1-9-16

INDEXED.

Local & Munl. (1897) Department.

PRINTED.

G.O., No. 755 M

DATED 31-3-97

DESPATCHED

[Despatch Abstract.]

Inspection Rules

Recording visits remarks Sanitary Comrs ——— on the Panigrumbadi Mun[illegible]

BACK PAPERS.

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

FURTHER PAPERS.

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

Government {1897} of Madras.

LOCAL AND MUNICIPAL.

Recd. } 1897. *Enclosures*

Regd. *Spare copies*

G.O., No. 755 M., 31st March 1897.

MARCH.

Inspection Notes.

Recording, with remarks, Sanitary Commissioner's — on the Vániyambádi Municipality.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following paper :—

From M.R.Ry. T. V. GOPALASWAMI AIYAR Avargal, B.A., Chairman, Municipal Council, Vániyambádi, to the Secretary to Government, Local and Municipal Department (through the Collector of Salem), dated 4th February 1897, No. 91.

I have the honour to submit herewith the inspection notes of the Sanitary Commissioner for Madras on the Vániyambádi Municipality, with the resolution of the council recorded in the margin thereof, and to state that I have no further remarks to offer.

2. A copy of the council's resolution passing the same also accompanies.

ENCLOSURES.

INSPECTION NOTES of the Sanitary Commissioner for Madras.

SALEM DISTRICT.

VÁNIYAMBÁDI MUNICIPALITY.

Inspected 4th to 6th November 1896.

Population as per census of 1891 15,838

Inspection Notes.	Chairman's Remarks.
Dwellings.—It is the intention of the council to erect a "travellers' bungalow." The site shown me is near a public latrine and bandy-stand. If this be the only available site, the bandy-stand should be abolished before proceeding to build it.	This will be done accordingly.
2. *Roads.*—With the exception of the main roads, roads hardly exist, the majority being mere gravel-patched lanes. Where metal is used, it is often very mixed in size.	Attention is being paid to put the minor streets and lanes in good order. Metal mixed in size is always rejected.
3. *Surface Drainage.*—This passes freely into the rivers whence the water-supply is taken. The bazaar drains are much silted up. The neighbouring shops obstruct the drain by boards, &c. Attention is invited to G.O., No. 1341 M., dated 27th September 1894. The drains should be kept thoroughly clean.	Steps will be taken to remove the obstructions referred to and to keep the bazaar drains satisfactorily as required in the Government Order. A list of such cases will be called for and duly dealt with.

Inspection Notes.	Chairman's Remarks.
4. *Sewage.*—(*a*) This is mostly received into cesspools and dumb-wells. These are made for receipt of fæcal matter. In most places where I have seen these their use is confined to Muhammadans, but here they are used largely in Hindu houses. As a rule, but four or five yards' space exists between the cesspits and the wells used for "domestic purposes." It need not be said that the employment of this character of water, even for washing vessels, *is most dangerous.* I advise the council without delay to cause a complete list of cesspools to be drawn up and then direct their alteration under sections 214 and 221. It would be difficult to imagine a more grossly insanitary condition than here shown.	A list showing the cesspools and dumb-wells attached to each house and their distance from the wells, &c., will be called for, and necessary steps taken under sections 214 and 221.
(*b*) In Kanyambadi street, certain of the inhabitants at their own expense are making cement-lined, egg-shaped drains of a serviceable nature. No idea of making arrangements for ultimate disposal of the sewage, however, seems to have been entertained. The council would do well to attempt to form a contract with the owner of the garden near the termination of the drain, with the object of his allowing of disposal of the sewage on his ground for cultivation purposes. All that would be required is that a cesspool serving for collection and a picotah for lifting the sewage for distribution be provided. In other instances, where the drains and in an indefinite manner, attempts should be made to secure small patches of ground which should be cultivated under irrigation.	The owner of the garden will be asked to allow the sewage of the street into his garden. Necessary steps will be taken to carry out the suggestion as far as practicable.
5. *Water-supply.*—(*a*) Having regard to the pollution of the water possible from graveyards, night-soil and rubbish depôts, the water-supply from the branches of the Pálár are open to suspicion. When "springs" are excavated in the river-bed persons are apt to defile them by passing into them for withdrawal of water. This being the case, the Deputy Sanitary Commissioner in his last inspection notes advised the use of "pot-wells" sunk in the sand as a simple and safe expedient. The council, however, formally refused to adopt this method. I, however, pressed the matter only to receive the definite statement that, owing to the shallowness of the sand, the method could not be adopted. I need not say I did not consider such a reply as satisfactory, and I hoped to have been able to verify the	Additional pot-wells also will be sunk when people appreciate the advantage of such wells and this system of water-supply extended.

Inspection Notes.

condition of affairs during my present inspection. I found, however, that what neither my Deputy nor myself could persuade the council to do, the combined efforts of cholera and of the local medical subordinate have effected. Pot-wells have now been adopted, and doubtless with benefit.

(*b*) As during floods these will be covered, the council would do well to use a series of Norton's tube wells close to the bank of the river. These cost about Rs. 70 to Rs. 90 each complete. This does not include the cost of driving apparatus (Rs. 225), of which only one would be necessary, however many the wells to be sunk.

(*c*) It is presumably impossible for the Sanitary Engineer at present to undertake the drawing up of a scheme for Váni-yambádi; but when this town's turn comes for attention, it is to be hoped the council will not hesitate to accept a public water-supply scheme, which could doubtless be supplied at a small cost from infiltration works in the river.

6. *Night-soil Conservancy.*—There are but eleven latrines for the whole municipality, having a population of 15,838. Only 357 houses out of a total of 3,520 are attended to under the private scavengering system. As already shown under "Sewerage," much fæcal matter never leaves the town site. As for the amounts not here accounted for, doubtless much is distributed along the river banks as found by me on inspection. There are but fifteen mounted conservancy *buckets* for transport. The depôts are distant, and it is impossible that more can be done than transport three times daily, so that of a total of human excreta of 158 cubic feet that must be expected from the town population daily, only 112·5 are removed from the town, even if the buckets were really full on each occasion. Only twelve toties are employed, and as the same people are supposed to drag the mounted hand-buckets, as well as keep the latrines clean, it is evident, even with their best intentions to overtake the work, *it cannot be done.*

Chairman's Remarks.

Catalogues will be sent for and the subject again considered by the council as it has no idea at present how many such wells will be required for this town and whether the water drawn therefrom is likely to be resorted to by the people.

The council will be glad to have a good water-supply scheme.

The council is alive to the fact that the existing number of latrines is insufficient for the requirements of the town. Three more brick and chunam wall latrines will be constructed during 1897–98 as provided in the budget.

The council has been unremitting in its endeavours to extend the private scavenging system in parts of the town into which it has not yet been introduced, but the efforts have not borne fruit owing to the insuperable difficulty experienced in securing the number of toties essentially necessary for working the system on a large scale. The council does not relax its efforts to extend the operation of the agency as the main difficulty so long experienced may be got over as provision is made in the budget for 1897–98 to increase the pay of the toties so as to attract men from the places where the supply is ample agreeably to the instructions given by Government in the review of the last administration report. The council has no hesitation in assuring that sufficient supervision is exercised and streets and roads and river banks are kept as clean as possible.

The council also thinks that with the present staff—viz., twelve toties for eleven latrines—the excreta is properly removed

Inspection Notes.

7. *Rubbish.*—Forty-four sweepers are employed, against sixteen really necessary for fulfilling the work. There are seventeen carts against fourteen necessary. So that it is evident by re-organizing the night-soil staff at the expense of the rubbish conservancy, much improvement would be effected.

8. *Disposal of Night-soil and Rubbish.*—Of the seven depôts maintained, with the exception of that at Pudur all must be regarded as dangerously near the river Pálár or one or other of its branches. There is practically no sale for either night-soil or rubbish. There is undoubtedly difficulty in securing suitable land for depôts, owing to the proximity of the rivers and, as no sale can be obtained, there can be no object in hoarding these matters up. A course that I would advise be adopted at once is to get both, as received day by day, ploughed into the patches of dry land found here and there on the island. These are nearly always worthless on account of their sandy nature, but under this system would soon become valuable by creation of new soil. Whilst advising this as a makeshift, I consider, situated as Vániyambádi is so that at every turn a branch of the river Pálár is present, the wisest course is to incinerate both rubbish and night-soil. This would save

Chairman's Remarks.

to the depôts from the latrines and that the latrines are always kept clean. Very rarely the inspecting officers found the latrines in an unsatisfactory state.

