of local self government has been bestowed on all municipalities throughout India, and they would naturally and justly ask why if it is right for the urban, it should not be conceded to the rural population, especially when they know that many of the so-called towns are no bigger or more influential than many of the villages. Such a question would be difficult to answer, for as far as I know there is no reason why every village in India, of course under proper and efficient safeguards, should not be allowed to manage its own local affairs as regards sanitation.

I am convinced that no movement would be more in accord with native traditions than if the Government were pleased to grant the people in each village power to elect their own Panchayat, which would thus be a really representative body, and which would, after a short time, learn to manage, under the direction of the Sanitary Boards, their own sanitary affairs. This is no new proposal, as the Madras Local Board's Act of 1884 already provides for the establishment of Village Panchayats, the members being either wholly appointed by

Government, or partly elected by the tax-payers. If this concession were made by Government, it would be the one best calculated to allay the suspicion with which the rural mind always invests anything strange or new, and it would at once disarm them, and restore their confidence in the good and paternal intentions of the Government, and besides it would transfer the odium I have spoken of from the Government to the elected representatives of the people. Of course the Act of Village Rules would carefully define the mode of election and the duties of the Panchayat, etc. The position of its members would be one conferring dignity, and one which respectable villagers would be anxious to attain, especially if Government were pleased to confer on each Panchayatdar a distinctive title during his tenure of office, or if it sanctioned a dress of honour being bestowed on the Chairman, of that Panchayat whose village at the time of Jamabandi was found to be the cleanest in the Taluka.

To the Panchayat also would be entrusted the most important and delicate duty of raising in any manner which might be agreed upon by a majority of the villagers, in conclave assembled, and subject of course to the approval, or veto of Government, funds, sufficient to pay the wages of the village menial servants, whose services would be placed under their command, and to purchase carts, brooms, etc., etc.

The raising of funds in India is always a ticklish matter, but the course I so strongly recommend would cause much less irritation, than if Government were to order the Collector to levy a rate to meet the necessary expenses, for in that case there would be an immediate outcry that it was imposing additional taxation, and great and widespread discontent would be caused. There are, in the Bombay Presidency, at least three villages where the villagers elected their own Panchayats, who with the consent of the majority imposed a house-tax on themselves to meet the expenditure necessary to keep the village clean. In one of these this movement was entirely spontaneous, without any pressure whatever being put on the villagers by any Government official—and in my strongest opinion the example thus set by the natives themselves should be followed by Government in introducing an Act for Village Sanitation. Surely this course would be far more politic in every sense, than that Government should attempt to do the work itself, either through the agency of its own officers, or through villagers appointed by Government, whom the people would know were controlled by the irresistible power of the Collector. Such a course would be most unpopular, and I also know that the people hate and dread any interference with their local affairs on the part of the Magistracy, as would be the case if Magistrates were placed on Village Committees, etc. It is, moreover, I respectfully submit, most unwise and unfair that the same man should occupy the position of accuser and judge. As an old Health Officer I can speak most decidedly as to the paramount importance of having an impartial judge to decide cases between the accused and the servants of the cleansing establishment; and in my judgment it would be far better to enlarge the powers already conferred by, for example, Bombay Act VIII of 1867 on the Village Patel, and to make him the Village Magistrate, to try all cases of offences against the Village Rules, and I would suggest as the surest means in my experience of getting sanitary work done, that he be empowered to inflict a continuing penalty, however small the amount, for every day after the date fixed by the notice had expired, and during which the nuisance remains unabated. Let the accused by all means have the right to appeal from his decision to the Mamlutdar, or the District Magistrate, and consequently to the High Court. Such a procedure would be in strict accordance with established law and custom. Then it is most essential that the Government should have the power, through such agency as it may be pleased to determine, to inspect the work of the Panchayat and their servants, and to see that they really do their duty, and that the provisions of the Village Rules, especially as regards water-supply, drainage, and conservancy, are efficiently carried out, and by all means introduce what in the existing Municipal and Local Board Acts are popularly designated "The Bludgeon Clauses," and let the Act give Government full power, on default being proved against a Panchayat, to suspend it, and to perform what is necessary at the expense of the villagers.

It must never be forgotten that Government may pass what Acts it pleases to enforce sanitation in the villages, but unless the people themselves co-operate to give effect to their provisions, they will remain a dead-letter, except, as I cannot conceive nowadays to be possible, actual force is used to compel their adoption; but a Sanitary Act embodying the principles I advocate would afford the best chance of practical sanitation, being at length really introduced into the Villages of India, as it would be administered by the people themselves without direct interference on the part of Government, but under its advice and counsel.

Doubtless, difficulties would and must be met with at first, but under the judicious and kindly management which Government would assuredly exercise, these would soon be overcome, and in any case the experiment—for any move in this direction must at first be an experiment—is worth trying, for if it succeeds it must surely be conceded that it is better than any other plan; and one that would at least not excite the opposition of the masses.

Having thus stated the principles which, in my strongest opinion, it would be well to adopt, in framing a Sanitary Act for India, I pass on to the consideration of the Village Rules.

In the orders of the Government of India above quoted, it will be observed that each village is to be provided with "an efficient system of water-supply, drainage, and conservancy." This can only mean that the system is to be such as will prevent disease and improve health, for if it does not accomplish this it cannot be "efficient." The problem then, which faces us, and which must be solved, is, first: What system of practical sanitation in the villages will be efficient, *i. e.*, sufficient to prevent cholera and the other malignant fevers which at present cause such a very heavy mortality in them? and when this point has been decided, the further question arises,—Is it possible to carry them out?

The following Rules to introduce sanitation into villages in India embody the observation and experience of a life-time, and I am convinced if the measures taken to give effect to the suggestions of the Government of India are to be efficient, that there is not one single rule in them which can be safely omitted, and I am equally confident that it is perfectly feasible to carry out in the villages the provisions of each Rule. I think I may claim that they embody the suggestions of the Army Sanitary Commission, and that they contain clear and definite instructions, as it is so vitally important that they should, and that they show the villagers exactly what they are to do, as well as what they are forbidden to do.

I have endeavoured also to instruct them and to explain the reason for each rule. In some instances the rule exhorts rather than compels, and several things are allowed, out of deference to native customs and prejudices, which perhaps, strictly speaking, ought to have been forbidden. The penalties spoken of in several sections are not specified, as of course they would be included among the sections of the Act. It may be said that the Rules are too long, but they necessarily embrace very many points, and deal with some of the most prominent wrong conditions, commonly met with in villages, which affect, and destroy health, and which, if any practical good is to follow, must be clearly stated. I know, as an old Health Officer, who has seen perhaps more cholera than most men, that it is simply idle to expect that it or the other intense fevers of India can be eradicated by *half measures*, and in my opinion it would be better to let things go on as they are, than to enact Rules which do not strike at the root of the wrong conditions, and which do not deal with the causation of disease.

I have added a preamble, as I am convinced that some such preface would be really useful in allaying distrust on the part of the rural population. These Rules are intended to apply to all villages containing more than 500 inhabitants, as in them will be found a sufficiently intelligent community to appreciate their value. It must be remembered that many of our so-called villages are in reality towns, containing more than 5,000

and some more than 10,000 inhabitants. At the same time they can, with perfect propriety, be applied to villages containing between 200 and 500 inhabitants, whilst for villages with a population under 200, which usually consists of a collection of huts occupied by Bhils, hill men, etc., etc., the Sanitary Board of the Province might draw up simple regulations, principally prohibitions, to ensure the conservation of the water supply, the cleanliness of the surface close to the huts, and to compel the villagers to go to selected places for the purposes of nature. I have also incorporated in the Village Rules some simple instructions regarding the action required to be taken during outbreaks of cholera, which I drew up, whilst Sanitary Commissioner of Bombay, for the information and guidance of the village officers, and which were approved by Government and circulated throughout the Presidency.

