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Local & Munl. (1896) Department.

PRINTED.

G.O., No. 56 M

DATED 11th January 96

[Despatch Abstract.]

Inspection Notes.

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

BACK PAPERS.

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

FURTHER PAPERS.

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

500—27-5-95.

Papers to be read in Proceedings:—

10 P

Again G.O., dated 189 , No.

Current No. 3723/M of 1895 , dated 30th November from the Chairman, M.C., Guntur.

Current No. of 189 , dated from the

Order. RP 5 Dec 96 11-1-96

Recorded with the following remarks:—

(1) The attention of the Sanitary Commissioner will be drawn to the remarks of the Chairman on paras 4 & 5 (d) of the Inspection Notes.

(2) Steps should at once be taken to prevent the surface washings of the China bazaar latrines from entering the red tank.

1.12 WWD
2/1/96 1.12.96

To, The Chairman, M.C., Guntur. 12
" Collector of Kistna. 3
" Sanitary Commissioner. 1
" " Engineer 3
Editors' Table.

Dft. 8/2/96

Guntur Inspection Notes.

3723 M

No 520

Guntur Municipal Office 30th November 1895

LOCAL & MUNICIPAL DEPT. RECEIPT No. 37231 M

From

M. R. Ry
P. Venkatarisniah Naidu
Guru B. A.
Chairman Municipal Council
Guntur

To

The Chief Secretary to Govt.
Local and Municipal Dept.
Madras
(Through the Collector Kistna)

Sir

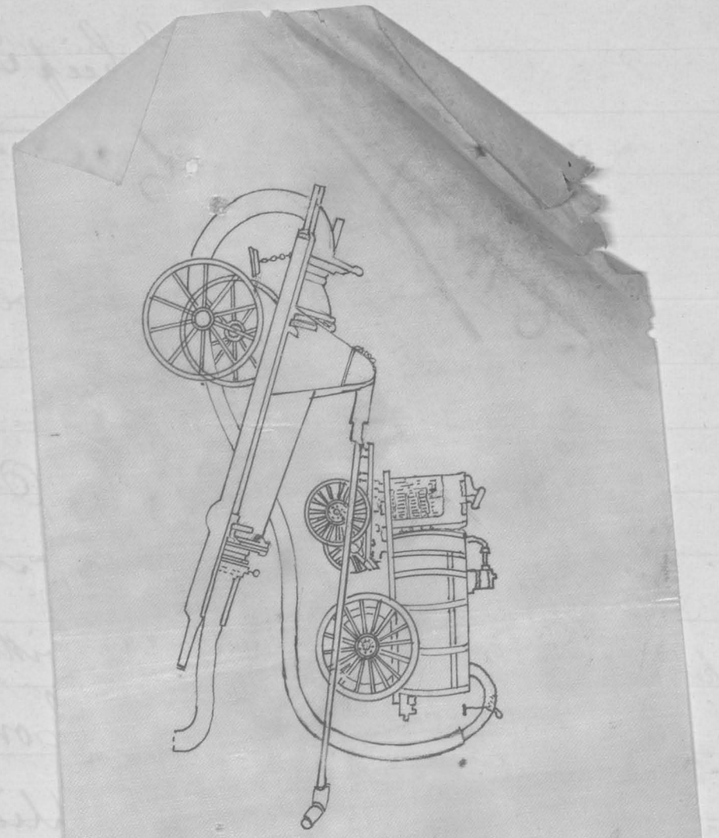
In obedience to G.O. dated 23rd December 1893, No. 1765 M, I have the honor to submit herewith inspection notes of the Sanitary Commissioner for Madras with my replies to the several remarks made therein and copies of resolutions of the Council dated 13th and 30th instant

x By packet post

I have the honor

Guntur Inspection Notes.

3723 M



Press. This needs not be reproduced.

No 520

Guntur Municipal Office 30th November 1893.

Local [illegible] Received 6 DEC 1893 No. 3723 M

From

M. R. Ry
P. Venkataratnam Naidu Garu B.A.
Chairman Municipal Council
Guntur

To

The Chief Secretary to Govt.
Local and Municipal Depts
Madras
(Through the Collector Kistna)

Sir

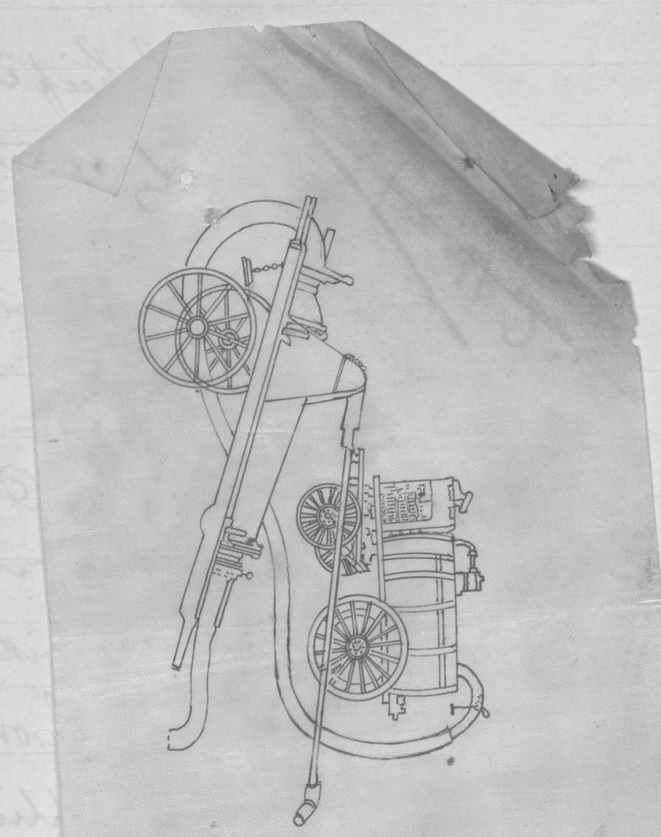
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Guntur Inspection Notes.

3723 Rm



Press. This needs to be reproduced.

Guntur Municipal
Office 30th November 89.

No. 520

From

M. R. Ry
P. Venkatakristnah Naidu
Garu B. A.
Chairman Municipal Council
Guntur

To

The Chief Secretary to Govt.
Local and Municipal Dept.
Madras
(Through the Collector Kistna)

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x By packet post

I have the honor

I have the honor to be

Sir

Your most obedient servant

P Venkataratnam Garu
30/11
Chairman

Inspection notes of the Sanitary Commissioner for Madras.

Kistna District

Guntur Municipality

Population per census of 1891 — 23,359

Inspected 6th and 7th August 1895.