The budget for the year 1897–98 has already been submitted. The question of increasing the number of toties will, however, be considered when framing the next budget.

The Sanitary Commissioner probably did not take into consideration the peculiar physical state of the town. The town is a scattered one and is divided by the Pálár river into islands. Each island consists of several zigzag lanes and streets. Some of the councillors even came forward to suggest at the last budget meeting to further increase the number of sweepers in consideration of the fact that the village of Pudur was added to the municipality during the year. This proposal was not entertained by the council. Considering the scattered condition of the town, the large number of streets and lanes, and considering that the rubbish carts are drawn by these sweepers, the council would venture to submit that reduction in the number of sweepers will only bring the present sanitary condition of the town to an unsatisfactory state and would defeat the object of the council which is endeavouring to more and more advance the sanitary condition of the town.

The site for the night-soil depôt at Amburpet, which is below the town, was selected by the Deputy Sanitary Commissioner and with his approval it was acquired at a cost of Rs. 100. The depôt is one acre in extent and arrangements will be made to bury night-soil in the upper portion of the land which is not close to the river. The depôt at Periapet is in an objectionable place and burial of night-soil there has to be stopped. The council is at its wits' end to find a less objectionable place.

Inspection Notes.

much cost in transport, and is certainly the best mode of disposal in this case. Two of Roberts' incinerators would probably suffice for destruction of both night-soil and rubbish, if both were mixed. If the council will address Messrs. Burn & Co., Calcutta, that firm will give all particulars as to cost, &c. The menial staff and plant employed for night-soil and rubbish conservancy should be altered so as to bring them up to the following numbers :—

Thirty-two scavengers.
Sixteen sweepers.
Four night-soil carts, each of 16 cubic feet capacity, at three trips per day.
Fourteen rubbish carts, each at 27 cubic feet capacity.

[Note.—Total quantity of night-soil to be removed—158 cubic feet.

Total quantity of rubbish to be removed—756 cubic feet.]

9. *Slaughter-houses.*—(*a*) This place was under repair at the time of my visit. The asphalte for the flooring was being laid in a very unworkman-like manner and should be rejected. The arrangement for draining the floor is incorrect, and it would be well for the council before proceeding further to obtain from the Sanitary Board a design for a small slaughter-house, and attempt to adapt their present building as far as feasible to that plan.

10. *Graveyards.*—There are twenty-four graveyards in this town. Of these, fifteen are Muhammadan and within a few yards of houses. The consideration of the necessity to close these must be regarded side by side with proposals for sites elsewhere. Further measurements showing existing condition are desirable before arriving at any decision. I therefore advise that plans of each Muhammadan burial-ground be prepared, showing the nature of their surroundings for 300 yards.

(*b*) With reference to G.O., No. 1054 M., dated 4th July 1895, I inspected with the Chairman the several spots indicated; I cannot say the result has been entirely satisfactory, but the position selected is, taking into consideration the various factors of soil, sub-soil and position in relation to the river, the best that can be secured. Certain questions as to depth of the sub-soil water I asked

Chairman's Remarks.

Messrs. Burn & Co. will be addressed on the subject and if funds permit, two incinerators will be purchased.

In the circumstances explained in paragraph 7 *supra*, the council regrets to state that the alteration cannot be made in the conservancy staff as suggested. The council has proposed to increase the number of scavengers and night-soil hand-carts as funds permit.

The flooring was already condemned and the contractor made to do the work satisfactorily.

Though provision was made in the current year's budget for the construction of a pukka slaughter-house it was postponed owing to difficulty in acquiring the site. A plan of the present building will be forwarded to the Sanitary Board and its advice obtained and the defects suggested will be remedied as far as possible.

Necessary steps will be taken in the manner suggested.

Inspection Notes.

the Chairman to supply me with after my departure. In searching near the ground suggested by me, he discovered a plot that would be cheaper and had the sub-soil water at greater depth than that selected by me. I therefore consider the site shown in the accompanying diagram No. 1 should be chosen by the council.

11. *Offensive Trades.*—Dhobies wash clothing in the river *above* the town, as well as at other sites below it. No washing should be allowed above the town, and this should be duly set forth in granting a license to dhobies. These, under section 188, should be granted, but without charge.

12. *Bandy-stand.*—The so-called bandy stand is an uneven, ill-arranged plot of ground near a large public latrine and possessed of no comfort beyond a well. If money be taken from bandymen and they be compelled to resort to a certain spot at the will of the municipality, I hold that it is but just that the place should be made reasonably comfortable. The place should be levelled, metalled, drained and be provided with sheds for sleeping and cooking.

13. *Vaccination.*—The following shows the result of compulsory vaccination in this town :—

Total births during preceding six months, *i.e.*, from 1st July to 31st December 1895.	Of the births entered in column 1 state—								Ratio of successful vaccination to total births per cent.
	Number vaccinated.		Number vaccinated a second time because first operation proved unsuccessful.		Number postponed under medical certificate.	Number died.	Number left the town.	Number unaccounted for.	
	Successful in the first instance.	Unsuccessful in the first instance.	Successfully.	Unsuccessfully.					
425	268	1	1	..	24	68	64	..	63·1

Of the forty children examined in the streets, twenty-four bore marks of vaccination, three were unprotected, and the remainder had marks of small-pox. The latter were chiefly in children between eight and ten years of age. It is very desirable, consequently, that a complete census of children should be taken by house-to-house visitation, and that all those liable to vaccination under section 138 should be vaccinated without delay.

Chairman's Remarks.

The diagram No. 1, referred to by the Sanitary Commissioner, has not yet been received, and when it is received, necessary steps will be taken.

Unobjectionable places in the river will be set apart for the washing purposes referred to. Washing in objectionable places will be prohibited.

The place is unsuited for a bandy-stand as it is in a corner of the town, and the council does not consider it worth while to spend any money on it. It is not resorted to and little or no income is derived from the cart-stand.

This will be attended to.

Inspection Notes.

14. *Registration.*—The following table shows the results of registration in this town for the last three years :—

Years.	Birth-rate per mille of estimated population	Death-rate per mille of estimated population.	Percentage of deaths from					
			Cholera.	Small-pox.	Fevers	Dysentery and diarrhœa.	Injuries.	All other causes.
1894	49·4	26·3	6·0	..	45·4	3·1	1·0	44·5
1895	52·8	28·7	..	0 7	38·5	2·9	0·9	57·0
1896	56·2	51·8	34·6	..	21·5	3·9	0·2	39·8

In view of the fact that this town at the last census showed a marked decrease in the intercensal period, I should think the birth-rates have by some means been exaggerated. The heavy death-rate is due to a severe epidemic of cholera during the year—an epidemic which, as I have noted in paragraph 5 *supra*, taught what no argument of mine could enforce, namely, that even the measures of protection afforded by pot-wells is better than trusting to open "odais."

Chairman's Remarks.

The council is sure that there is no exaggeration in the birth-rate.

Fort St. George,
18*th December* 1896.

(Signed) W. G. KING, Surgeon-Lieut.-Col.,
Sanitary Commissioner for Madras.

Extract from the Proceedings of the Municipal Council, Vániyambádi, dated 30th January 1897.

* * * * * *

Read inspection notes of the Sanitary Commissioner for Madras on the Vániyambádi Municipality.

Resolution.—Passed.

Forwarded.

10*th February* 1897.

(Signed) V. VENUGOPAUL CHETTY,
Acting Sub-Collector.

Order—No. 755 M., dated 31st March 1897.

Recorded.

2. The Government is glad to note that the municipal council, as advised by the Sanitary Commissioner, proposes to sink additional "pot wells" in the river.

3. The earnest attention of the municipal council should be given to the Sanitary Commissioner's remarks in paragraphs 6 and 7 of the notes. It is of far more importance to increase the night-soil staff than the rubbish conservancy establishment, and if funds are limited the former should be strengthened at the expense of the latter.

4. With reference to paragraph 12 of the notes, it is observed that, if the present cart-stand is unsuitably situated, steps should be taken to provide a more convenient place.