## DRAFT VILLAGE SANITATION BILL.

### PREAMBLE.

Government having taken into its most earnest consideration the very heavy mortality which year by year takes place among the rural population, and finding that it is due to the extreme prevalence of disease, especially of fevers, bowel complaints, and, in some years, of cholera and small-pox in the villages, has been pleased to determine that, in the interests of the rural population committed to its charge, the serious state of things can no longer be permitted to continue; and as this excessive death rate has been clearly traced to the filthy conditions in which the villagers live, and is principally caused by the rubbish, dirt, and filth which have been allowed to accumulate in the back yards, and by the sides and fronts of the houses they inhabit, as well as by the too frequent impurity of the water they drink, and by the other unwholesome matters which are so commonly met with in villages, it has therefore resolved that, for the future, cleanliness must be maintained in all villages, and that the surface and surroundings of each village to which this Act is applied, must be daily cleansed, and that the water-supply must be improved, and that such other measures as may be determined upon must be taken with the view of improving the health of the villagers; and in furtherance of this object Government is pleased to publish Rules, which will clearly explain to the villagers exactly what they have to do and what they are forbidden to do.

Government believes that in this its endeavour to benefit the rural population, it will have the support and assistance of all right-thinking persons, and has therefore resolved to grant to the villagers the boon of Local Self-Government, which the Most Noble the Marquess of Ripon, when Viceroy, bestowed upon all Municipalities throughout India. Government will therefore permit the villagers to elect from among themselves a Panchayat for each village, whose duty it will be to see that the provisions of this Act and of the Village Rules are properly and efficiently carried out. The members of the Panchayat will thus be in a position of great trust and responsibility, as it will also be their duty to raise funds, subject to the approval of the Government, in any way that may be decided by a majority of the villagers, so as to pay the establishments, etc., necessary to keep the village clean, and to meet the expenditure entailed by this Act.

### VILLAGE RULES.

#### CHAPTER I.

**RULES TO PROVIDE FOR THE SELECTION AND MANAGEMENT OF PLACES TO BE SET APART—1ST, FOR THE USE OF THE VILLAGERS AS PLACES OF RESORT FOR NATURAL PURPOSES; 2ND, FOR THE DEPOSIT OF ALL RUBBISH, DIRT, GARBAGE, FILTH, OTHER THAN NIGHT-SOIL, COLLECTED IN THE VILLAGE; 3RD, FOR THE BURIAL OF THE CARCASSES OF DEAD ANIMALS.**

1. Subject to the approval of such officer as Government may be pleased to appoint, the Panchayat shall set up boundary-marks round, but not nearer than 250 yards to, the village, within which no deposit of any kind of filth shall be allowed. It shall also select at least three sites for the undermentioned purposes, which shall be outside the boundary-marks, and at the distances hereafter named. These sites shall be to leeward, and, in the Bombay Presidency, if possible, to the south of the village.

Boundary-marks not nearer than 250 yards to the village to be set up all round it, and no filth to be deposited within this boundary. Sites to be selected for the performance of the offices of nature, the deposit of filth and rubbish, and the burial of the carcasses of dead animals.

2. The first site shall not be nearer than 250 yards to the village, and shall be assigned for the use of the villagers as a place for resort for the performance of the offices of nature. If the village is a very large one, it may be necessary to allot more sites for this purpose, so that the villagers should not have too far to walk to relieve themselves. Each site shall be divided into two portions, one for men and the other for women; or, if preferred, two separate sites may be allotted, one for each sex. The area must necessarily depend on the size of the village, but the boundary of each site shall be enclosed by a thick bramble hedge or wall, and care must be taken, either by the use of turnstiles or other convenient arrangements, to ensure the exclusion of cattle from the interior of the site, the approach to which should be marked out by stones which have been limewhited, so as to be readily distinguishable at night.

3. After the site or sites have been provided, it should be notified that any villager caught easing him or herself in any street, thoroughfare, or anywhere inside the village, or within the boundary-marks, except in an authorized privy, shall be dealt with as hereafter provided.

When places of natural resort are provided, anyone who performs the offices of nature in the village or within the boundary-marks will be punished.

4. If the surface of the soil will admit of it, a trench one foot deep by one foot wide, and as long as required, shall day by day be dug by the village menial servants within the enclosure at each site. Every person, after using it, shall draw with a phowra, or kick with his foot, a little earth over what has come from him, and when the site has been completely trenched over, a fresh plot of ground must be selected and treated in a similar way, and the former site must be ploughed up crosswise, and be planted with crops. The cultivation of the manured field is an essential part of this scheme, as growing plants rapidly assimilate the manure, and the ground will again become sweet, whilst the crops from these fields will be far more luxuriant than those grown on fields which have not been thus manured.

5. If there are any privies, either public or private, in the village, their contents as well as all the night-soil collected in it, shall be daily brought to a trench and covered over with a layer of fresh earth.

All night-soil collected in the village to be daily buried in a trench.

6. In places where the soil will not admit of trenches being dug in it, the villagers must perform the offices of nature on the bare ground; but as soon as they have retired, the village servants shall throw over the night-soil the ashes of burnt village sweepings, or which have been collected from the chullas in the village, or, in their absence, shall cover the night-soil with fresh earth, so as to make it into a solid compost, which they shall afterwards convey to a selected field for burial; but if there is no place where it can be buried within a reasonable distance of the village, it should be carted away to a waste place and deposited on the ground, but not near a water-course, and not nearer than one mile to leeward of the village.

7. The Panchayat shall also select a second site, which shall not be nearer than 450 yards to the village, to be selected for all filth other than night-soil which shall be brought all the liquid and solid filth other than night-soil, rubbish, stable litter, manure, etc., etc. collected in the village, and which shall be there deposited.

8. The Panchayat may, if it consider it desirable, allot to individual villagers a plot or plots of ground within the enclosure of this site, for the purpose of storing thereon stable litter or other manure belonging to them, before it can be carted to their fields.

9. The Panchayat shall also select a third site, which shall not be nearer the village than 450 yards, to be selected for the burial of carcasses of dead animals, which the carcasses of all animals which die in it shall be brought, to be there buried under not less than 6 feet of earth.

10. Great care must be taken that the places set apart for the performance of the offices of nature, for the deposit of filth other than night-soil, and for the burial of the carcasses of dead animals, are not situated on high ground—near any *nala* discharging into a source of drinking water. This is most important, because otherwise the filth would either run into the *nala*, or else, when rain fell, would soak through the ground, or be carried over the surface, and thus find its way into a source of drinking water.

## CHAPTER II.

### REGARDING SOURCES OF DRINKING WATER.

11. All sources of drinking water, whether from tanks, wells, running streams, dry water-courses, reservoirs or cisterns, from which the villagers draw their drinking water-supply, are hereby placed under the control, management and jurisdiction of the Panchayat, and it is one of its most important duties to preserve the purity of the water in them, and to prevent in every way it can its contamination; and it shall bring in the manner hereafter provided all offenders against these rules before the village Patel for punishment; and in the event of any of the abovenamed sources being found to yield impure water, the Panchayat shall take immediate measures to improve the same, and shall either by beat of *battakes*, or by attaching a notice in the vernacular of the district in a conspicuous place near it, forbid the further use of such source, either temporarily or permanently.