(a) Nuisance Inspectors have been directed to submit lists of all dilapidated buildings, ruinous walls & other objectionable structures and the lists have been received. Notices are being issued to the parties concerned to restore the buildings or walls to order, or to remove them and clear the sites. Compliance will be enforced on pain of prosecution.

(b) The Works Overseer is directed to submit a plan of the Nagaram-vaipalem with his opinion as to the suggestions of the Sanitary Commissioner.

2 Needs no remarks

Dwellings (a) No action seems to have been taken in the direction of getting rid of ruined dwellings — within the town, as advised on my last inspection. This is most desirable. Every useless wall means so much obstruction to the perflation of houses, and, moreover, every ruined house affords shelter for the commission of nuisance.

(b) The new suburb of Nagaram-palieru is possibly on private ground; but, in sanctioning buildings, the Municipality should arrange to prevent extensions of their limits, so as to block all prospect at communication — through the locality. Small portions should, if necessary, be bought so as to maintain open roads throughout.

2. Roads — These are in fair order.

3(a) Surface drainage — The Red tank

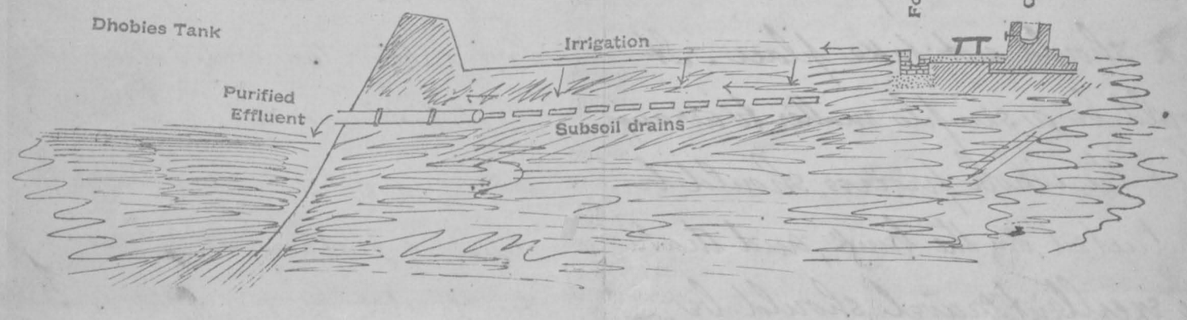
tank receives the surface drainage of the town. In this the dhobies wash. As this tank is divided into — certain portions by intervening banks, there is no reason why the dhobies should be allowed to wash where they like, as at present. They should be confined to one special tank. Still better would it be that washing direct in the tank should not take place. It would be a simple matter to arrange that the whole process should be conducted on the bank, and that the excellent gravel should be — under-drained, so as to filter the refuse water before its return to the tank. In any case the dhobies should, by exercise of Section 154 (ii) be prevented from washing where they choose, and especially the Sanjaid Gunta should not be employed for this purpose, it being formed of surface water from inhabited area and of sewage.

Ottussain Gunta - I pointed out on my last inspection that it was most desirable this should be filled in, and the surface drainage in the

30) The Red tank is no regular tank, but the pits made from time to time in years past have been converted into a number of tanks connected by culverts. They are fed by rain water and have no regular supply channels. They contain water only after heavy rainfall, otherwise being empty. Even then, the water does not last for more than 3 or 4 months, and it is not at all used for drinking purposes. The Council beg to state that if such a restriction as is proposed by the Sanitary Commission be put upon the dhobies, they would be put to much inconvenience. Some years ago an attempt was made to confine the washermen to carry on their washings in one tank, but this restriction gave rise to much discontent leading to a strike, and the then Council deemed it wise not to interfere with the long existing privilege of the dhobies. If an attempt be now made, the Council apprehends similar results. As for the other suggestion of the Sanitary Commission in

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Reg: No. 2232—Copies 95
Litho. Survey Office, Madras.
1895

Note

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No 506
11-1-98

in this Connection, the Council prefer it better to postpone action for the present as the arrangement suggested, apart from its cost to the Municipality, will entail much difficulty upon the people in bringing water from the tank to the tank bund, where the cleaning can be conducted very easily near the water. Not only dhobies but even high caste people resort to these tanks for the purpose of washing and they would think it derogatory to carry water outside the tank for this purpose. Such restrictions may be insisted upon if these tanks were used for any other purpose than washing, but this being not the case, the Council have resolved not to give effect to these proposals for some time.

Washing in the Sangadigunta will be stopped, and the Nuisance Inspector has been directed to do it at once.

3(b) Notice has been served on the owner and vigorous steps will be taken to enforce the filling in of this gunta. The Works Overseer is also directed to suggest means for the drainage of rain water in this part of the town.

the neighbourhood be re-arranged. Since then I understand a man who did not belong to the town attempted to cross it with a child in his arms during a period of rainfall; both the man and the child were drowned. In the interests of human life, irrespective of sanitary reasons, this place should be so sectioned as to be relieved from the lodgement of rain water, and should be provided with a well-made culvert that would be above flood level at all times. Seeing that the public road passes through this "gunta", none but an initiated inhabitant of Gunture would for a moment imagine that it terminated in a man trap.

4. Sewerage - It being out of the question to make a sewerage scheme till the more urgent demand for protected water is met, the Municipality should do their best to make short lengths of drains of Messrs Burn & Co's glazed half-tiles. By this means the sewage could be discharged upon suitable plots of ground where the cultivation of vegetables, grass, or ornamental shrubs could be pursued. Where Cess pools are used, it should be seen that they

are

are of the pattern prescribed by the Sanitary Board. To empty these Cess pools, carts with pump — attached, of which Massey & Co, Madras, have the pattern should be employed. Their use would save labour and secure efficiency. But when poverty prevents the use of such correctly designed cess-pools the Vizianagaram Sewage filter should be employed [Vide diagram enclosed]

5. Water supply (a). The water in the reservoir below the Black tank is open to gross contamination, by reason of persons entering it for the drawing of water. Some confusion having arisen in the minds of the Municipal Council as to the scope of my advice in regard to protection of this supply, I explained the matter fully at a meeting held on the subject, when they all agreed that it would be advisable to lift the water by a small steam Engine to an elevated tank for distribution, instead of permitting persons to enter it. This mode is successfully pursued at Negapatam and has been of the greatest utility to the inhabitants of the area.