(True Extract.)

G. S. FORBES,
Secretary to Government.

To the Chairman, Municipal Council, Vániyambádi.
„ Collector of Salem.
„ Sanitary Board.
„ Sanitary Commissioner.
„ Sanitary Engineer.

Editors' Table.

Ed. A. Raitt.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following paper :—

From M.R.Ry. T. V. GOPALASWAMI AIYAR Avargal, B.A., Chairman, Municipal Council, Vániyambádi, to the Secretary to Government, Local and Municipal Department (through the Collector of Salem), dated 4th February 1897, No. 91.

I have the honour to submit herewith the inspection notes of the Sanitary Commissioner for Madras on the Vániyambádi Municipality, with the resolution of the council recorded in the margin thereof, and to state that I have no further remarks to offer.

2. A copy of the council's resolution passing the same also accompanies.

ENCLOSURES.

INSPECTION NOTES of the Sanitary Commissioner for Madras.

SALEM DISTRICT.

VÁNIYAMBÁDI MUNICIPALITY.

Inspected 4th to 6th November 1896.

Population as per census of 1891 15,838

Inspection Notes.	Chairman's Remarks.
Dwellings.—It is the intention of the council to erect a "travellers' bungalow." The site shown me is near a public latrine and bandy-stand. If this be the only available site, the bandy-stand should be abolished before proceeding to build it.	This will be done accordingly.
2. *Roads.*—With the exception of the main roads, roads hardly exist, the majority being mere gravel-patched lanes. Where metal is used, it is often very mixed in size.	Attention is being paid to put the minor streets and lanes in good order. Metal mixed in size is always rejected.
3. *Surface Drainage.*—This passes freely into the rivers whence the water-supply is taken. The bazaar drains are much silted up. The neighbouring shops obstruct the drain by boards, &c. Attention is invited to G.O., No. 1341 M., dated 27th September 1894. The drains should be kept thoroughly clean.	Steps will be taken to remove the obstructions referred to and to keep the bazaar drains satisfactorily as required in the Government Order. A list of such cases will be called for and duly dealt with.

Inspection Notes.	Chairman's Remarks.
4. *Sewage.*—(*a*) This is mostly received into cesspools and dumb-wells. These are made for receipt of fæcal matter. In most places where I have seen these their use is confined to Muhammadans, but here they are used largely in Hindu houses. As a rule, but four or five yards' space exists between the cesspits and the wells used for "domestic purposes." It need not be said that the employment of this character of water, even for washing vessels, *is most dangerous.* I advise the council without delay to cause a complete list of cesspools to be drawn up and then direct their alteration under sections 214 and 221. It would be difficult to imagine a more grossly insanitary condition than here shown.	A list showing the cesspools and dumb-wells attached to each house and their distance from the wells, &c., will be called for, and necessary steps taken under sections 214 and 221.
(*b*) In Kanyambadi street, certain of the inhabitants at their own expense are making cement-lined, egg-shaped drains of a serviceable nature. No idea of making arrangements for ultimate disposal of the sewage, however, seems to have been entertained. The council would do well to attempt to form a contract with the owner of the garden near the termination of the drain, with the object of his allowing of disposal of the sewage on his ground for cultivation purposes. All that would be required is that a cesspool serving for collection and a picotah for lifting the sewage for distribution be provided. In other instances, where the drains and in an indefinite manner, attempts should be made to secure small patches of ground which should be cultivated under irrigation.	The owner of the garden will be asked to allow the sewage of the street into his garden. Necessary steps will be taken to carry out the suggestion as far as practicable.
5. *Water-supply.*—(*a*) Having regard to the pollution of the water possible from graveyards, night-soil and rubbish depôts, the water-supply from the branches of the Pálár are open to suspicion. When "springs" are excavated in the river-bed persons are apt to defile them by passing into them for withdrawal of water. This being the case, the Deputy Sanitary Commissioner in his last inspection notes advised the use of "pot-wells" sunk in the sand as a simple and safe expedient. The council, however, formally refused to adopt this method. I, however, pressed the matter only to receive the definite statement that, owing to the shallowness of the sand, the method could not be adopted. I need not say I did not consider such a reply as satisfactory, and I hoped to have been able to verify the	Additional pot-wells also will be sunk when people appreciate the advantage of such wells and this system of water-supply extended.

Inspection Notes.

condition of affairs during my present inspection. I found, however, that what neither my Deputy nor myself could persuade the council to do, the combined efforts of cholera and of the local medical subordinate have effected. Pot-wells have now been adopted, and doubtless with benefit.

(*b*) As during floods these will be covered, the council would do well to use a series of Norton's tube wells close to the bank of the river. These cost about Rs. 70 to Rs. 90 each complete. This does not include the cost of driving apparatus (Rs. 225), of which only one would be necessary, however many the wells to be sunk.

(*c*) It is presumably impossible for the Sanitary Engineer at present to undertake the drawing up of a scheme for Vániyambádi; but when this town's turn comes for attention, it is to be hoped the council will not hesitate to accept a public water-supply scheme, which could doubtless be supplied at a small cost from infiltration works in the river.

6. *Night-soil Conservancy.*—There are but eleven latrines for the whole municipality, having a population of 15,838. Only 357 houses out of a total of 3,520 are attended to under the private scavengering system. As already shown under "Sewerage," much fæcal matter never leaves the town site. As for the amounts not here accounted for, doubtless much is distributed along the river banks as found by me on inspection. There are but fifteen mounted conservancy *buckets* for transport. The depôts are distant, and it is impossible that more can be done than transport three times daily, so that of a total of human excreta of 158 cubic feet that must be expected from the town population daily, only 112·5 are removed from the town, even if the buckets were really full on each occasion. Only twelve toties are employed, and as the same people are supposed to drag the mounted hand-buckets, as well as keep the latrines clean, it is evident, even with their best intentions to overtake the work, *it cannot be done.*

Chairman's Remarks.

Catalogues will be sent for and the subject again considered by the council as it has no idea at present how many such wells will be required for this town and whether the water drawn therefrom is likely to be resorted to by the people.

The council will be glad to have a good water-supply scheme.

The council is alive to the fact that the existing number of latrines is insufficient for the requirements of the town. Three more brick and chunam wall latrines will be constructed during 1897–98 as provided in the budget.

The council has been unremitting in its endeavours to extend the private scavenging system in parts of the town into which it has not yet been introduced, but the efforts have not borne fruit owing to the insuperable difficulty experienced in securing the number of toties essentially necessary for working the system on a large scale. The council does not relax its efforts to extend the operation of the agency as the main difficulty so long experienced may be got over as provision is made in the budget for 1897–98 to increase the pay of the toties so as to attract men from the places where the supply is ample agreeably to the instructions given by Government in the review of the last administration report. The council has no hesitation in assuring that sufficient supervision is exercised and streets and roads and river banks are kept as clean as possible.

The council also thinks that with the present staff—viz., twelve toties for eleven latrines—the excreta is properly removed

Inspection Notes.

7. *Rubbish.*—Forty-four sweepers are employed, against sixteen really necessary for fulfilling the work. There are seventeen carts against fourteen necessary. So that it is evident by re-organizing the night-soil staff at the expense of the rubbish conservancy, much improvement would be effected.

8. *Disposal of Night-soil and Rubbish.*—Of the seven depôts maintained, with the exception of that at Pudur all must be regarded as dangerously near the river Pálár or one or other of its branches. There is practically no sale for either night-soil or rubbish. There is undoubtedly difficulty in securing suitable land for depôts, owing to the proximity of the rivers and, as no sale can be obtained, there can be no object in hoarding these matters up. A course that I would advise be adopted at once is to get both, as received day by day, ploughed into the patches of dry land found here and there on the island. These are nearly always worthless on account of their sandy nature, but under this system would soon become valuable by creation of new soil. Whilst advising this as a makeshift, I consider, situated as Vániyambádi is so that at every turn a branch of the river Pálár is present, the wisest course is to incinerate both rubbish and night-soil. This would save

Chairman's Remarks.

to the depôts from the latrines and that the latrines are always kept clean. Very rarely the inspecting officers found the latrines in an unsatisfactory state.