12. Experience has proved that the water in open tanks is always impure, because it is impossible to prevent dust, etc., being blown into the water, or men or animals from going into it, or the surface filth on the gathering ground from being washed into it, and therefore it is necessary to take immediate steps to improve such water, if the villagers are dependent on it as a source of drinking water. In every village, therefore, where the only source of drinking water is from a tank, or where the villagers use the water of any tank for drinking purposes, the Panchayat shall, as soon as possible after it is first appointed and within three months of such date, cause to be dug one or two or more wells on the sides of the tank, but at a distance of not less than 15 feet from its margin, so that the water from the tank in its passage to the well may become purified by filtration through that thickness of earth. It is also essential that the margin of the tank should be covered with grass. It would be better if it were paved, but this would be much too expensive in many villages, and grass can be grown in most villages around tanks.

13. The following directions of the Army Sanitary Commission regarding existing wells deserve great attention: "The ground about every well should be examined. If the ground is foul and filth-sodden, no well dug in it can yield good water. If in a house or compound there is a cess-pit, together with a well, both should be filled up. It may be taken for granted that the cess-pit has so fouled the subsoil that no good water can be got from it. When wells are the source of the water supply the safest course is to provide a new well. It should be dug in clean ground away from all nuisances."

14. In digging new wells the following rules by the Army Sanitary Commission are in all cases to be strictly followed. "The well is dug and built up in the usual way, but when it comes within eight or ten feet of the surface the tube must be coated outside with puddle or cement to cut off the upper portion of the subsoil water. The tube of the well should be raised two feet above the ground-level and covered with a roof. The ground round the well should be coated with concrete, or paved and sloped away from the well to open channels to convey the wastage water to a distance." Instead of a wooden roof the top of the well may be domed over like the old Mahomedan wells at Bijapur, or as in some ancient Hindu wells, of which there is a fine specimen at Mhow. Openings should be left in the dome, through which, as recommended by the Army Sanitary Commission, the water can be drawn up by means of an iron bucket attached to an iron chain, and worked over a hand windlass. Iron chains and buckets are much cleaner than the ordinary mode of a rope and brass lots. In "Ads," and indeed around every well, old as well as new, a channel to convey away the wastage water to a distance must be made. It is also a good plan, as at Neriad, to fix iron bars across the tube, about two or three feet below the top, and to attach iron chains and foot-rests to the inner sides of the tube, so that persons who fall in accidentally may have the means of saving themselves.

15. No well should be situated below a tree, as not only leaves but the droppings of birds and of animals, such as monkeys, squirrels, etc., fall into the water and render it impure. Birds also frequently build their nests in holes situated in the sides of a well, and of course the water is rendered impure by their droppings, feathers, etc., etc. If any existing well is below a tree, a cover must at once be put over it.

16. It is expressly forbidden to construct any new well with steps leading down into the water, as it has been found that the practice of going down steps into the water, with naked feet and legs, exposes persons so doing to a very great risk of contracting Guinea worm. All existing step-wells should at once have the approach leading into the water bricked or walled across, and the well should be converted into a draw-well.

17. If the drinking water is obtained from a flowing river, it is the duty of the Panchayat to take efficient measures to preserve the cleanliness of the banks as well as the beds of all *nalas*, streams, or water-courses which discharge into it, and to prevent their contamination.

18. If the villagers draw their drinking water from Jheels dug in the dry bed of a river, the Panchayat shall take especial precautions to protect it from defilement, and no one shall be permitted to resort to it for the purposes of nature, or to cultivate its bed, or to grow melons on it, or to manure its surface, especially above stream. The place where the Jheels are situated shall be enclosed by a thick bramble hedge or high ramps of sand, so as to prevent cattle from fouling the water. A separate place for watering the cattle shall be provided.

19. Tankas or cisterns for storing rain water under houses are dangerous, first because evaporation is constantly going on from the surface of the water, so that the residents live in a moist atmosphere; 2nd, because it is almost impossible to prevent filth from being washed into them from the roof; 3rd, because the mortar or cement used to plaster the sides cracks and gives way in places, and there is constant and great danger of soaking of impure matter into the water so stored from the subsoil outside; 4th, because both in old and new tankas rats and other vermin make their way to the water, often through drains, and impure gas finds its way into it. Their use should therefore be discouraged as much as possible, but until a plentiful supply of pure water is provided, they may be allowed; but they should be inspected by the servants of the Panchayat, and should be cemented inside once a year, and be cleaned out before the rains, and they should be covered with a cemented dome, through which a ventilating shaft should be carried up through the roof. They should not be covered by wooden rafters, which rot and are liable to be infested by insects.

20. It shall be the duty of the Panchayat, as soon after commencing work as possible, and certainly within one month afterwards, to allot for the use of the low caste people attached to the village a separate source or sources of drinking water for their sole use, if they do not already possess one, and no deviation from this rule can be permitted. It must also be remembered if both Mahars and Mangs are attached to the village that a separate source must be allotted to each, as they will not drink water from each other's well.

21. The Panchayat shall also set apart, if possible, a tank, or such other place as may be most convenient for the use of the villagers for bathing, washing of clothes, and watering of cattle. If, however, there is only one tank in a village, then until new wells, as provided in Rule 12, are dug, the water for the purpose of ablution, washing of clothes, and the watering of cattle, should be raised by a Persian wheel, and distributed into troughs, which should be so placed that the waste-water from them cannot drain back into the tank, and every person who bathes, or washes clothes, or waters cattle in, or who defiles in any other way any tank not reserved for the purpose, shall be punished in the manner hereafter provided.

### CHAPTER III.

#### RULES TO PROVIDE FOR THE DAILY CLEANSING OF THE VILLAGE SITE AND FOR THE REMOVAL OF FILTH THEREFROM, AND INSTRUCTIONS HOW TO PREVENT SOME OF THE NUISANCES MOST COMMONLY MET WITH IN VILLAGES.

22. One of the principal duties of the Panchayat is to take effective measures to ensure the daily cleansing of the village site up to the boundary-marks, and to prevent nuisances being committed on it.

23. To enable it to perform the first-named of these duties, the village menial servants are hereby placed under its command, and it shall be their duty daily to sweep the surface of the roads, lanes, thoroughfares throughout the village, etc., and to keep the surface not only inside, but on the outskirts of the village up to the boundary-marks, clean; to clean the surface of the compounds, back enclosures, yards, and at the sides and fronts of the houses; to collect and remove all filth of whatever description therefrom and convey it to the place appointed; to sweep out, flush, and remove all dirt, silt, etc., from the surface drainage channels, and, where they exist, from the roadside gutters; to empty cess-pools and remove their contents to the place appointed; to clean out and remove the night-soil from every privy in the village, whether public or private; to sweep up all night-soil which may have been passed by squatters in waste places, or on the sites of ruined houses, or on the thoroughfares, etc., in the village, and to convey it to the place appointed; to collect and remove all stable litter, dung, dry and liquid refuse, garbage, offal, etc., to the place appointed; to cut down all prickly pear wherever met within the boundary-marks, and to bury it under 3 feet of earth; to cut down and remove all rank vegetation, etc., and generally to perform such other acts as may be necessary for the maintenance of thorough cleanliness in the village.