(b) Portable Engines can be procured at about the following prices:-

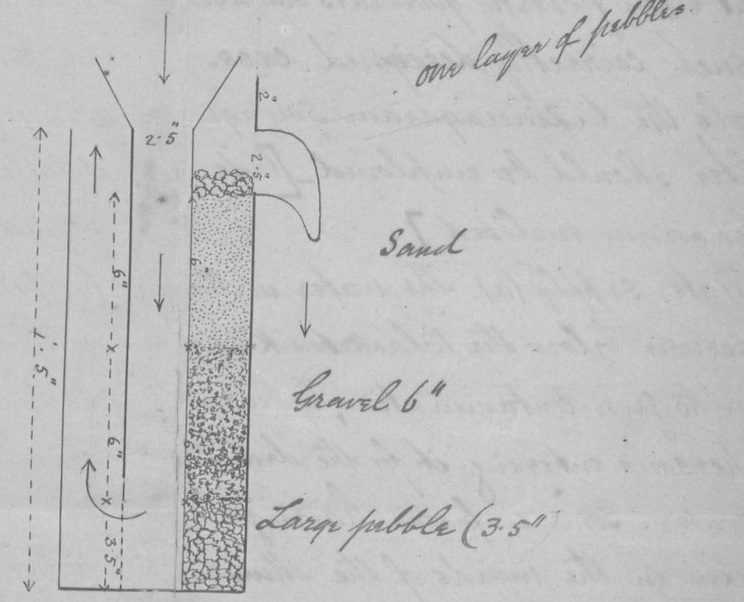
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(4) The The suggestions of the Sanitary Commissioner as to how drains have to be constructed have not been clearly & thoroughly understood by the Council, and the various diagrams forwarded with the notes in this Connection also require further and more detailed elucidation. The Council requests the Sanitary Commissioner for fuller information, and as soon as this is received, his Suggestions will receive the earnest attention of the Council

5 (a, b & c) — Water supply is indeed defective. For a thorough study of this question and suggestions of means for improving it on the lines suggested by the Sanitary Commissioner, a Sub Committee Consisting of Messrs A. A. G. Molat R. P. Gill, A. P. Fernandez MRA A. M. Sundara Siva Iyer B.A & Ch. Lakshmanna garu has been formed; and on the receipt of its report, the Council will take the matter into deep Consideration

C 3723

6



scale
2" to a foot

Note Both sides to be filled as shown
The Vizianagaram Sewage filter

Note
Press This diagram need not be reproduced

A tank with fittings
would cost from Rs 680 to 1,800
according to the size required.

Bore of steam cylinder instrument	4	5	6	6	8	8	9	10	10	10
Bore of water — do —	3	3	4	6	6	8	6	5	8	12
Gallons of water raised per hour approximate	1,830	1,830	3,260	7,300	7,300	13,000	7,300	5,100	13,000	29,000
Height in feet water can be lifted with 40 ℔ steam pressure	117	162	132	60	105	60	132	240	90	45
Price of Pump and Boiler mounted on wheels Rs	1,150	1,350	1,500	1,650	2,100	2,350	2,600	2,850	3,100	3,750.

(c) Should the Municipality so elect, the water could be sent from the tank by pipes as far as the Sub-Magistrate's Choultry, where persons were so anxious a couple of years back to make an open tank supplied by water from this point. It is more than possible from what I understand that with a small grant from the Municipality, the public would subscribe for the carrying out of so useful a measure. This little scheme must of course be distinctly understood to imply simply the protection of the water from contamination, and in no sense to replace the large public water scheme which is under preparation by the Sanitary Engineer, but which it is unlikely, in spite of his best intentions, his department could undertake for some time to come. When that scheme is introduced, the Municipality would be able to use the machinery for some other Municipal purpose, such as, lifting water for dhobies, or sell it without much loss.

(b) There is no well of this name in this Municipality. It is not known

(d) Bannerjee's well requires repair.

repair badly.

(E) The Subadar's well should have a parapet and basement — provided.

(f) The well in the dhobis tank Sujada Gunta can only yield filtered sewage. It should be closed, and if a source in this neighbourhood is required, a new well should be sunk in the neighbouring fields.

6. Night soil conservancy. (a) The new latrines at Kabar Gudam would be of more use were a path at the edge of the fields, and a small foot bridge made over the stream that passes at its side. The ground is, I know, private property, but I should think the owner ought to readily come to terms; the inhabitants at present use his ground for easement, as testified to by its filthy condition.

(b) The China bazaar latrine drains direct into the Red tank; either it should be abolished or it should be provided with a roof, and thus prevent surface washings — making their way from the latrine.

(c) Notwithstanding the recent purchase

known what well is precisely referred to by the Sanitary Commissioner under this name.

(E) Notice has been issued to the owner who has already begun collecting materials: the improvements suggested will be made at an early date.

(f) Referred to the Works Overseer for early action in reference to the various suggestions herein made.

(a) The Works Overseer has been directed to report after consulting the owner as to the plot of ground required for laying out a small bridge. He has also been asked to submit an estimate for giving effect to the other suggestions & provision will be made for the same in the next budget.

(b) The China bazaar latrine is so very serviceable that its abolition on the ground of its draining into the Red tank will entail on the people residing in this portion of the town much inconvenience & hardship; China Bazaar is chiefly inhabited

by Muhammadans who being very poor have no latrines of their own; neither would their women, being gosha, resort to any distant latrine in case this be done away with. Its abolition consequently entails hardship on the poor people and the Council are not therefore prepared to adopt the suggestions of the Sanitary Commissioner. Nor does the Council think it advisable to roof the latrine, because a latrine of the large dimensions as the one in question will cost a good deal for its roofing, and even if covered, it will not serve the purpose so well as the open one now in use. It also emits a very disgusting smell for want of free play of the air & sun-shine. Moreover, the rainy season lasts for a short time & if proper measures be taken during this period to remedy the one defect pointed out by the Sanitary Commissioner the advantages from keeping the latrine open during the remaining

seasons

purchase of 11 mounted buckets, it is impossible for the total night soil of the town to be so removed even were the urine neglected. The whole question of Conservancy should receive careful consideration from the Municipality. They should arrange for the removal of 5.9 tons of human excreta in two trips. This would require 4 of Richardson & Cruddas 200 gallon carts drawn by two bullocks, or 2 single bullock iron carts of 12 cubic feet capacity.

(d) The night soil buckets should then be relegated to their proper place in conservancy, that is, the collection of fecal matter from latrines by the totties and the meeting of the night soil carts at certain spots, so as to secure rapid disposal.

(E) An increase of 20 latrines on the standard plan should be obtained by allotments made year by year.

(f) The new latrine near the market is too near the stalls, and should be used only for stall-holders, as soon as a greater provision for public latrines is feasible.

Rubbish

7. Rubbish conservancy (a) In the matter of care as to cleanliness of premises, the Municipality of Guntur is exhibiting a steady decline, although the list of public improvements effected reflects much credit upon the management otherwise.