The budget for the year 1897–98 has already been submitted. The question of increasing the number of toties will, however, be considered when framing the next budget.

The Sanitary Commissioner probably did not take into consideration the peculiar physical state of the town. The town is a scattered one and is divided by the Pálár river into islands. Each island consists of several zigzag lanes and streets. Some of the councillors even came forward to suggest at the last budget meeting to further increase the number of sweepers in consideration of the fact that the village of Pudur was added to the municipality during the year. This proposal was not entertained by the council. Considering the scattered condition of the town, the large number of streets and lanes, and considering that the rubbish carts are drawn by these sweepers, the council would venture to submit that reduction in the number of sweepers will only bring the present sanitary condition of the town to an unsatisfactory state and would defeat the object of the council which is endeavouring to more and more advance the sanitary condition of the town.

The site for the night-soil depôt at Amburpet, which is below the town, was selected by the Deputy Sanitary Commissioner and with his approval it was acquired at a cost of Rs. 100. The depôt is one acre in extent and arrangements will be made to bury night-soil in the upper portion of the land which is not close to the river. The depôt at Periapet is in an objectionable place and burial of night-soil there has to be stopped. The council is at its wits' end to find a less objectionable place.

Inspection Notes.

much cost in transport, and is certainly the best mode of disposal in this case. Two of Roberts' incinerators would probably suffice for destruction of both night-soil and rubbish, if both were mixed. If the council will address Messrs. Burn & Co., Calcutta, that firm will give all particulars as to cost, &c. The menial staff and plant employed for night-soil and rubbish conservancy should be altered so as to bring them up to the following numbers:—

Thirty-two scavengers.
Sixteen sweepers.
Four night-soil carts, each of 16 cubic feet capacity, at three trips per day.
Fourteen rubbish carts, each at 27 cubic feet capacity.

[Note.—Total quantity of night-soil to be removed—158 cubic feet.

Total quantity of rubbish to be removed—756 cubic feet.]

Chairman's Remarks.

Messrs. Burn & Co. will be addressed on the subject and if funds permit, two incinerators will be purchased.

In the circumstances explained in paragraph 7 *supra*, the council regrets to state that the alteration cannot be made in the conservancy staff as suggested. The council has proposed to increase the number of scavengers and night-soil hand-carts as funds permit.

9. *Slaughter-house.*—(*a*) This place was under repair at the time of my visit. The asphalte for the flooring was being laid in a very unworkman-like manner and should be rejected. The arrangement for draining the floor is incorrect, and it would be well for the council before proceeding further to obtain from the Sanitary Board a design for a small slaughter-house, and attempt to adapt their present building as far as feasible to that plan.

The flooring was already condemned and the contractor made to do the work satisfactorily.

Though provision was made in the current year's budget for the construction of a pukka slaughter-house it was postponed owing to difficulty in acquiring the site. A plan of the present building will be forwarded to the Sanitary Board and its advice obtained and the defects suggested will be remedied as far as possible.

10. *Graveyards.*—There are twenty-four graveyards in this town. Of these, fifteen are Muhammadan and within a few yards of houses. The consideration of the necessity to close these must be regarded side by side with proposals for sites elsewhere. Further measurements showing existing condition are desirable before arriving at any decision. I therefore advise that plans of each Muhammadan burial-ground be prepared, showing the nature of their surroundings for 300 yards.

Necessary steps will be taken in the manner suggested.

(*b*) With reference to G.O., No. 1054 M., dated 4th July 1895, I inspected with the Chairman the several spots indicated; I cannot say the result has been entirely satisfactory, but the position selected is, taking into consideration the various factors of soil, sub-soil and position in relation to the river, the best that can be secured. Certain questions as to depth of the sub-soil water I asked

Inspection Notes.

the Chairman to supply me with after my departure. In searching near the ground suggested by me, he discovered a plot that would be cheaper and had the sub-soil water at greater depth than that selected by me. I therefore consider the site shown in the accompanying diagram No. 1 should be chosen by the council.

Chairman's Remarks.

The diagram No. 1, referred to by the Sanitary Commissioner, has not yet been received, and when it is received, necessary steps will be taken.

11. *Offensive Trades.*—Dhobies wash clothing in the river *above* the town, as well as at other sites below it. No washing should be allowed above the town, and this should be duly set forth in granting a license to dhobies. These, under section 188, should be granted, but without charge.

Unobjectionable places in the river will be set apart for the washing purposes referred to. Washing in objectionable places will be prohibited.

12. *Bandy-stand.*—The so-called bandy stand is an uneven, ill-arranged plot of ground near a large public latrine and possessed of no comfort beyond a well. If money be taken from bandymen and they be compelled to resort to a certain spot at the will of the municipality, I hold that it is but just that the place should be made reasonably comfortable. The place should be levelled, metalled, drained and be provided with sheds for sleeping and cooking.

The place is unsuited for a bandy-stand as it is in a corner of the town, and the council does not consider it worth while to spend any money on it. It is not resorted to and little or no income is derived from the cart-stand.

13. *Vaccination.*—The following shows the result of compulsory vaccination in this town:—

Total births during preceding six months, *i.e.*, from 1st July to 31st December 1895.	Of the births entered in column 1 state—								Ratio of successful vaccination to total births per cent.
	Number vaccinated.		Number vaccinated a second time because first operation proved unsuccessful.		Number postponed under medical certificate.	Number died.	Number left the town.	Number unaccounted for.	
	Successful in the first instance.	Unsuccessful in the first instance.	Successfully.	Unsuccessfully.					
425	268	1	1	..	24	68	64	..	63·1

Of the forty children examined in the streets, twenty-four bore marks of vaccination, three were unprotected, and the remainder had marks of small-pox. The latter were chiefly in children between eight and ten years of age. It is very desirable, consequently, that a complete census of children should be taken by house-to-house visitation, and that all those liable to vaccination under section 138 should be vaccinated without delay.

This will be attended to.

Inspection Notes. Chairman's Remarks.

14. *Registration.*—The following table shows the results of registration in this town for the last three years :—

Years.	Birth-rate per mille of estimated population	Death-rate per mille of estimated population.	Percentage of deaths from					
			Cholera.	Small-pox.	Fevers	Dysentery and diarrhœa.	Injuries.	All other causes.
1894	49·4	26·3	6·0	..	45·4	3·1	1·0	44·5
1895	52·8	28·7	..	0 7	38·5	2·9	0·9	57·0
1896	56·2	51·8	34·6	..	21·5	3·9	0·2	39·8

In view of the fact that this town at the last census showed a marked decrease in the intercensal period, I should think the birth-rates have by some means been exaggerated. The heavy death-rate is due to a severe epidemic of cholera during the year—an epidemic which, as I have noted in paragraph 5 *supra*, taught what no argument of mine could enforce, namely, that even the measures of protection afforded by pot-wells is better than trusting to open "odais."

The council is sure that there is no exaggeration in the birth-rate.

Fort St. George, 18*th December* 1896. (Signed) W. G. KING, Surgeon-Lieut.-Col., *Sanitary Commissioner for Madras.*

Extract from the Proceedings of the Municipal Council, Vániyambádi, dated 30th January 1897.

* * * * *

Read inspection notes of the Sanitary Commissioner for Madras on the Vániyambádi Municipality.

Resolution.—Passed.

Forwarded.

10*th February* 1897. (Signed) V. VENUGOPAUL CHETTY, *Acting Sub-Collector.*

Order—No. 755 M., dated 31st March 1897.

Recorded.

2. The Government is glad to note that the municipal council, as advised by the Sanitary Commissioner, propose to sink additional "pot wells" in the river.

3. The earnest attention of the municipal council should be given to the Sanitary Commissioner's remarks in paragraphs 6 and 7 of the notes. It is of far more importance to increase the night-soil staff than the rubbish conservancy establishment, and if funds are limited the former should be strengthened at the expense of the latter.

4. With reference to paragraph 12 of the notes, it is observed that, if the present cart-stand is unsuitably situated, steps should be taken to provide a more convenient place.

(True Extract.)

Secretary to Government.

To the Chairman, Municipal Council, Vániyambádi.
" Collector of Salem.
" Sanitary Board.
" Sanitary Commissioner.
" Sanitary Engineer.

Editors' Table.

Exd. A. Raitt.