24. For the performance of these duties, which will demand their full time, the menial servants, if hereditary, shall receive a money-payment over and above any emolument they derive from land or from grain given as "baluta." The amount of this money-payment, after deducting the estimated equivalent of the baluta, shall be settled on the basis of the ruling wage of a daily labourer in the district. It of course must vary. In districts where there are no hereditary menial servants, the amount of wages to be paid to each menial servant shall be calculated on the ruling wage of a daily labourer in the district. In all cases the scale of wages or of money-payment to be paid to each menial servant must receive the sanction of Government, who may either increase or decrease it, as seems to it to be proper and just to all the parties concerned.

25. The following rules enumerate some of the nuisances commonly met with in villages and which Government wishes to be stopped. The Panchayat should therefore inform the villagers to this effect, and point out to them that these Rules have been drawn up with the sole object of benefiting them and their families, and that the filth which is most dangerous to their health is the filth produced by themselves, and existing in the immediate vicinity of their houses.

26. For example, it is too often the custom for the inhabitants to micturate on the ground alongside the walls of their houses, or along the sides of the roads, etc. Now urine contains substances which quickly putrefy, and, as it soaks into the subsoil, it renders it and the air breathed by the household impure.

27. Then again, old persons of either sex, and even adult men and women as well as children, during the dark hours of the night or in the very early morning before it is yet light, ease themselves in the back-yards of

their houses, or in the roads in front of houses, or on the site of fallen houses, or on waste places, or on any other convenient spot. The practice is most dangerous, and must be stopped, as it taints the air with dangerous emanations, and it fouls the soil with dangerous matter.

28. Then again the liquid kitchen refuse frequently is conveyed through a closed pipe to a cess-pool situated close alongside the house in the back-yard, whilst all the solid household refuse, such as vegetable ends, the entrails of fish, or fowls, bones, leaves which have been used as dinner plates, currie, rice, etc., are usually thrown out on to the ground near the back door. All such and similar substances readily putrefy, and make the soil, subsoil, and atmosphere impure, and this foulness is intensified by the inhabitants performing their necessary ablutions generally whilst standing on a flat stone near the back door. This practice, besides fouling the water in wells, renders the subsoil very damp, and is a fertile source of fevers and other diseases.

29. The Panchayat shall therefore at once take measures to prevent such nuisances being committed in the village, and it should notify to the villagers that Government positively forbids them—1st, to relieve nature either by micturition or by easing themselves in places such as are named above, where it would be of detriment to the public health to do so, or in any other place where such act is forbidden; 2nd, to deposit dirt of any description except in places or receptacles assigned for its reception.

30. The Panchayat shall select and enclose suitable places for the use of each sex in different parts of the village, to which the villagers should retire for the purpose of micturition, and at which thick earthenware or iron vessels, which have been dammered inside and out should be placed, which must be emptied regularly every day by the village servants. The Panchayat may also permit villagers to keep a similar utensil on a bricked or paved surface in their compounds, which shall likewise be emptied every day. After public urinals have been provided in sufficient number for the size of the village, any person found micturating in any other place than a privy, proper utensil, or at a public urinal, shall be dealt with in the manner hereafter provided.

31. The Panchayat shall likewise make public proclamation that after a certain date all villagers must as a rule perform the offices of nature only at the place or places assigned for this purpose, outside the boundary-marks round the village; but circumstances may possibly arise when it may be desirable to allow the erection of public or private privies in the interior of the village, when the following regulations regarding privies shall be strictly enforced.

32. In the first place all pit-privies, which in Guzerat are called *Datan* privies or *Khalkowas*, are hereby strictly prohibited, as the ordure collected in them fouls the subsoil and water-bearing stratum, whilst the constant emanations given off by the decomposing night-soil seriously taints the atmosphere around houses; the Panchayat shall therefore give immediate notice to the owner of every pit privy existing in the village to have it filled in with clean earth, within six months after this Act comes into operation, and on no account and in no circumstances is permission to be given for a new pit privy to be made.

33. It is advisable not to have any privies at all in the compounds. Even the cleanest privy emits an offensive odour, and all such smells near a house are unwholesome. It would be safer if the Panchayat were to erect public privies on convenient sites for the use of villagers. If, however, several villagers are desirous of having private privies, permission may be given to them to erect groups of privies on convenient sites, on open places outside the compounds, but inside the village, the door of each compartment being provided with a key, so as to reserve it for the sole use of each family.

34. If, however, circumstances arise where the Panchayat exceptionally permits the erection of private privies in the back-yard of the houses, the following regulations must be strictly observed.

35. No privy shall be situated within the walls of a dwelling house, but it shall only be allowed to be erected in a building standing by itself, and separated from the house and any adjacent house, by an air space of at least three feet all round.

36. The site shall be selected with reference to its capability for the privy being cleaned by a *halalcara* without entering the compound. In no case shall a privy be situated in a verandah of a house, or open directly on to a public thoroughfare.

37. In the construction of a privy no lime or masonry shall be used, as when urine falls on lime, offensive ammoniacal salts are produced, and it is impossible to keep the place clean. The roof should slope towards the south-west but be open towards the north-east and at the sides. It should be supported by four wooden uprights, the two at the rear being one-and-a-half or two feet higher than the two in the front, which should be let into the ground after the bottom ends have been well dammered. There should be two foot-rests, 3 feet cube, consisting, if possible, of stone, but if that is not procurable, of bricks covered with dammer. In the centre an iron receptacle, similar in pattern to the one sanctioned by the Government of Bombay for a native privy, should be placed, which should stand if possible on a paved, bricked, asphalted, or at least dammered surface. The receptacle consists of two chambers, the upper one of which retains the night-soil, and is perforated to allow of the ablution-water and urine flowing into the lower chamber.

38. Baskets are not to be used as receptacles for night-soil in privies, and are only allowed in exceptional circumstances, when they should be cow-dunged inside and out, so as to become watertight. They may, however, be required to be brought into a house for the use of children who are too young to go to the appointed place, or for persons who are sick or too feeble to walk the distance, or for *pardamashin* women. If used they must be kept on a paved or bricked surface in the back-yard, and the ashes from the chulas must be thrown over the night-soil, which must be removed every day to the appointed place.

39. Besides the above Rules regarding privies, the Panchayat shall cause the following instructions regarding cess-pools to be rigidly adhered to:—

40. Cess-pools at present are frequently built just outside the walls of a house in the back-yard, and are frequently connected with a *naas* or *mori* inside the house on the ground-floor, or if it is an upper-storied building, with the *naas* on each floor, by means of closed pipes. This practice is most dangerous to health, as all

the foul air from the decomposing matter in the cess-pool is drawn up into the rooms by the warmer air of the apartments, where it is breathed by the inmates. The Panchayat should therefore take immediate measures to substitute for the closed pipe an open channel, so as to allow the foul air to escape at once into the external air. The down-take channels should not discharge direct into the cess-pool, but should terminate a foot above an open gutter situated at least two feet on one side of the cess-pool, and opening direct into it.

41. All cess-pools should be open at the top, but if from unavoidable circumstances of position the Panchayat, in exceptional and rare instances, permits a cess-pool to be covered, a large ventilating pipe of not less than 4 inches in diameter should be carried from the top of the cess-pool up the sides of the house, or, if the roof is a sloping one, in a vertical direction so as to terminate not less than ten feet above the line of roof. The utmost care must be taken that the pipe does not end below the windows of an adjacent house.