(b) In the case of the parts of the town chiefly inhabited by agriculturists, I advised purchase of a small plot of ground for storage of their manure. It cannot, with land at a cost not exceeding Rs 100 per acre, be regarded as an improvement beyond the means of the Municipality, and it undoubtedly would go far towards securing air and soil purity within this special area, whilst not depriving the ryots of the manure they are naturally anxious to store.

(c) During the hot season, a site near the dhobies' tank is employed for the storage of night soil and rubbish. This certainly cannot be regarded as a suitable spot.* Neither can the more constantly used place within the catchment of the Black tank, which forms the chief source of latrine notwithstanding this limitation. The Civil Surgeon is of opinion that a urinal will suffice the stall-holders, and the Council agree with him.

7(a) Measures are being taken to ensure cleanliness of premises. The Sanitary Inspectors have been ordered to report on the condition of backyards, and to issue notices to keep them clean. Cleanliness will be enforced on pain of prosecution.

(b) The arrangement suggested herein though commendable & valuable does not appear practicable; the Council will be only too glad to give effect to it if it were so. The ryots are, however, strictly warned to make their own arrangements for the speedy removal of rubbish &c from their Compounds. Vigorous steps are being taken by the Council to enforce this.

(c) Since abolished. The Council will see that this does not occur in future

seasons are so many and so manifest that the Council have resolved to keep this proposal in abeyance for the present, and in the meantime, the Sanitary Inspector of the Division is strictly instructed to inspect the latrine at regular intervals & see that it is kept in a thorough Sanitary condition.

(c) This will be attended to

(d) This will be attended to

(e) Adequate provision will be made year by year for the Construction of latrines on the Standard plan until the number recommended is duly supplied.

(f) The Council deem it advisable to remove the latrine altogether from its objectionable locality. It is so very near the markets that flies resorting to the latrine may be attracted to the markets and thus alight on the foodstuff sold. Moreover, if the use of the latrine be restricted to stall-holders, it is not possible to distinguish this class of people from the general public & so it will be used as a public

of water supply of the town be considered as suitable. A little tracing of the night soil depôt surface drainage will show that it goes straight into the tank. This can neither be good for the retention of caste nor the cause of health. A site well removed from the catchment area of the tanks should be sought for. If no site for rubbish disposal prior to its purchase by ryots can be obtained outside the catchment area of the Black tank, incineration of rubbish should be undertaken in one or other of the modern type of apparatus.

(d) The rubbish carts employed are certainly not in keeping in a Municipality which has recently made so much advance in the way of erecting structures on improved plans. It is impossible (as shown by the state of back yards of houses) that the rubbish could be withdrawn from the town by so inferior an agency. Indeed, I consider that as the single buffaloes and miniature rubbish carts execute the work at so slow a pace, it is calculable that what they do accomplish is too highly priced for. Two bullock carts would be required for the removal

* Referred

removal of rubbish at 3 trips per day.

8. Markets (a) The arrangements for butchers are very inferior, and should be remedied without delay. There should be a drain along each meat stall and, preferably also beside all stalls. For the case of the butchers a smooth stone slab – polished (7d) by preference, should replace the present filthy boxes, and steel hooks should be used instead of bits of dirty ropes as at present.

(b) The walls and wooden pillars should be painted with silicate paint.

(C) For both a fish and beef market proposals have already been submitted by the Municipality to the Sanitary Board.

8(a) Cattle and sheep Slaughter houses These are neatly kept – Arrangements should be made to provide for lifting the water from a well sunk outside to an elevated cistern, whence the supply should be distributed by pipes and taps.x It would be advisable to make a garden in the immediate vicinity of the slaughter house, and there bury the offal and use the washings of all healthy animals.

9. Vaccination (a) The following table exhibits the state of Vaccination up to date

On

Referred to the Civil Surgeon who has been requested to kindly select a suitable site for the rubbish & night soil depôt. Early steps will be taken to put this valuable recommendation into effect. The rubbish carts now in use will be gradually [replaced by] wooden skeleton carts lined with sheet iron & provided with covers. There being some provision in the current year's budget, the Sanitary Commissioner's recommendation will receive immediate attention as far as funds permit.

8 (a) (b) (c) Estimates will be called for and due provision made for carrying out the works suggested

(c) The construction of a fish and a beef market will be commenced ere long

8(a) The improvements suggested will be made at an early date

x This is being attended to immediately.

the end of August 1895 :- 8

	1891	1892	1893	1894	1895 up to end of August
Number Vaccinated	1290	871	1051	1247	684
— do — Successfully	1135	855	1010	1215	616
— do — Under one year of age	482	515	591	818	472
No. Verified by Inspecting Officer	820	764	493	630 up to August	-
Births	701	710	820	824	509

The following table shows the results of infantile Vaccination :-

Total Births during 6 months (i.e) 1st July to 30 June 94	Number Vaccinated Successfully	Number Vaccinated unsuccessfully the 1st time	No. Vaccinated a second time because first operation proved unsuccessful		Cases found on Medical Certificate at the end of 6 months	Died	Left the town	Unaccounted for	Ratio of successful Vaccinations to total Births per cent	Prosecutions for failure to accept Vaccination during the year up to 31st July 1895.		
			Successful	Unsuccessful						No of suits filed	No of cases Dismissed or Withdrawn	Number of Convictions
383	240	2	2	*	63	90	40	1	63.19	186	162	12
5*	3	3	5	5	4 are					5	5	

* Of this number Still 8 on Medical Certificate
16 pending in Magistrate's office.

(b) Of 32 children examined — haphazard on the roads, 21 or 65.6 per cent were found protected, for 21.9 were unprotected, and 4 or 12.5 had suffered from small-pox.

9(c) The Civil Surgeon is requested to make provision in the "New Hospital Buildings" scheme for a Vaccine depôt on the standard plan and he will also kindly address the Sanitary Board for a design for the same.

(C) The Vaccine depôt is unfit for its purpose. A design should be sought for from the Sanitary Board.

(d) The Council has framed the following rule in reference to the fee to be paid for the Vaccinator to visit houses:— "If any parent or guardian wishes to have his child vaccinated in his house, he may send an application to the Chairman or Civil Surgeon accompanied by a fee of 2 as. for the Vaccinator. If more than one child have to be vaccinated in a house, it should be so stated in the application & a fee of one anna must be paid in the case of every additional child. No separate fee need be charged for inspection."