No. 755 M., February 1897.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

Read—the following paper :—

From M.R.Ry. I. V. GOPALASAWMY AIYAR Avargal, B.A., Chairman, Municipal Council, Vániyambádi, to the Secretary to Government, Local and Municipal Department (through the Collector of Salem), dated 4th February 1897, No. 91.

I have the honour to submit herewith the inspection notes of the Sanitary Commissioner for Madras on the Vániyambádi Municipality, with the resolution of the council recorded in the margin thereof, and to state that I have no further remarks to offer.

2. A copy of the council's resolution passing the same also accompanies.

Enclosures.

Inspection Notes of the Sanitary Commissioner for Madras.

SALEM DISTRICT.

Vániyambádi Municipality.

Inspected 4th to 6th November 1896.

Population as per census of 1891 15,838

Inspection Notes.	Chairman's Remarks.
Dwellings.—It is the intention of the council to erect a "travellers' bungalow." The site shown me is near a public latrine and bandy-stand. If this be the only available site, the bandy-stand should be abolished before proceeding to build it.	This will be done accordingly.
2. *Roads*.—With the exception of the main roads, roads hardly exist, the majority being mere gravel-patched lanes. Where metal is used, it is often very mixed in size.	Attention is being paid to put the minor streets and lanes in good order. Metal mixed in size is always rejected.
3. *Surface Drainage*.—This passes freely into the rivers whence the water-supply is taken. The bazaar drains are much silted up. The neighbouring shops obstruct the drain by boards, &c. Attention is invited to G.O., No. 1341 M., dated 27th September 1894. The drains should be kept thoroughly clean.	Steps will be taken to remove the obstructions referred to and to keep the bazaar drains satisfactorily as required in the Government Order. A list of such cases will be called for and duly dealt with.

Inspection Notes.

4. *Sewage.*—(*a*) This is mostly received into cesspools and dumb-wells. These are made for receipt of fæcal matter. In most places where I have seen these their use is confined to Muhammadans, but here they are used largely in Hindu houses. As a rule, but four or five yards' space exists between the cesspits and the wells used for "domestic purposes." It need not be said that the employment of this character of water, even for washing vessels, *is most dangerous.* I advise the council without delay to cause a complete list of cesspools to be drawn up and then direct their alteration under sections 214 and 221. It would be difficult to imagine a more grossly insanitary condition than here shown.

(*b*) In Kanyambadi Street, certain of the inhabitants at their own expense are making cement-lined, egg-shaped drains of a serviceable nature. No idea of making arrangements for ultimate disposal of the sewage, however, seems to have been entertained. The council would do well to attempt to form a contract with the owner of the garden near the termination of the drain, with the object of his allowing of disposal of the sewage on his ground for cultivation purposes. All that would be required is that a cesspool serving for collection and a picotah for lifting the sewage for distribution be provided. In other instances, where the drains end in an indefinite manner, attempts should be made to secure small patches of ground which should be cultivated under irrigation.

5. *Water-supply.*—(*a*) Having regard to the pollution of the water possible from graveyards, night-soil and rubbish depôts, the water-supply from the branches of the Pálár are open to suspicion. When "springs" are excavated in the river-bed persons are apt to defile them by passing into them for withdrawal of water. This being the case, the Deputy Sanitary Commissioner in his last inspection notes advised the use of "pot-wells" sunk in the sand as a simple and safe expedient. The council, however, formally refused to adopt this method. I, however, pressed the matter only to receive the definite statement that, owing to the shallowness of the sand, the method could not be adopted. I need not say I did not consider such a reply as satisfactory, and I hoped to have been able to verify the

Chairman's Remarks.

A list showing the cesspools and dumb-wells attached to each house and their distance from the wells, &c., will be called for, and necessary steps taken under sections 214 and 221.

The owner of the garden will be asked to allow the sewage of the street into his garden. Necessary steps will be taken to carry out the suggestion as far as practicable.

Additional pot-wells also will be sunk when people appreciate the advantage of such wells and this system of water-supply extended.

Inspection Notes.

condition of affairs during my present inspection. I found, however, that what neither my Deputy nor myself could persuade the council to do, the combined efforts of cholera and of the local medical subordinate have effected. Pot-wells have now been adopted, and doubtless with benefit.

(*b*) As during floods these will be covered, the council would do well to use a series of Norton's tube wells close to the bank of the river. These cost about Rs. 70 to Rs. 90 each complete. * This does not include the cost of driving apparatus (Rs. 225), of which only one would be necessary, however many the wells to be sunk.

(*c*) It is presumably impossible for the Sanitary Engineer at present to undertake the drawing up of a scheme for Váni-yambádi; but when this town's turn comes for attention, it is to be hoped the council will not hesitate to accept a public water-supply scheme, which could doubtless be supplied at a small cost from infiltration works in the river.

6. *Night-soil Conservancy.*—There are but eleven latrines for the whole municipality, having a population of 15,838. Only 357 houses out of a total of 3,520 are attended to under the private scavengering system. As already shown under "Sewerage," much fæcal matter never leaves the town site. As for the amounts not here accounted for, doubtless much is distributed along the river banks as found by me on inspection. There are but fifteen mounted conservancy *buckets* for transport. The depôts are distant; and it is impossible that more can be done than transport three times daily, so that of a total of human excreta of 158 cubic feet that must be expected from the town population daily, only 112·5 are removed from the town, even if the buckets were really full on each occasion. Only twelve toties are employed, and as the same people are supposed

Chairman's Remarks.

Catalogues will be sent for and the subject again considered by the council as it has no idea at present how many such wells will be required for this town and whether the water drawn therefrom is likely to be resorted to by the people.

The council will be glad to have a good water-supply scheme.

The council is alive to the fact that the existing number of latrines is insufficient for the requirements of the town. Three more brick and chunam wall latrines will be constructed during 1897–98 as provided in the budget.

The council has been unremitting in its endeavours to extend the private scavengering system in parts of the town into which it has not yet been introduced, but the efforts have not borne fruit owing to the insuparable difficulty experienced in securing the number of toties essentially necessary for working the system on a large scale. The council does not relax its efforts to extend the operation of the agency as the main difficulty so long experienced may be got over as provision is made in the budget for 1897–98 to increase the pay of the toties so as to attract men from the places where the supply is ample agreeably to the instructions given by Government in the review of the last administration report. The council has no hesitation in assuring that sufficient supervision is exercised and streets and roads and river banks are kept as clean as possible.

The council also thinks that with the present staff—viz., twelve toties for eleven latrines—the excreta is properly removed

dealt with.

Inspection Notes.

to drag the mounted hand-buckets, as well as keep the latrines clean, it is evident, even with their best intentions to overtake the work, *it cannot be done.*

7. *Rubbish.*—Forty-four sweepers are employed, against sixteen really necessary for fulfilling the work. There are seventeen carts against fourteen necessary. So that it is evident by re-organizing the night-soil staff at the expense of the rubbish conservancy, much improvement would be effected.

8. *Disposal of Night-soil and Rubbish.*—Of the seven depôts maintained, with the exception of that at Pudur all must be regarded as dangerously near the river Pálár or one or other of its branches. There is practically no sale for either night-soil or rubbish. There is undoubtedly difficulty in securing suitable land for depôts, owing to the proximity of the rivers and, as no sale can be obtained, there can be no object in hoarding these matters up. A course that I would advise be adopted at once is to get both, as received day by day, ploughed into the patches of dry land found here and there on the island. These are nearly always worthless on account of their sandy nature, but under this system would soon become valuable by creation of new soil. Whilst advising this as a makeshift, I consider, situated as Vániyambádi is so that at every turn a branch of the river Pálár is present,

Chairman's Remarks.

to the depôts from the latrines and that the latrines are always kept clean. Very rarely the inspecting officers found the latrines in an unsatisfactory state.

The budget for the year 1897–98 has already been submitted. The question of increasing the number of toties will, however, be considered when framing the next budget.

The Sanitary Commissioner probably did not take into consideration the peculiar physical state of the town. The town is a scattered one and is divided by the Pálár river into islands. Each island consists of several zigzag lanes and streets. Some of the councillors even came forward to suggest at the last budget meeting to further increase the number of sweepers in consideration of the fact that the village Pudur was added to the municipality during the year. This proposal was not entertained by the council. Considering the scattered condition of the town, the large number of streets and lanes, and considering that the rubbish carts are drawn by these sweepers, the council would venture to submit that reduction in the number of sweepers will only bring the present sanitary condition of the town to an unsatisfactory state and would defeat the object of the council which is endeavouring to more and more advance the sanitary condition of the town.