42. All cess-pools, including those that are covered, must be cleaned out daily, and the Panchayat should be careful to see that they are properly cemented on the inside so that no soakage into the subsoil can take place. They should also not allow cess-pools to be constructed close to the foundations of a house, to which, if possible, they should not be nearer than ten feet.

43. But in every village the Panchayat shall at once take measures to provide surface drains for the purpose of carrying off the storm-water and keeping the village site as dry as possible. When these have been provided the Panchayat shall cause each house to be connected with a surface drain, for the purpose of carrying off the liquid refuse, and the bathing water, and when this has been done, shall cause all cess-pools to be filled in with fresh earth at the expense of the owner.

44. The surface-drains shall consist of open shallow watertight channels, either placed by the side of a footpath, or, if there is no footpath, by the side of the road. The rubble masonry roadside gutters, as usually seen, are very dangerous, as they follow the inequalities of the house fronts, and invariably keep the foundations of the adjacent houses very damp. Surface-drains should always be laid in straight lines, with a gentle bend at each change of direction. The instructions of the Army Sanitary Commission regarding them are as follows:—  
 "The materials should be the best and cheapest to be obtained on the spot. Cut-stone, or concrete, or asphalt might be used, or masonry or close-fitting vitrified bricks, but in any case it is absolutely necessary that the channel itself be laid true, have a sufficient fall, and that all the joints should be watertight. Open cuts in the earth are of no use, but are on the contrary to be avoided, as leading to a damp unwholesome state of the subsoil. Shallow saucer sectional surface-drains can be kept clean by sweeping or by throwing water into them. With due care in cleansing with fresh water there would be no risk in allowing water used by households for washing and bathing to run into the surface-drains. The surface-drains should discharge their contents into open impervious shallow surface sewers, by which the water could be conveyed to a distance from the village, and used at once for irrigating land, and so be finally disposed of."

45. The Panchayat shall take especial care to prevent the flow of water in the surface-drains being intercepted by house-owners placing any articles in them, and it shall not be lawful to cover over a drain, or to place anything over it, except, if access is required to a house, a plank not more than 18 inches in width may be placed across such drain.

46. If open drains are not found to answer, or in thoroughfares where there is much wheeled traffic, the Panchayat may adopt a system of partially closed drains, laid under the surface of the roads, so successfully introduced in parts of the town at Sholapur, which are described in the Inspection Report for 1887 on that city.

47. All places in the back-yards, where the residents usually bathe, must be paved or covered with concrete, and be connected with a surface-drain, but if situated inside the house, the water from them should flow out through an open, and not through a closed, channel on to a paved or concrete surface, communicating with a surface-drain.

48. The solid household refuse should be carried out of the houses and be deposited in dustbins to be erected by the Panchayat on convenient sites outside, but near the houses in every street, etc., throughout the village, but if in exceptional circumstances the Panchayat permits it to be deposited within the compounds, it must be placed in an iron receptacle, or deposited on a paved or bricked surface in the back-yard, not less than four feet square. It must not be thrown out on to the bare ground. It must be daily removed from the dustbins and receptacles by the village servants.

49. The carcasses of all animals which die in the village shall be removed at the expense of the owner by the village servants to the place set apart for the disposal of carcasses, and be there buried under six feet of earth. The flesh shall in no circumstances be eaten by Mahars or other low-caste people.

50. It shall not be lawful to store night-soil near human habitations, or anywhere within the boundary-marks, nor shall it be lawful to keep the dung of cattle in stacks near houses. Any person contravening this rule shall be dealt with in the manner hereafter provided. Of course cow-dung cakes to be used as fuel may be kept inside houses, but it shall not be lawful to spread wet cow-dung over the ground or to affix it to walls inside compounds. Cow-dung cakes should be manufactured outside the village boundary-marks.

51. It is very desirable that where stone is procurable the surface of the streets and thoroughfares should be paved, and that where it is not procurable their surface be raised in the centre and be well rammed, so that water will not lie on them but run easily off to a drain.

52. It shall be one of the most important duties of the Panchayat to visit at frequent intervals, and not less often than twice a week, the Mahars or Mang Vada attached to the village. The greatest care is to be taken that these places are kept scrupulously clean, that the water-supply is good and sufficient, and that places of natural resort are allotted for the use of low caste residents. The provisions of the Rules are to be as strictly applied to these places as to houses and compounds inside the village, for if disease springs up among the low-caste people, it is sure to spread to the village.



## CHAPTER IV.

THE FOLLOWING RULES PROVIDE ESPECIALLY FOR THE IMPROVEMENT OF THE INTERIOR OF HOUSES AND COMPOUNDS, AND THEIR OBJECT IS TO INSURE PURE AIR BEING BREATHED BY THE VILLAGERS, AND TO GUARD THEM AND THEIR CHILDREN AGAINST ILLNESS.

53. Every house in the village shall be lime-washed inside and out twice a year, as hotlime-wash destroys much hurtful matter which clings to, and accumulates on, the surface of the walls.  
Lime-washing.
54. The ground-floor of houses should not be leaped with cow dung. If it must be leaped at all, clay should be used for this purpose, but in the event of no clay being procurable in the village, fresh and clean earth, or kunkur, should be spread over the floor and be well rammed, so as to form a hard compact surface. This should be renewed at intervals, say, of every six months.  
Leaping floors.
55. A very frequent cause of ill-health is the custom of sleeping on the bare floor, which, although it may appear on the surface to be quite dry, yet, when opened up for a few inches, is frequently found to be damp. It is very necessary for health that each person should sleep on a cot, or charpai, or even on a net stretched across the room. The great object is to raise the body even for a few inches above the floor. This would be found to be a great protection against contracting fever by sleeping on damp ground. If the legs and joints of the charpai are dipped in kerosine oil, all insects, such as bugs, will keep away from it.  
Danger of sleeping on bare floor.
56. Every room in a house should be provided with means of communication with the external air other than by the door. If the house consists of only a ground-floor, an opening 3' by 3' should be made in the roof, which should over it be raised for a height of not less than 9 inches, so that, whilst the rain is excluded, the foul air and smoke will escape into the external air.  
Ventilation of ground floor houses.
57. If the house is upper-storied, openings at least 3' long and 1' broad should be made in the external wall in each room on the lower floors, on a line with the ceiling or rafters of the upper room. If one of the walls of these rooms is a party-wall, no opening should be made in it, but only in the external wall.  
Ventilation in upper storied houses.
58. It would be better if these openings were converted into windows. It is easy to knock a hole in the wall and to insert a window-frame, say 3' by 2½'. A window of these dimensions would afford good means of ventilation, and add immensely to the purity of the air, and would thereby improve the health of the inmates, especially of the children.  
Windows.
59. In some houses, in order to economize space, it is common to find a wooden staging which extends perhaps more than half-way up the wall, on which fowls roost, and firewood, cowdung cakes, odds and ends, are kept. This practice seriously interferes with the cubic space of the room, and consequently with the amount of air in it, which ought to be kept for respiration by the inmates. The Panchayat should therefore especially warn the villagers of the danger caused by these lofts.  
Cubic space of rooms not to be encroached upon.
60. No fowls or animals, such as goats, sheep, horses, ponies, mules, donkeys, cows, buffaloes, etc., should be allowed to be kept in the interior of houses, as by so doing the air which the inmates breathe is rendered very impure, not only by the droppings of the animals, whose urine also soaks into the floor and finds its way into wells, but also because they abstract a very large quantity of the air which ought to be used by the household, and it is very well known that air is rendered very impure by the respiration of animals.  
No fowls or animals to be kept inside houses.
61. In all cases such animals must be kept in a stable outside the house. It is very desirable that arrangements should be made to stall all cattle in a field outside the village, but if that cannot be done, and they must be kept for safety inside the village, they should be stalled in a stable erected on some open ground.  
All animals must be kept in a stable outside the house.
62. The floors of all stables shall consist of well-rammed earth or clay, and until the stable is connected with a surface-drain, provision should be made to catch the urine passed by the animals in gurras, and to convey it to the appointed place.  
Floors of stables.
63. The stable litter and dung, if required for agricultural purposes, must be periodically, and not less often than twice a week, removed to the fields. The surface of the ground on which it is deposited in the stable-yards should be paved or bricked, and it should be drained.  
Litter to be removed frequently.