(d) The demand for return to the depôt for examination as to — result is not strictly enforced. This should be attended to, as it enables more work to be done by the Vaccinator, and thus decreases the — chances of persons escaping protection. Where rank or disinclination dictates that the parents or — Guardians would prefer the — Vaccinator to proceed to their houses for the operation or for verification, a fee should be required in all instances; so as to discourage this as much as possible.

10. Registration — One Registrar is employed. The people do not report at the office in the first place, but expect this man to discover — occurrences, and then they will

proceed

proceed on threat to the office. This can only be due to want of firm-ness on the part of the Municipality. The law as to registration should be occasionally proclaimed by tom-tom throughout the town, and boards also declaring the same facts should be placed in suitable public spots. After this, prosecutions should be carried out. Only one prosecution took place under Section 268 during last year! The following is the result of registration up to date:—

-	Ratio of births per mille of estimated population.	Ratio of deaths per mille of estimated population	Percentage of deaths from						Ratio of deaths of infants under one year of age per mille of registered births in the preceding year.	Ratio per mille of deaths of infants between one and five years of age to deaths under that age.
			Cholera	Small Pox	Fevers	Dysentery and Diarrhœa	Syphilis	Other causes.		
1892.	29·4	36·3	11·1	.	31·3	8·7	2·4	46·5	291·0	239·9
1893.	33·4	24·7	3·1	.	31·4	5·6	3·1	56·8	202·8	162·3
1894.	33·0	26·9	2·4	.	30·4	5·6	3·3	58·3	235·4	165·1
1895. up to August 1895.	30·0	23·7	-	-	32·2	5·2	3·5	59·1	194·2	149·7

Whether or not the death rate is correct, the birth rate is evidently below what should be expected

This rule remedies the defect pointed out by the Sanitary Commissioner.

10 The various suggestions are being attended to. The nuisance Inspectors have also been directed to note down in their diaries the daily occurrences of birth & death in their respective divisions. This will be an additional help to the Registrar. The Registrar himself is ordered to peregrinate the town every day before 10 A.M. From these various improvements, better & more satisfactory results may be expected in future.

11 The matter of reorganization of the Sanitary staff is referred to a sub Committee consisting of the Chairman, Dr Fernandez Revd L. B. Wolf, Messrs B. Kanakaraja Pantulu B.A & A. M Sundara Siva Iyer B.A which is requested to send in its report at early date.

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expected. The high death rate from Cholera, dysentery and diarrhœa points conclusively to the fact that the Municipality would have done well in acting upon my advice to protect the water supply after the various methods suggested in my report in G.O No 438 Pa dated 3d April 1894, — instead of ignoring it in favor of deepening the existing tank to very little purpose.

11. Sanitary administration. No less than 6 "Sanitary Inspectors" are employed by this Municipality. None of them have received any training, and their standard of education is not such as would entitle them to be thus termed. These men should after due notice be got rid of — thus saving Rs 82, which might be expended with better results. One certificated Sanitary Inspector on Rs 45, and one Assistant certificated Sanitary Inspector on Rs 25, a staff of 25 sweepers (or one per thousand of population) ought also to be quite sufficient for requirements, if the carters are not included in the number of 44 returned by the Municipality. The 34 Scavengers might well be increased to 50 or two per 1000 of the population. Two men returned as excavators of night soil trenches at Rs 7 each seems to me an unnecessary charge

charge. The total amount of work daily in good gravel soil would be to form trenches 18"x18" and 168·5 feet long.

it is probable the work could be fulfilled more cheaply on contract. The revised charge would be as follows:—

Present staff	Salary per mensem Rs	As	Ps.	Proposed staff	Salary per mensem. Rs	As	Ps.
1. Conservancy Inspector	17	"	"	1 Sanitary Inspector Rs 45–60.	45	"	"
1 do	15	"	"	1 Asst — do — 25–35.	25	"	"
1 do	14	"	"	2 Conservancy Overseers Rs 10 each.	20	"	"
3 do at Rs 12 each	36	"	"	8 Peons at Rs 6.	48	"	"
5 Peons at Rs 6.	30	"	"	25 female tothis at Rs 6.	150		
1 Peon at Rs 5.	5	"	"	25 Sweepers at Rs 5.	125	"	"
23 Scavengers at Rs 5	115	"	"	2 Scavengers on Cess pool to work pump at Rs 5	10	"	"
11 Scavengers at Rs 6	66	"	"				
44 Sweepers at Rs 5	220	"	"				
2 Excavators of night soil pits at Rs 7	14	"	"				
Private scavengering							
2 Mairtris at Rs 7	14	"	"				
7 Scavengers – private privies at Rs 6	42	"	"				
5 do at Rs 5	25	"	"				
4 do ar Cesspools	20	"	"				
	633				423	"	"

12. The following improvements have been effected in this town – since my last inspection:–

(a) Wash's choultry has been cleaned and repaired.

Eleven

(b) Eleven night soil conservancy buckets have been purchased.

(c) One corrugated iron latrine has been formed.

(d) A market has been completed.

(e) Twenty-four dust bins have been purchased.

(f) A sheep slaughter house has been erected, on the Sanitary Board's standard plan.

(g) A bullock slaughter house has been made.

(h) A sluice to enable the silt from the bottom of the tank to be got rid of has been constructed.

13. The following desirable recommendations made during the last two years have not been attended to:–

13(a) The Councillors, when consulted, ~~to have~~ Consider Considered such latrines as are recommended by the Sanitary Commissioner to be too expensive to be undertaken by them

(b) Vide reply to note to 5

(c) Vide reply to note to 1(a)

(a) That a plan suitable for private latrines should be adopted for general use, according to designs to be supplied by the Sanitary Board.

(b) That the water of the service reservoir attached to the Black tank should be protected from pollution by mechanical means.

(c) That ruined houses and walls should be removed.