The site for the night-soil depôt at Amburpet, which is below the town, was selected by the Deputy Sanitary Commissioner and with his approval it was acquired at a cost of Rs. 100. The depôt is one acre in extent and arrangements will be made to bury night-soil in the upper portion of the land which is not close to the river. The depôt at Periapet is in an objectionable place and burial of night-soil there has to be stopped. The council is at its wits' end to find a less objectionable place.

Inspection Notes.

the wisest course is to incinerate both rubbish and night-soil. This would save much cost in transport, and is certainly the best mode of disposal in this case. Two of Roberts' incinerators would probably suffice for destruction of both night-soil and rubbish, if both were mixed. If the council will address Messrs. Burn Co., Calcutta, that firm will give all particulars as to cost, &c. The menial staff and plant employed for night-soil and rubbish conservancy should be altered so as to bring them up to the following numbers :—

Thirty-two scavengers.
Sixteen sweepers.
Four night-soil carts, each of 16 cubic feet capacity, at three trips per day.
Fourteen rubbish carts, each at 27 cubic feet capacity.

[Note.—Total quantity of night-soil to be removed—158 cubic feet.

Total quantity of rubbish to be removed—756 cubic feet.]

Chairman's Remrks.

Messrs. Burn & Co. will be addressed on the subject and if funds permit, two incinerators will be purchased.

In the circumstances explained in paragraph 7 *supra*, the council regrets to state that the alteration cannot be made in the conservancy staff as suggested. The council has proposed to increase the number of scavengers and night-soil hand-carts as funds permit.

9. *Slaughter-house.*—(*a*) This place was under repair at the time of my visit. The asphalte for the flooring was being laid in a very unworkman-like manner and should be rejected. The arrangement for draining the floor is incorrect, and it would be well for the council before proceeding further to obtain from the Sanitary Board a design for a small slaughter-house, and attempt to adapt their present building as far as feasible to that plan.

The flooring was already condemned and the contractor made to do the work satisfactorily.

Though provision was made in the current year's budget for the construction of a pucka slaughter-house it was postponed owing to difficulty in acquiring the site. A plan of the present building will be forwarded to the Sanitary Board and its advice obtained and the defects suggested will be remedied as far as possible.

10. *Graveyards.*—There are twenty-four graveyards in this town. Of these, fifteen are Muhammadan and within a few yards of houses. The consideration of the necessity to close these must be regarded side by side with proposals for sites elsewhere. Further measurements showing existing condition are desirable before arriving at any decision. I therefore advise that plans of each Muhammadan burial-ground be prepared, showing the nature of their surroundings for 300 yards.

Necessary steps will be taken in the manner suggested.

(*b*) With reference to G.O., No. 1054 M., dated 4th July 1895, I inspected with the Chairman the several spots indicated; I cannot say the result has been entirely satisfactory, but the position selected is, taking into consideration the various factors of soil, sub-soil and position in relation to the river, the best that can be secured. Certain questions as to depth of the sub-soil water I asked

dealt with.

the Chairman to supply me with after my departure. In searching near the ground suggested by me, he discovered a plot that would be cheaper and had the subsoil water at greater depth than that selected by me. I therefore consider the site shown in the accompanying diagram No. 1 should be chosen by the council.

The diagram No. 1, referred to by the Sanitary Commissioner, has not yet been received, and when it is received, necessary steps will be taken.

11. *Offensive Trades.*—Dhobies wash clothing in the river *above* the town, as well as at other sites below it. No washing should be allowed above the town, and this should be duly set forth in granting a license to dhobies. These, under section 188, should be granted, but without charge.

Unobjectionable places in the river will be set apart for the washing purposes referred to. Washing in objectionable places will be prohibited.

12. *Bandy-stand.*—The so-called bandy stand is an uneven, ill-arranged plot of ground near a large public latrine and possessed of no comfort beyond a well. If money be taken from bandymen and they be compelled to resort to a certain spot at the will of the municipality, I hold that it is but just that the place should be made reasonably comfortable. The place should be levelled, metalled, drained and be provided with sheds for sleeping and cooking.

The place is unsuited for a bandy-stand as it is in a corner of the town, and the council does not consider it worthwhile to spend any money on it. It is not resorted to and little or no income is derived from the cart-stand.

13. *Vaccination.*—The following shows the result of compulsory vaccination in this town:—

Total births during preceding six months, *i.e.*, from 1st July to 31st December 1895.	Of the births entered in column 1 state—								Ratio of successful vaccination to total births per cent.
	Number vaccinated.		Number vaccinated a second time because first operation proved unsuccessful.		Number postponed under medical certificate.	Number died.	Number left the town.	Number unaccounted for.	
	Successful in the first instance.	Unsuccessful in the first instance.	Successfully.	Unsuccessfully.					
425	268	1	1	..	24	68	64	..	63·1

Of the forty children examined in the streets, twenty-four bore marks of vaccination, three were unprotected, and the remainder had marks of small-pox. The latter were chiefly in children between eight and ten years of age. It is very desirable, consequently, that a complete census of children should be taken by house-to-house visitation, and that all those liable to vaccination under section 138 should be vaccinated without delay.

This will be attended to.

14. *Registration.*—The following table shows the results of registration in this town for the last three years:—

Years.	Birth-rate per mille of estimated population	Death-rate per mille of estimated population.	Percentage of deaths from					
			Cholera.	Small-pox.	Fevers.	Dysentery and diarrhœa.	Injuries.	All other causes.
1894	49·4	26·3	6·0	..	45·4	3·1	1·0	44·5
1895	52·8	28·7	..	0 7	38·5	2·9	0·9	57·0
1896	56·2	51·8	34·6	..	21·5	3·9	0·2	39·8

In view of the fact that this town at the last census showed a marked decrease in the intercensal period, I should think the birth-rates have by some means been exaggerated. The heavy death-rate is due to a severe epidemic of cholera during the year—an epidemic which, as I have noted in paragraph 5 *supra*, taught what no argument of mine could enforce, namely, that even the measures of protection afforded by pot-wells is better than trusting to open "odais."

The council is sure that there is no exaggeration in the birth-rate.

FORT ST. GEORGE,
18*th December* 1896.

(Signed) W. G. KING, Surgeon-Lieut.-Col.,
Sanitary Commissioner for Madras.

EXTRACT from the Proceedings of the Municipal Council, Vániyambádi, dated 30th January 1897.

* * * * * *

Read inspection notes of the Sanitary Commissioner for Madras on the Vániyambádi Municipality.

Resolution.—Passed.

Forwarded.

10*th February* 1897.

(Signed) V. VENUGOPAUL CHETTY,
Acting Sub-Collector.

Note 25/2/97 C.No 562 M

Vaniyambadi Inspection

C: No. 562. M

P.S.

Order No. 755 Md/31/3/97

Recorded.

2. The Sanitary Board should be asked by the Sanitary Commissioner that the Municipal Chairman should submit additional plot wells in the town

I.R. 25/3/97

3 The earnest attention of the H.S. should be given to the remarks in paras 6 & 7 of the Note. It is of far more importance to increase the night soil staff than the Public conservancy establishment & if funds are limited the former should be strengthened at the expense of the latter

4. With reference to para 12 of the note, it is observed that if the present site should stand is unsuitably situated, steps should be taken to provide a more convenient place.

To the Chairman, M.C. Vaniyambadi
" Collector of Salem. No 3
" Sanitary Board
" Commissioner No 4
" Engineer No 3

Editors' Table Dup. 4/5/97

31/3/97

11.4.97

W/3

Reference on No. 91

18

MUNICIPAL OFFICE VANIYAMBADI.

Dated 4th February 1897
Despatched 5-2-97.

From K.R. Rly S. V. Gopalaswamy Aiyangar B.A.
Esquire.

Chairman, Municipal Council,

VANIYAMBADI.

LOCAL & MUNICIPAL DEPT.
RECEIPT No. 562 M

To

The Chief Secretary to Government
Local & Municipal department
Madras

Thro the Collector of Salem.