## CHAPTER V.

GENERAL REGULATIONS FOR THE PROMOTION OF CLEANLINESS AND OTHER MEASURES NECESSARY FOR THE WELL-BEING OF THE VILLAGE.

64. The Panchayat shall take measures to compel the owners of all ruined or fallen houses to level the site and to keep the surface clean and free from rank vegetation and filth, and shall order it to be forthwith enclosed, either by a sufficient wall, or fence, so as to prevent its being used as a place of natural resort; and any owner failing to comply with the orders of the Panchayat shall be dealt with in the manner hereafter provided.  
Fallen houses.
65. All low brushwood, jungle or rank vegetation, growing inside or on the outskirts of a village, shall be cut down and removed by the village manual servants, and all prickly pear, whether growing inside or on the outskirts of a village, shall be cut down and immediately buried under three feet of earth. It is no good to burn it—it must be buried under three feet of earth. It is necessary to eradicate this noxious plant, because it not only grows to such a height as to frequently interfere with the perfumation of the village, but it also affords a convenient shelter for persons to frequent as a place of natural resort, whilst it permits all kinds of filth to collect below it, where it putrefies, and is difficult to dislodge, and then when the rains set in, is liable to be washed into a source of drinking water.  
Rank vegetation and prickly pear.



66. The lower branches of trees should be lopped, so as to improve the external ventilation, and trees should be planted on wet and damp ground near a village, so as to dry the ground and purify the air.  
Trees.
67. No new excavations are, on any account, to be permitted in or near a village, and all existing ones must either be filled in or drained. If the villagers want earth to make mud for building purposes, they must excavate it beyond the boundary-marks. When stagnant water begins to dry up, the exposed mud becomes a fruitful source of fever; all marshy ground therefore near a village should be drained.  
Excavations, etc.
68. The Panchayat shall regulate the height of wood-stacks in the village, and not allow any stacks to be so high as to interfere with the perfation and ventilation of adjoining houses.  
Wood stacks.
69. No pigs shall be allowed to wander about the village or its outskirts, and their owners shall be compelled to keep them in proper styes, which shall be so situated and be so kept as not to cause a nuisance.  
Pigs.
70. No slaughter-house of any description shall be allowed inside the village, and no animals, except as hereafter permitted, shall be slaughtered in it, or anywhere except in a slaughter-house licensed by, or belonging to, the Panchayat. On the occasion, however, of religious ceremonies, the Panchayat may permit sheep or goats to be slaughtered as sacrifices, on payment of a fee of one rupee per animal; but in all cases ashes must previously be spread thickly over the place where the animal is to be slaughtered, and ashes shall also be poured over the blood, so as to prevent its soaking into the ground, which must afterwards be swept and well sluiced with water so as to clean it.  
Slaughter-houses.
71. All offensive trades such as tanneries, potteries, tile-burning, lime-burning, indigo-dyeing, wool-sorting and cleaning, catgut-making, cow-dung manufactories, and the like, shall be permitted only when their owners have received a license from the Panchayat. These trades shall be removed from the interior of the village, and not be allowed to be established on any site nearer than a quarter of a mile, and only on the south of it. The Panchayat shall frequently inspect such places and not permit any heap of offensive refuse to be kept, and they shall see that the premises are kept clean and are drained.  
Offensive trades.
72. It is very desirable that there should, if possible, be a public market, and wealthy villagers could not give their fellow-villagers a greater boon than a good public market, which could be called after their names, but until one has been provided, the shops in which articles of food are exposed for sale should be frequently inspected by the Panchayat, and if any article of food is unfit for human consumption, it shall be confiscated and the vendor shall be dealt with in the manner hereinafter provided. Great care must be taken to prevent the sale of, and to destroy all, under-ripe or over-ripe fruit which is offered for sale, especially when cholera is about.  
Food-supplies to be frequently inspected by the Panchayat.
73. The mixing of water with milk, or the mixing of any foreign substance with *ghi*, is prohibited, and any person who offers or exposes for sale such adulterated milk or *ghi* shall be dealt with in the manner hereinafter provided.  
Adulteration of milk or *ghi*.
74. *Suniasis* shall not be buried and the bodies of other Hindus shall not be burnt above stream, or in the bed or on the bank of any river, water-course, or tank from which drinking-water is drawn, or anywhere except on such sites as may be selected by the Panchayat and approved of by Government; in all cases the burning gháts shall be below the site from which drinking-water is drawn.  
Burning gháts.
75. No burial-ground shall be allowed inside a village, or on the banks or sides of tanks, or on the gathering ground of any tank from which the villagers draw their drinking-water; all such at present existing shall be closed when new ones are provided, and when the order of Government has been received to that effect, and no new burial-ground shall be nearer than 450 yards to the village.  
Burial-grounds.
76. All graves, where the depth of soil will admit of it, shall not be less than six feet, and in no circumstances shall the depth of a grave be less than four feet.  
Graves.
77. It shall also be the duty of the Panchayat to frequently inspect all *Dhumsalas* in or near a village, and to see that they are properly lime-washed, and that they and their environments are drained and are kept perfectly clean, and are provided with sufficient privy accommodation.  
*Dhumsalas*.

## CHAPTER VI.

## FURTHER DUTIES OF THE PANCHAYAT AND INSTRUCTIONS FOR USE IN OUTBREAKS OF CHOLERA.

78. Immediately after the Panchayat is first appointed, the Chairman shall divide the village into as many wards as there are members of the Panchayat, and shall appoint each member to the charge of a particular ward. It must ever be remembered that the members of the Panchayat are appointed to exercise constant and strict supervision over the sanitary state of the village. Each member must therefore take individual interest in the ward entrusted to him, and shall see that cleanliness is strictly maintained in it, and that the provisions of these Rules are strictly enforced in it, and the inhabitants of each ward should be encouraged to inform their representative on the Panchayat of all such sanitary defects as come to their notice.  
Village to be divided into wards and a member of Panchayat appointed to take charge of each.
79. In furtherance also of the objects of these Rules the Panchayat shall have power to maintain a sufficient establishment of carts, servants' baskets, brooms, and such other appurtenances as may be necessary to carry out the purposes of this Act. It shall not be lawful for it to delegate the duty of cleansing the village to any contractor, but it shall, through the village servants, take adequate measures for cleansing the village, and such other action as is referred to in these Rules.  
Duties of Panchayat, etc., not to be delegated.
80. The Panchayat shall also give every assistance to the Taluka Vaccinator, whenever he visits a village, by collecting all unprotected children for him to vaccinate; and it shall also from time to time warn the villagers that every child born in the village since the vaccinator's last visit, or who is unprotected, must be brought to him to be vaccinated, on the first occasion on which he subsequently visits the village.  
Vaccination.