The

(2.) The filling in of the Hussain sahibs gunta - (d) Vide reply to note to 3(b)

(5.) Improvement of the condition of private premises as to rubbish collection - (e) ——— 7(a)

(4.) The provision of a suitable plot of ground to enable ryots to store manure outside their dwellings (f) ——— 7(b)

(5.) To prevent the dhobies washing in sewage - (g) ——— 3(a)

W. H. Evans
Surgeon Lieut Col
Sanitary Commissioner for Madras

N. Venkatalakshmiah
30/11
Chairman

Ex A 2/95 Jan 95

COLLECTOR'S OFFICE
RECEIVED
5 DEC 95
MASULIPATAM

1/3/23 Inc 95

Extract from the Proceedings of the Municipal Council, Guntur at a meeting held on the 13th November 1895

Present

URRz P. Venkatakrishnayya naidu garu Chairman

A. A. G. Malet Esquire

A. P. Fernandez Esquire

C. Venkatachelam Pantulu garu

Revd L B. Wolf M.A

A. M. Sundarasivam Avergal BA

B. Kanakaraju Pantulu garu BA

M. Subbaiah Pantulu garu BA

A. Ramayya Pantulu garu BA

Ch. Lakshmanna garu

A. Set Balamukundas garu

Syed Bajeet Sahib garu

I Read inspection notes of the Sanitary Commissioner for Madras for 1895 on the Guntur Municipality

The notes are read, and the Chairman is requested to prepare remarks basing them on the suggestions thrown out by the Council and he will place the report before the Council for approval

(signed) P Venkatakrishnayya
Chairman

(True Extract)

P Venkatakrishnayya
30/11
Chairman

Extract from the Proceedings of the Municipal Council

Guntur at a meeting held on the 30th November 1895

168

Present

MRRy P. Venkatakrishnayya naidu garu B.A
Chairman

" C. Venkatachelam Pantulu garu

A. P. Fernandez Esquire

" A. M. Sundara Siva Aiyyal B.A

" N. Ramayya Pantulu garu

Syed Bajee Sahel garu

" Ch. Lakshmanna garu

" A. Set Balamukundas garu

" G. Krishnamma garu

Mahamad Ibrahim Sahib garu

I Read Inspection notes of the Sanitary Commissioner, and the replies of the Chairman based on the suggestions thrown out by the Council on the 13th November 1895 for approval

Approved

× × ×

(Signed) P. Venkatakrishnayya
Chairman

(True Extract)

P. Venkatakrishnayya
Chairman 30/11

2/3/23 Govt

Ct 1705 795

Legal & Municipal Dept.

From

CURRENT No. 3723/M

The Chairman
Municipal Council
Guntur

To

The Chief Secretary
to Govt L. & M. Dept
Madras
through the Collector Kistna

Dated 30th November } 1895

Received
CHIEF SECRETARY'S OFFICE
-8 DEC 1895
MADRAS

No. 5526

Enclosures 3

Subject

Submitting Inspection
Notes of the Sanitary
Commissioner for Madras
on the Guntur Municipality
with replies of the Chairman
and resolutions of the
Council

9/12.

DESPATCHED
5- DEC. 95

170

N D 1705/Confl 795

Submitted to Government
Ld ne 2nd Dept with enclosures

J. M. Atkinson
4/12
Collector

retg
3/12

Rem
Phasepatin typo
Ct
12.12.95

Proof Sec to query phrase
29/1/96.

801

No. 56 M., 11th January 1896.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

Read—the following paper:—

From M.R.Ry. P. VENKATAKRISTNAYYA NAYUDU GARU, B.A., Chairman, Municipal Council, Guntúr, to the Chief Secretary to Government (through the Collector of Kistna), dated 30th November 1895, No. 520.

In obedience to G.O., No. 1765 M., dated 23rd December 1893, I have the honour to submit herewith (by packet post) inspection notes of Sanitary Commissioner for Madras with my replies to the several remarks made therein and copies of resolutions of the council, dated 13th and 30th instant.

—

Enclosures.

Inspection Notes of the Sanitary Commissioner for Madras.

KISTNA DISTRICT.

Guntur Municipality.

Inspected 6th and 7th August 1895.

Population per census of 1891 .. .. 23,359.

Inspection Notes.

Dwellings (*a*).—No action seems to have been taken in the direction of getting rid of ruined dwellings within the town as advised on my last inspection. This is most desirable. Every useless wall means so much obstruction to the perflation of houses, and, moreover, every ruined house affords shelter for the commission of nuisance.

(*b*) The new suburb of Nagampaliem is possibly on private ground; but, in sanctioning buildings, the municipality should arrange to prevent extensions of their limits so as to block all pretence at communication through the locality. Small portions should, if necessary, be bought so as to maintain open roads throughout.

2. *Roads*.—These are in fair order.

3. *Surface drainage* (*a*).—The red tank receives the surface drainage of the town. In this the dhobies wash. As this tank is divided into certain portions by intervening banks, there is no reason why the dhobies should be allowed to wash where they like as at present. They should be confined to one special tank. Still better

Chairman's Remarks.

(*a*) Nuisance inspectors have been directed to submit lists of all dilapidated buildings, ruinous walls and other objectionable structures and the lists have been received. Notices are being issued to the parties concerned to restore the buildings or walls to order, or to remove them and clear the sites. Compliance will be enforced on pain of prosecution.

(*b*) The works overseer is directed to submit a plan of the Nagaramvaripalem with his opinion as to the suggestions of the Sanitary Commissioner.

2. Needs no remarks.

3. (*a*) The red tank is no regular tank, but the pits made from time to time in years past have been converted into a number of tanks connected by culverts. They are fed by rain-water and have no regular supply channels. They contain water only after heavy rainfall, otherwise being empty. Even then, the water does

Inspection Notes.

would it be that washing direct in the tank should not take place. It would be a simple matter to arrange that the whole process should be conducted on the bank, and that the excellent gravel should be under-drained, so as to filter the refuse water before its return to the tank. In any case the dhobies should, by exercise of section 154 (ii), be prevented from washing where they choose, and especially the Sanjaid gunta should not be employed for this purpose, it being formed of surface water from inhabited area and of sewage.

Hussain Gunta (*b*).—I pointed out on my last inspection that it was most desirable this should be filled in, and the surface drainage in the neighbourhood be re-arranged. Since then I understand a man who did not belong to the town attempted to cross it with a child in his arms during a period of rainfall; both the man and the child were drowned. In the interests of human life, irrespective of sanitary reasons, this place should be so sectioned as to be relieved from the lodgment of rain-water, and should be provided with a well-made culvert that would be above flood-level at all times. Seeing that the public road passes through this "gunta," none but an initiated inhabitant of Guntúr would, for a moment, imagine that it terminated in a man trap.

4. *Sewerage.*—It being out of the question to make a sewerage scheme till the more urgent demand for protected water is met, the municipality should do their best to make short lengths of drains of Messrs. Burn and Co.'s glazed half-tiles. By this means the sewage could be discharged upon suitable plots of ground where the cultivation of vegetables, grass, or ornamental shrubs could be pursued. When cess-pools are used, it should be seen that they are of the pattern prescribed by the Sanitary Board. To empty these cess-pools, carts with pump attached, of which Massey and Co., Madras, have the pattern, should be employed. Their use would save labour and secure efficiency; but when poverty prevents the use of such correctly designed cess-pools, the Vizianagram sewage filter should be employed (*vide* diagram enclosed).