Sir,

I have the honor to submit herewith the Inspection Notes of the Sanitary Commissioner for Madras on the Vaniyambadi Municipality with the Resolution of the Council recorded in the margin thereof and to state that I have no further remarks to offer.

A Copy of the Council's resolution passing the same also accompanies.

I have the honor to be
Sir,
Your most obdt. Servant

Gopalasamy
Chairman
4-2-97

dealt with.

P.S

Inspection Notes of the Sanitary Commissioner for Madras.

Salem District.

Vaniyambadi Municipality

Inspected 4th to 6th Nov 1896.

Population as per Census of 1891 — 15838.

---

1. Dwellings. — It is the intention of the Council to erect a "travellers' bungalow". The site shown me is near a public latrine and bandy stand. If this be the only available site, the bandy stand should be abolished before proceeding to build it.

This will be done accordingly

2. Roads. — With the exception of the main roads, roads hardly exist, the majority being mere gravel patched lanes. Where metal is used, it is often very mixed in size.

Attention is being paid to put the minor streets and lanes in good order. Metal mixed in size is always rejected.

3. Surface drainage. — This passes freely into the rivers whence the water-supply is taken. The bazaar drains are much silted up. The neighbouring shops obstruct the drain by boards &c.

Steps will be taken to remove the obstructions referred to and to keep the bazaar drains satisfactorily as required in the Govt. Order. A list of such cases will be called for and duly dealt with.

Attention

Attention is invited to G. O.
No 1341 dated 27th Sep 1894.
The drains should be kept
thoroughly clean.

4

4. Sewage. (a) This is mostly received into cess-pools and dumb wells. These are made for receipt of fœcal matter. In most places where I have seen these their use is confined to Mahomedans, but here they are used largely in Hindu houses. As a rule but four or five yards space exists between the cesspits and the wells used for "domestic purposes". It need not be said that the employment of this character of water even for washing vessels, is most dangerous. I advise the Council without delay to cause a complete list of cesspools to be drawn up, and then direct their ~~abolition~~ alteration under Section 214 & 221.

A list showing the cesspools and dumb wells attached to each house and their distance from the wells &c will be called for and necessary steps taken under Sections 214 & 221.

(b) It would be difficult to imagine a more grossly insanitary condition than here shown.

(b) In Kanyambadi street, certain of the inhabitants at their own expense are making cement lined egg-shaped drains of a serviceable nature. No idea of making arrangements for ultimate disposal of the sewage, however, seems to have been entertained. The Council would do well to attempt to form a contract with the owner of the garden near the termination of the drain, with the object of his allowing of disposal of the sewage on his ground for cultivation purposes. All that would be required is that a cesspool serving for collection, and a picotah for lifting the sewage for distribution be provided. In other instances, where the drains made end in an indefinite manner, attempts should be made to secure small patches of ground which should be cultivated under irrigation.

The owner of the garden will be asked to allow the sewage of the Street into his garden. Necessary Steps will be taken to carry out the suggestion as far as practicable.

5. Water-supply (a) Having regard to the pollution of the water possible from graveyards,

night

night-soil and rubbish depots, the water-supply from the branches of the Palar are open to suspicion. When "springs" are excavated in the river bed, persons are apt to defile them by passing into them for withdrawal of water. This being the case, the Deputy Sanitary Commissioner in his last inspection Notes advised the use of "pot wells" sunk in the sand as a simple and safe expedient. The Council, however, formally refused to adopt this method. I, however pressed the matter only to receive the definite statement that, owing to the shallowness of the sand, the method could not be adopted. I need not say I did not consider such a reply as satisfactory, and I hoped to have been able to verify the condition of affairs during my present inspection. I found, however, that what neither my deputy nor myself could persuade the Council to do, the continued efforts of cholera and the local medical units ordinarily have effected. Pot wells have now been adopted, and doubtless with benefit. As during floods these will be covered, the Council would do well to use a series of Norton's tube wells close to the bank of the river. These cost about Rs 70 to Rs 90 each complete. It is presumably impossible for the Sanitary Engineer at present to undertake the drawing up of the scheme for Vaniyambadi; but when this town's turn comes for attention, it is to be hoped the Council will not hesitate to accept a public water-supply scheme, which could doubtless be supplied at a small cost from infiltration works in the river.

Additional pot wells also will be sunk when people appreciate the advantage of such wells and this System of water Supply Extended.

Catalogues will be sent for and the subject again considered by the Council as it has no idea at present how many such wells will be required for this town and whether the water drawn therefrom is likely to be resorted to by the people. (B)

* This does not include the cost of driving apparatus (Rs 225) of which only one need be necessary, however many pot wells to be sunk. (C)

The Council will be glad to have a good water-Supply scheme.

Night-

6. Night-soil Conservancy.— There are but eleven latrines for the whole Municipality, having a population of 15,838. Only 357 houses out of a total of 3520 are attended to, under the private scavengering system. As already shown under 'sewerage', much faecal matter never leaves the town site. As for the amounts not here accounted for, doubtless much is distributed along the river banks as found by me on inspection. There are but 15 mounted conservancy buckets for transport. The depôts are distant, and it is impossible that more can be done than transport three times daily; so that of a total of human excreta of 158 cft that must be expected from the town population daily, only 112.5 are removed from the town, even if the buckets were really full on each occasion. Only 12 tories are employed, and as the same people are supposed to

The Council is alive to the fact that the existing number of latrines is insufficient for the requirements of the town. Three more brick and Chunam wall latrines will be constructed during 1897-98 as provided in the budget.

The Council has been unremitting in its endeavours to extend the Scavenging System in parts of the town into which it has not yet been introduced but the efforts have not borne fruit owing to the insuperable difficulty experienced in securing the number of tories essentially necessary for working the System on a large scale. The Council does not relax its ~~endeavours~~ efforts to extend the operation of the agency as the main difficulty so long experienced may be got over as provision is made in the budget for 1897-98 to increase the pay of the tories so as to attract men from the places where the supply is ample — agreeably to the instructions given by Government in the review of the last Administration Report. Sufficient Supervision is exercised & Streets & roads & river banks are kept as clean as possible.

The Council also thinks that with the present staff viz 12 tories for 11 latrines the excreta is properly removed to the depots from the latrines and that the latrines are always kept clean. Very rarely the Inspecting Officers found the latrines in an unsatisfactory state.

The budget for the year 1897-98 has already been submitted. The question of increasing the number of tories will however be considered when framing the next budget.

The Sanitary Commissioner probably did not take into consideration the peculiar physical state of the town. The town is a scattered one and is divided by the Palar rivers into Islands. Each island consists of several zig zag lanes and streets. Some of the Councillors came forward to suggest at the last budget meeting to further increase the number of Sweepers in consideration of the fact that the village Puder was added to the municipality during the year. This proposal was not entertained by the Council. Considering the scattered condition of the town the large number of streets and lanes & considering that the rubbish carts are drawn by these Sweepers, the Council would venture to submit that reduction in the number of Sweepers will only bring the present Sanitary condition of the town to an unsatisfactory state and would defeat the object of the Council which is endeavouring to more and more advance the Sanitary Condition of the town.

8. The site for the night soil depot at Amburpet which is below the town was selected by the Deputy Sanitary Commissioner and with his approval it was acquired at a cost of Rs 100. The depot is one acre in extent and arrangements will be made to bury night soil in the upper portion of the land which is not close to the river. The depot at Periapet is in an objectionable place and burial of night soil there has to be stopped. The Council is at its wits end to find a less objectionable place.

to drag the mounted hand buckets, as well as keep the latrines clean, it is evident, even with their best endeavours to overtake the work, it cannot be done.

7. Rubbish.— 44 Sweepers are employed, against 16 really necessary for fulfilling the work. There are 17 carts against 14 necessary. So that it is evident by re-organising the night soil staff & the expense of the rubbish Conservancy, much improvement would be effected.