81. It will also be the duty of the Panchayat to take measures, in concert with the Patel, to ensure a correct registration of every birth and death which occurs in the village, and it should frequently warn the villagers, by beat of *battaki*, that whenever a birth or death occurs in their house, the headman of the family is bound by law to report the occurrence to the Kulkurni or Telati, or in their absence to the Patel, within 24 hours after such occurrence, so that it may be duly entered in the Village Register. The village bhungies should likewise be instructed to give notice to the Patel, immediately on its coming to their knowledge that a birth or death has taken place in any family.
- Registration of births and deaths.
82. The Panchayat shall also assist the Patel in keeping a correct register of deaths from small-pox, or cholera, and shall bring such deaths immediately to his notice.
- Register of small-pox and cholera.
83. The Panchayat shall also at once make a register of all blind, deaf and dumb persons, and of all persons affected with either black or white leprosy, living in the village, which shall be kept in readiness for the inspection of Officers of Government. They should not allow persons affected with black leprosy to live in the same house with the healthy, but should provide proper shelter for them outside the village.
- The blind, deaf, and dumb, and all lepers to be registered.
84. The Panchayat should also keep a register of all offensive trades, liquor and opium shops, burning gháts, burial grounds, and take measures at frequent intervals to test its correctness.
- Offensive trades, liquor and opium shops, burning gháts, burial grounds, to be registered.
85. As soon after it is appointed as possible, the Panchayat shall provide a stock of cholera mixture, and cholera pills, to be kept ready for emergencies, and when cholera is prevalent in the adjacent villages, great care must be taken to see that the provisions of these rules are most strictly carried out, and that the most perfect cleanliness of surface is everywhere maintained in the village, and that the purity of the drinking-water is above suspicion. The villagers are to be warned that outbreaks of cholera are generally preceded by a period in which diarrhoea becomes prevalent and that therefore any villager who has occasion to go to the rear more frequently than usual—even once more often—should forthwith, at any hour, even in the middle of the night, apply to the Patel for medicine to check the diarrhoea, which at that time is easily curable, but which, if neglected, even for a very short time, will probably develop into cholera. This is most extremely important, and the Panchayat should so instruct the villagers in every way they can.
- Cholera; action before outbreak.
86. If cholera actually invades the village, it is not advisable at that time to disturb deposits of filth. There should be none such in the village; but if in spite of these Rules there are deposits of filth found, the best thing to do is to cover them with at least six inches of fresh and clean earth, and to maintain the utmost cleanliness in the village. The presence of cholera ought to make no difference in cleaning; for the best preventive is to maintain the most scrupulous cleanliness at all times and seasons, independent of such times as cholera is in movement. As an extra precaution, however, watchmen should be placed to prevent any possible contamination of the sources of the drinking water, and the villagers should be told to boil all their drinking water.
- Action during outbreak.
87. The Panchayat should also warn the people to abstain from drinking spirits, as the practice of drinking spirits is believed to pre-dispose the person taking them, and to render him more liable to catch the disease.
- Spirits to be avoided as deadly.
88. When cholera appears in a village it is most important to tell the people that the disease is not contagious, and that therefore there is no danger in attending the sick; but it is especially necessary to recollect that cholera evidently attaches itself to particular localities. The principle to be borne in mind therefore is that the particular locality in which cholera shows itself must be looked upon as dangerous. If possible, the patient should leave the house and be moved away to a shed or open place situated outside the village, quite away from the place where he was attacked.
- Cholera not contagious, but attaches itself to particular localities.
89. The Panchayat should therefore have prepared before the outbreak, on the outskirts of the village but not near any of the filth-sites, a grass hut or huts, to which temporary shelter persons who leave their houses on account of cholera can go. Water, provisions, medicine, and attendance should, of course, be provided for such persons.
- Grass huts to be erected on the outskirts of village.
90. As plenty of fresh air greatly assists the chances of recovery, the friends and relations should not crowd round the person attacked, but only one, or at the most, two people should remain with him.
- Fresh air necessary for patient.
91. The patient should, if possible, lie on a cot, and not on the ground. He should be fanned, and one man should shampoo his arms and legs if he has cramps. Water which has been boiled and allowed to become cold may from time to time be given him to drink. He should be given the cholera medicine according to the directions; but if the surface of the body is icy cold, if the lips are blue, if the eyes appear glazed, it is no good giving him medicine, but he should be well shampooed and the surface of the body should be well rubbed with the palms of the hands, and bottles containing hot water should be applied to the extremities. If he can swallow, he should be given hot mutton broth at frequent intervals. If his caste will not allow him to eat this, he should be given hot arrowroot conjee. It is very important to have the doors and windows, if any, left wide open. Never mind if he feels cold, fresh air is absolutely important, and he can be covered with warm clothes, etc., but at all hazards give him plenty of fresh air, and do not let more than two people be in the same room with him.
- Treatment of patient.
92. It is all important to have the following rule most strictly carried out. The particular poison of cholera is supposed to be contained in the stools and vomited matter passed by the patient. It is therefore absolutely necessary that they be received in an old chatty or other receptacle, so that they should not be spilt on the floor or bedding, and as soon as they are passed, they should be burnt by igniting a little straw and dammer over them, and the ashes should be at once carried out of the village to the appointed place, and be there buried under at least a foot of earth. It must not be expected that the stools will consist of solid fecal matter; they will be more like rice conjee water, and you must not say it is only water, and therefore throw it anywhere. The stool, which is like rice conjee water is the most dangerous of all, therefore these directions must be most implicitly obeyed. Particular care must be taken on no account to bury the stools or vomit near any well, water or tank, or to throw them out into the back-yard or into a privy; but as soon as the stool is passed, it must be burnt and the ashes be carried out of the village at once. On no account should the vessel containing these discharges be put down in the house or in the back-yard with the intention of removing them an hour or two hence; such a proceeding is very dangerous, for the stools, when first passed, are not dangerous, but they very rapidly, after a very short interval, become intensely poisonous. The only safe course is to remove them clean away as soon as they are passed. If the patient passes any of these stools on his bedding, no matter what the value of the article may be, should be at once burnt.
- The stools and vomit must be immediately burnt and is carried out of village.

Body to be disposed of at once.

93. If the patient dies, the body should be at once burnt, or buried in the clothes in which he died; they should not be taken off the body or sold.

94. If a second case occurs in the same house, all the inmates should be turned out, and after the recovery or death of the patient, one pound of sulphur should be burnt in a pipkin in the room which he occupied. Whilst the

Disinfection.

process of disinfection is going on, the doors, windows, or other openings should be closed and kept closed for four hours, after which they should be opened. The floor should be dug up and the earth taken outside the village boundary and buried. The walls should be lime-washed and a portion of the tiles be removed from the roof; or, if it is a mud roof an opening should be made in it, so as to allow plenty of light and air to enter, and the inmates should not be allowed to return to the house for at least ten days.

95. If the Panchayat take these simple precautions and follow out these instructions, many lives will be saved, but much will depend on whether they are strictly observed. The villagers at times when there is no cholera,

Cleanliness is the surest preventive of cholera.

should be warned that the surest preventive of cholera and other diseases is to have clean air, clean soil, clean food, clean water, clean houses, and clean persons.