5. *Water-Supply* (*a*).—The water in the reservoir below the black tank is open to gross contamination by reason

Chairman's Remarks.

not last for more than three or four months, and it is not at all used for drinking purposes. The council beg to state that if such a restriction as is proposed by the Sanitary Commissioner be put upon the dhobies, they would be put to much inconvenience.

Some years ago an attempt was made to confine the washermen to carry on their washings in one tank, but this restriction gave rise to much discontent, leading to a strike, and the then council deemed it wise not to interfere with the long existing privilege of the dhobies. If an attempt be now made, the council apprehends similar results. As for the other suggestion of the Sanitary Commissioner in this connection, the council prefer it better to postpone action for the present as the arrangement suggested, apart from its cost to the municipality, will entail much difficulty upon the people in bringing water from the tank to the tank bund, when the cleaning can be conducted very easily near the water. Not only dhobies but even high caste people resort to these tanks for the purpose of washing and they would think it derogatory to carry water outside the tank for this purpose. Such restrictions may be insisted upon if these tanks were used for any other purpose than washing, but this being not the case, the council have resolved not to give effect to these proposals for some time.

Washing in the Sangadigunta will be stopped, and the nuisance inspector has been directed to do it at once.

(*b*) Notice has been served on the owner and vigorous steps will be taken to enforce the filling in of this gunta. The works overseer is also directed to suggest means for the drainage of rain-water in this part of the town.

4. The suggestions of the Sanitary Commissioner as to how drains have to be constructed have not been clearly and thoroughly understood by the council and the various diagrams forwarded with the notes in this connection also require further and more detailed elucidation. The council requests the Sanitary Commissioner for fuller information, and as soon as this is received, his suggestions will receive the earnest attention of the council.

5. (*a*), (*b*) *and* (*c*).—Water-supply is indeed defective. For a thorough study of this question and suggestions of means for

Inspection Notes.

of persons entering it for the drawing of water. Some confusion having arisen in the minds of the municipal council as to the scope of my advice in regard to protection of this supply, I explained the matter fully at a meeting held on the subject, when they all agreed that it would be advisable to lift the water by a small steam-engine to an elevated tank for distribution, instead of permitting persons to enter it. This mode is successfully pursued at Negapatam and has been of the greatest utility to the inhabitants of the area.

(*b*) Portable engines can be procured at about the following prices.

A tank with fittings would cost from Rs. 680 to 1,800 according to the size required.

Bore of steam cylinder instrument	4	5	6	6	8	8	9	10	10	10
Bore of water cylinder instrument	3	3	4	6	6	8	6	5	8	12
Gallons of water raised per hour, approximate ..	1,830	1,830	3,260	7,300	7,300	13,000	7,300	5,100	13,000	29,000
Height in feet water can be lifted with 40 lb. steam pressure ..	117	162	132	60	105	60	132	240	90	45
Price of pump and boiler mounted on wheels	Rs. 1,150	1,350	1,500	1,650	2,100	2,350	2,600	2,850	3,100	3,750

(*c*) Should the municipality so elect, the water could be sent from the tank by pipes as far as the sub-magistrate's choultry where persons were so anxious a couple of years back to make an open tank supplied by water from this point. It is more than possible from what I understand that, with a small grant from the municipality, the public would subscribe for the carrying out of so useful a measure. This little scheme must, of course, be distinctly understood to imply simply the protection of the water from contamination and in no sense to replace the large public water scheme which is under preparation by the Sanitary Engineer, but which it is unlikely, in spite of his best intentions, his department could undertake for some time to come. When that scheme is introduced, the municipality would be able to use the machinery for some other municipal purpose such as lifting water for dhobies, or sell it without much loss.

(*d*) Bannerjie's well requires repair badly.

Chairman's Remarks.

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Inspection Notes.

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Inspection Notes.

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(*d*) There is no well of this name in this municipality. It is not known what well is precisely referred to by the Sanitary Commissioner under this name.

Inspection Notes.

(*e*) The Subadar's well should have a parapet and basement provided.

(*f*) The well in the dhobies' tank Sunjada gunta can only yield filtered sewage. It should be closed, and if a source in this neighbourhood is required, a new well should be sunk in the neighbouring fields.

6. *Night-soil conservancy* (*a*).—The new latrines at Kabar Gudem would be of more use were a path at the edge of the fields and a small foot-bridge made over the stream that passes at its side. The ground is, I know, private property, but I should think the owner ought to readily come to terms; the inhabitants at present use his ground for easement as testified to by its filthy condition.

(*b*) The China bazaar latrine drains direct with the red tank; either it should be abolished or it should be provided with a roof, and thus prevent surface washings making their way from the latrine.

(*c*) Notwithstanding the recent purchase of eleven mounted buckets, it is impossible for the total night-soil of the town to be so removed even were the urine neglected. The whole question of conservancy should receive careful consideration from the municipality. They should arrange for the removal of 5·9 tons of human excreta in two trips. This would require four of Richardson and Cruddas 200 gallon carts drawn by two bullocks, or 21 single-bullock iron carts of 12 cubic feet capacity.

(*d*) The night-soil buckets should then be relegated to their proper place in conservancy, that is, the collection of fœcal matter from latrines by the toties and the meeting of the night-soil carts at certain spots, so as to secure rapid disposal.

(*e*) An increase of 20 latrines on the standard plan should be obtained by allotments made year by year.

(*f*) The new latrine near the market is too near the stalls and should be used only for stall-holders as soon as a greater provision for public latrines is feasible.

7. *Rubbish conservancy* (*a*).—In the matter of care as to cleanliness of premises, the Municipality of Guntúr is

Chairman's Remarks.

(*e*) Notice has been issued to the owner who has already begun collecting materials; the improvements suggested will be made at an early date.

(*f*) Referred to the works overseer for early action in reference to the various suggestions herein made.

6. (*a*) The works overseer has been directed to report after consulting the owner as to the plot of ground required for laying out a small bridge. He has also been asked to submit an estimate for giving effect to the other suggestions and provision will be made for the same in the next budget.

(*b*) The China bazaar latrine is so very serviceable that its abolition on the ground of its draining into the red tank will entail on the people residing in this portion of the town much inconvenience and hardship; China bazaar is chiefly inhabited by Muhammadans who, being very poor, have no latrines of their own, neither would their women, being gosha, resort to any distant latrine in case this be done away with. Its abolition consequently entails hardship on the poor people and the council are not therefore prepared to adopt the suggestion of the Sanitary Commissioner. Nor does the council think it advisable to roof the latrine, because a latrine of the large dimensions as the one in question will cost a good deal for its roofing, and even if covered, it will not serve the purpose so well as the open one now in use. It also emits a very disgusting smell for want of free play of the air and sunshine. Moreover, the rainy season lasts for a short time and if proper measures be taken during this period to remedy the one defect pointed out by the Sanitary Commissioner, the advantages from keeping the latrine open during the remaining seasons are so many and so manifest that the council have resolved to keep this proposal in abeyance for the present, and in the meantime the sanitary inspector of the division is strictly instructed to inspect the latrine at regular intervals and see that it is kept in a thorough sanitary condition.