8. Disposal of night soil and rubbish.— Of the 7 depôts maintained, with the exception of that at Puthur, all must be regarded as dangerously near the river Palar or one or other of its branches. There is practically no sale for either night soil or rubbish. There is undoubtedly difficulty in securing suitable land for depôts, owing to the proximity of the rivers and, as no sale can be obtained, there can be no object in hoarding these matters up. A course that I would advise be adopted at once, is to get both as received day by day, ploughed into the

the patches of dry land found here and there on the island. These are nearly always worthless on account of their sandy nature, but under this system would soon become valuable by creation of new soil. Whilst advising this as a makeshift I consider, situated as Vanyambadi is, so that at very turn a branch of the river Palar is present, the wisest course is to incinirate both rubbish and night soil. This would save much cost in transport, and is certainly the best mode of disposal in this case. Two of Roberts incinirators would probably suffice for destruction of both night-soil and rubbish, if both were mixed. If the Council will address Messrs Burn and Co., Calcutta, that firm will give all particulars as to cost &c. The menial staff and plant employed for night-soil and rubbish conservancy should be altered, so as to bring them up to the following numbers: —

Messrs Burn & Co. will be addressed on the subject and if funds permit two incinerators will be purchased.

In the circumstances explained in para 7 supra the Council regrets to state that the alteration cannot be made in the Conservancy staff as suggested.

The Council has proposed to increase the number of Scavengers & night soil hand Carts as funds permit.

32 Scavengers
16 Sweepers
4 night-soil carts, each of 16 c ft capacity at 3 trips per day
14 Rubbish carts, each of 27 c ft capacity.

[Vide Total quantity of night soil to be removed — 158 c ft
Total quantity of rubbish to be removed 756 c ft.]

The flooring was already Condemned and the Contractor made to do the work Satisfactorily.

Though provision was made in the current year's budget for the Construction of a pucka Slaughter house it was postponed owing to difficulty in acquiring the site. A plan of the present building will be forwarded to the Sanitary Board and its advice obtained and the defects suggested will be remedied as far as possible.

9. Slaughter-house (a) This place was under repair at the time of my visit. The asphalte for the flooring was being laid in a very unworkmanlike manner and should be rejected. The arrangement for draining the floor is incorrect, and it would be well for the Council before proceeding further to obtain from the Sanitary Board a design for a small slaughter house, and attempt to adapt their present building as far as feasible to that plan.

10. Graveyards. — There are 24 graveyards in this town. Of these, 15 are mahomedan

and

and within a few yards of houses. The consideration of the necessity to close these must be regarded side by side with proposals for sites elsewhere. Further measurements showing existing condition are desirable before arriving at any decision. I therefore advise that plans of each mahomedan burial ground be prepared, showing the nature of their surroundings for three hundred yards.

(b) With reference to G.O. No 1054 M dated 4th July 1895, I inspected with the Chairman the several spots indicated; I cannot say the result has been entirely satisfactory, but the position selected is, taking into consideration the various factors of soil, sub-soil and position in relation to the river, the best that can be secured. Certain question as to depth of the sub-soil water

Necessary Steps will be taken in the manner Suggested.

I

The diagram No 1 referred to by the Sanitary Commissioner has not yet been received & when it is received necessary Steps will be taken.

Unobjectionable places in the river will be set apart for the washing purposes referred to. Washing in objectionable places will be prohibited

I asked the Chairman to supply me with after my departure. In searching near the ground suggested by me, he discovered a plot that would be cheaper, and had the subsoil water at greater depth than that selected by me. I therefore consider the site shown in the accompanying diagram No 1 should be chosen by the Council.

11. Offensive trades. — Dhobies wash clothing in the river above the town, as well as at other sites below it. No washing should be allowed above the town, and this should be duly set forth in granting a license to dhobies. These, under Section 188, should be granted, but without charge.

12. Bandy stand. — The so-called bandy stand is an uneven, ill arranged, plot of ground near a large public latrine, and possessed of no comfort beyond a well. If money be taken from bandy men, and they be compelled to resort to

a

a certain spot at the will of the Municipality, I hold that it is but just that the place should be made as ~~comfortable as possible~~ reasonably comfortable as possible. The place should be levelled, metalled, drained, and be provided with sheds for sleeping and cooking.

The place is unsuited for a bandy stand as it is in a corner of the town, and the Council does not consider it worthwhile to spend any money on it. It is not resorted to and little or no income is derived from the Cart Stand.

13. Vaccination. — The following shows the result of compulsory vaccination in this town: —

Total births during 6 months ended 30th June 1895 (1st & 2nd Quarters)	of the births entered in Col 1 state: —								
	Number Vaccinated		No vaccd a 2nd time because 1st operation proved unsuccessful		No postponed on account of sickness	Number died	No left the town	No unaccounted for	Ratio of Insusceptibles to births per cent
	Successfully in the 1st winter	Unsuccessfully in the 1st winter	Successfully	Unsuccessfully					
425	268	1	1	-	24	68	64	-	63.1

Of the 40 children examined in the streets, 24 bore marks of vaccination, 3 were unprotected, and the remainder had marks of small-pox. The latter were chiefly in children between eight and ten years of age. It is very desirable, consequently, that a complete

This will be attended to —

census of children should be taken by house-to-house visitation, and that all those liable to vaccination under Section 138 should be vaccinated without delay.

14. Registration. — The following table shows the results of registration in this town for the last 3 years: —

Years.	Birth-rate per mille of Estimated Population.	Death-rate per mille of Estimated Population	Percentage of deaths from:					
			Cholera	Small-pox	Fever	Dysentery and Diarrhœa	Phthisis	All other Causes
1894	49.4	26.3	6.0	-	45.4	3.1	1.0	44.5
1895	52.8	28.7	-	0.7	38.5	2.9	0.9	57.0
1896	56.2	51.8	34.6	-	21.5	3.9	0.2	39.8

The Council is sure that there is no exaggeration in the birth rate.

In view of the fact that this town at the last census showed a marked decrease in the inter-censal period, I should think the birth-rates have by some means been exaggerated. The heavy death-rate is due to a severe epidemic of cholera — during the year — an epidemic which

which as I have noted in para 5 supra taught what no argument of mine could enforce, namely, that even the measures of protection afforded by pot wells is better than trusting to open "odais".

Chairman
3. 2. 97.

Surgeon-Lt-col,
Sanitary Commissioner,
Madras.

Fort St George
18th Dec 1896

Extract from the Proceedings of the Municipal Council Vaniyambadi dated 30 January 1897.

PRESENT.

Mr. D.Ry. V. Gopalasawmy aiyar avargal B.A. Chairman

Official-Councillors.

Mr. D.Ry. O. Sundara Rao Garu Deputy Tahsildar

" K. Basilamani mudaliar avargal Sub Registrar.

Non-Official Councillors.

Mr. D.Ry. T. M. Swiseha muthu Pillai avargal.

" Hanumantha Rao avargal.

" Jaya Karma Lala avargal.

" Venkatappa nayadu garu

" Bala Guruvappa Chettiyar avargal.

Patel Ahmad Yasim Sahib.

Read Inspection Notes of the Sanitary Commissioner for Madras on the Vaniyambadi municipality.

Resolution:- Passed.

(Signed) V. Gopalasawmy aiyar

(True Extract)

Chairman

COLLECTOR, * SALT * RECEIVED. * TREASURY DEPUTY
22 DEC. 9

BACK PAPERS.

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

Local & Munl. (1897) Department.

562/97

CURRENT No.

562/97

GOVERNMENT OF FORT ST. GEORGE MUNICIPAL DEPARTMENT

From The Chairman
Municipal Council
Vaniyambady

Order This the Collector of Salem

No. 91

Dated 4th February 1897.

Received 11-2-1897

Registered 12-2-1897

Enclosures 2

Spare copies. 108

SUBJECT.

Submitting the Inspection Notes of the Sanitary Commissioner for Madras on the Vaniyambady Municipality with the Council's remarks.

Pro
Put in type please
& send 3 copies.
PR
15/2/97

562-M- (Un type)

Pro
Show proof please
PR
31/3/97

...nt to Press. 1-5-97

...ignature. 1-5-97

...in print. 4-5-97

...O. No. DATED

...ER TO G. No.

...GOVERNMENT.

...IN MITRO.

...LED UP BEING MEANT FOR DESPATCH
...GINAL.

NUMBER OF COPIES REQUIRED. Letter only. Order complete with Letter.

A = Print in full.
B = Not to be printed.
P = Print abstract only.
Q = Print heading only.