If the above Rules are accepted, as calculated to give effect to the suggestions of the Government of India, and as being really necessary, as I maintain they are, to prevent disease and to improve the sanitary condition of the villages, it will be allowed, on all sides, that Government must provide the agency to see that the Panchayats really do their duty and carry out the orders of the Sanitary Boards. The work of organizing the cleansing establishments in the villages, and after this has been carried out, of seeing that they really are effective, must be continuous, and will be very onerous. The Panchayat will at first require much assistance. Places of natural resort, etc., must be selected by competent authority in each village, and it will require much labour, in the first place, to arrange, and afterwards to maintain, everything in smooth working order. The work of supervision on behalf of the Sanitary Board cannot be slurred over. It will not be sufficient to walk or ride through the streets of a village. Supervision of the condition of the *backyards, gullies, privies, etc.* is what is required and must, if any good is to follow, be conscientiously performed. It is therefore manifest to those who know what this really means, that there must be a distinct and separate agency provided for this duty. It would be, as the Government of India points out in the Resolution quoted above, physically impossible for an already overworked Collector and his Assistants, even if they had sufficient knowledge of the requirements of sanitation, to undertake this work in addition to the multifarious duties they already perform—whilst the hardworked Mamlutdar could not possibly do it, as in the first place he does not possess the requisite knowledge, and in the next, he could not devote even a fraction of his time to this duty; nor is it difficult to understand this, when it is remembered that the number of villages in a taluka sometimes amounts to 200 or 250, so that it is perfectly clear, if the Act is to be worked successfully, there must necessarily be a separate and distinct staff of officials, who must devote their whole time to this work.

I would therefore urge, as strongly as I can, that this opportunity should be taken to re-organize the Sanitary Department, and to entrust to its officers the organization and superintendence of the cleansing establishments in the villages, by constituting them the sanitary advisers of the Panchayats, and by appointing them the agents on behalf of the Sanitary Board to see that the Panchayats really carry out the Village Rules. If this were done, the Department, working under the orders of the Sanitary Board, would become a real *vis viva*, and would acquire inherent power to do good.

This is really a crying want, as at present the Officers of the Sanitary Department, except as regards vaccination, have no executive duties to perform. They can only give advice, which I regret to say is hardly ever followed; whilst they are so few in number, that it is absolutely ludicrous to suppose that they can maintain an effective supervision over the sanitary condition of their districts. Take the Presidency of Bombay for example, the population in which amounts to 16,454,414 persons, whilst its area comprises 124,130 square miles, or a larger area than that of Great Britain and Ireland combined. It is divided for the purposes of vaccination and the registration of vital statistics into districts, over each of which a Deputy Sanitary Commissioner presides. The following statement shows the number of Collectorates, villages, and vaccinators under the superintendence of each Deputy Sanitary Commissioner.

| Number. | Registration Districts.   | NUMBER.        |           |              |
|---------|---------------------------|----------------|-----------|--------------|
|         |                           | Collectorates. | Villages. | Vaccinators. |
| 1       | Western . . . . .         | 4              | 7,379     | 71           |
| 2       | Central . . . . .         | 5              | 5,856     | 93           |
| 3       | Southern . . . . .        | 4              | 4,600     | 98           |
| 4       | Eastern Guzerat . . . . . | 5              | 3,290     | 79           |
| 5       | Sind . . . . .            | 5              | 3,410     | 66           |

No. 1 District covers an area of 26,320 square miles and has a population of 3,493,821 persons. In other words the area equals more than half the area of England, and the population exceeds that of Scotland by about 42,000 persons. No. 2 covers an area of 30,252 square miles, which is about equal to that of Scotland (30,401). The population amounts to 4,858,709 persons, or nearly the same population as in Ireland. No. 3 has a population of 4,132,186 persons living on an area of 24,390 square miles. No. 4 covers 27,712 square miles, and has a population of 4,102,314 persons. No. 5 comprises an area of 48,014 square miles, on which there lives a population of 2,413,823 persons.

I would ask any thinking man whether it is physically possible for 5 Deputy Sanitary Commissioners to travel over such vast areas and to efficiently superintend, not only the sanitary condition of the towns and villages in them, but also to inspect, as efficiency demands, the work of each individual vaccinator in each taluka and town of each Collectorate in their district. It surely must be conceded that it is simply a matter of impossibility for them, able and zealous as they are, to do this, and the strongest necessity exists for strengthening the Sanitary Department, and for entrusting it with executive functions.

The first thing to do, in my most mature opinion, is to reduce the area of supervision to one of reasonable and practical dimensions, and I am convinced that this ought not to exceed the area of each Collectorate; and I therefore regard it as absolutely essential that there should be a Health Officer for each Collectorate. It would be impossible, on account of the very heavy expense it would entail, to recommend that these Health Officers should be European Commissioned Officers. I therefore suggest that they be selected from that very valuable class of

public servants, the Assistant Surgeons, who should have under their orders a staff of Native Inspectors who have received a certificate of competency, with respect to their acquaintance with the details of practical sanitation, and who should draw fair pay to keep them out of temptation. These men should be solely and constantly employed in seeing that the cleansing establishments in the villages did their duty. Lest it should be proposed that the present staff of taluka vaccinators should act as these Sanitary Inspectors, I think it well at once to state that any such proposal is impractical and would not work, as the vaccinators already have more work to do than they can properly perform; nor have they time to go through the villages, as they have to pay two visits to each village in eight days, and they do not visit it again probably for a year, so that they could not possibly perform this additional work. The Health Officers would not only see that the Panchayats did their duty as regards water-supply, drainage, and conservancy in every village in their Collectorate, but they would also inspect all dispensaries therein, whereby they would become acquainted with the incidence and movement of disease. The vaccination establishments employed in each taluka, town, and cantonment in the Zilla would be placed under their orders, and they would compile in their head-quarter office the vital statistics received from each village and town in the Collectorate, and would at once bring to notice the outbreak of any epidemic disease and take immediate steps to prevent its spreading.

In order to supervise the work of the Health Officers it would be necessary to appoint European Medical Officers, designated Deputy Sanitary Commissioners, who would be constantly travelling throughout their divisions, which might correspond in area to those of the Revenue Commissioners. Whilst at the head of the Sanitary Department, thus organized, would be the Sanitary Commissioner, who, as now, would be the sanitary adviser to Government in the Military, as well as in the Civil Departments, and who himself would take charge of the larger Municipalities, and who would also be constantly travelling to inspect the work of the officers subordinate to him, and who would thus be in a position, through his establishment, to give effect to the orders of the Sanitary Board.

The Sanitary Department, re-organized in the manner I advocate, would be concrete and compact, and a potent engine for good, and if the working of a practical Village Sanitation Act is entrusted to its officers, as a matter of the utmost certainty cholera would at once lose its intensity, and eventually become eradicated—whilst other indigenous fevers, small-pox, etc., would assume a much milder type, and a healthy rural population would grow up, the labour market would be much more amply supplied, an increased area of land would be brought under cultivation, and the revenue of the country would be augmented, whilst England would cease to be, as now, stigmatized by foreign Nations, as being entirely indifferent to the just demands of the civilized world and to the real welfare of the 200 millions of natives of India committed to its charge, among whom such a terrible mortality is now permitted year after year to take place, without any measures being taken by Government to prevent it.

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12th September, 1889. }