Inspection Notes.

exhibiting a steady decline, although the list of public improvements effected reflects much credit upon the management otherwise.

(*b*) In the case of the parts of the town chiefly inhabited by agriculturists, I advised purchase of a small plot of ground for storage of their manure. It cannot, with land at a cost not exceeding Rs. 100 per acre, be regarded as an improvement beyond the means of the municipality and it undoubtedly would go far towards securing air and soil purity within this special area, whilst not depriving the ryots of the manure they are naturally anxious to store.

(*c*) During the hot season, a site near the dhobies' tank is employed for the storage of night-soil and rubbish. This certainly cannot be regarded as a suitable spot.* Neither can the more constantly used place within the catchment of the black tank, which forms the chief source of water-supply of the town, be considered as suitable. A little tracing of the night-soil depôt surface drainage will show that it goes straight into the tank. This can neither be good for the retention of caste nor the cause of health. A site well removed from the catchment area of the tanks should be sought for. If no site for rubbish disposal prior to its purchase by ryots can be obtained outside the catchment area of the black tank, incineration of rubbish should be undertaken in one or other of the modern type of apparatus.

(*d*) The rubbish carts employed are certainly not in keeping in a municipality which has recently made so much advance in the way of erecting structures on improved plans. It is imposible (as shown by the state of backyards of houses) that the rubbish could be withdrawn from the town by so inferior an agency. Indeed, I consider that, as the single-buffaloe's and miniature rubbish carts execute the work at so slow a pace, it is calculable that what they do accomplish is too highly paid for. Seven two-bullock carts would be required for the correct removal of rubbish at three trips per day.

8. *Markets* (*a*).—The arrangements for butchers are very inferior and should be remedied without delay. There should be a drain along each meat stall, and preferably also beside all stalls. In the case of the butchers a smooth stone slab polished

Chairman's Remarks.

(*c*) This will be attended to.

(*d*) This will be attended to.

(*e*) Adequate provision will be made year by year for the construction of latrines on the standard plan until the number recommended is duly supplied.

(*f*) The council deem it advisable to remove the latrine altogether from its objectionable locality. It is so very near the markets that flies resorting to the latrine may be attracted to the markets and thus alight on the foodstaffs sold. Moreover, if the use of the latrine be restricted to stall-holders, it is not possible to distinguish this class of people from the general public and so it will be used as a public latrine notwithstanding this limitation. The Civil Surgeon is of opinion that a urinal will suffice the stall-holders, and the council agree with him.

7. (*a*) Measures are being taken to ensure cleanliness of premises. The sanitary inspectors have been ordered to report on the condition of backyards and to issue notices to keep them clean. Cleanliness will be enforced on pain of prosecution.

(*b*) The arrangement suggested herein, though commendable and valuable, does not appear practicable; the council will be only too glad to give effect to it if it were so. The ryots are, however, strictly warned to make their own arrangements for the speedy removal of rubbish, &c., from their compounds. Vigorous steps are being taken by the council to enforce this.

(*c*) Since abolished. The council will see that this does not occur in future.

* Referred to the Civil Surgeon who has been requested to kindly select a suitable site for the rubbish and night-soil depôt. Early steps will be taken to put this valueable recommendation into effect. The rubbish carts now in use will be gradually

Inspection Notes.

by preference should replace the present filthy boxes, and steel hooks should be used instead of bits of dirty ropes as at present.

(*b*) The walls and wooden pillars should be painted with silicate paint.

(*c*) For both a fish and beef market proposals have already been submitted by the municipality to the Sanitary Board.

8 (*a*) *Cattle and Sheep slaughter-houses.*—These are neatly kept. Arrangements should be made to provide for lifting the water from a well sunk outside to an elevated cistern, whence the supply should be distributed by pipes and taps.* It would be advisable to make a garden in the immediate vicinity of the slaughter-house, and there bury the offal and use the washings of all healthy animals.

9. *Vaccination.*—(*a*) The following table exhibits the state of vaccination up to the end of August 1895 :—

Chairman's Remarks.

replaced by wooden skeleton carts lined with sheet iron and provided with covers. There being some provision in the current year's budget, the Sanitary Commissioner's recommendation will receive immediate attention as far as funds permit.

8 (*a*) *and* (*b*). Estimates will be called for and due provision made for carrying out the works suggested.

(*c*) The construction of a fish and a beef market will be commenced ere long.

8 (*a*) The improvements suggested will be made at an early date.

* This is being attended to immediately.

—	1891.	1892.	1893.	1894.	1895 up to end of August.
Number vaccinated	1,290	871	1,051	1,247	684
,, ,, successfully	1,135	855	1,010	1,215	616
,, ,, under one year of age	482	515	591	818	472
,, verified by inspecting officers	820	764	493	630	..
Births	701	710	820	up to Aug. 824	509

The following table shows the results of infantile vaccination :—

Total births during preceding six months, *i.e.*, 1st January to 30th June 1895.	Number vaccinated successfully.	Number vaccinated unsuccessfully the 1st time.	Number vaccinated a second time because first operation proved unsuccessful.		Postponed on medical certificate at the end of six months.	Died.	Left the town.	Unaccounted for.	Ratio of successful vaccinations to total births per cent.	Prosecutions for failure to accept vaccination during the year up to 31st July 1895.		
			Successful.	Unsuccessful.						Number of suits filed.	Number of cases disposed of by Magistrate.	Number of convictions.
383	240	2	2	..	63	90	40	1	63·19	* 186	162	12

* Of this number there are still eight on medical certificate and sixteen pending in the Magistrate's office.

(*b*) Of 32 children examined haphazard on the roads, 21 or 65·6 per cent. were found protected, 7 or 21·9 were unprotected, and 4 or 12·5 had suffered from small-pox.

(*c*) The vaccine depôt is unfit for its purpose. A design should be sought for from the Sanitary Board.

9 (*c*). The Civil Surgeon is requested to make provision in the new hospital buildings scheme for a vaccine depôt on the standard plan and he will also kindly address the Sanitary Board for a design for the same.

Chairman's Remarks.

(*d*) The council has framed the following rule in reference to the fee to be paid for the vaccinator to visit houses :—

"If any parent or guardian wishes to have his child vaccinated in his house, he may send an application to the Chairman or Civil Surgeon accompanied by a fee of two annas for the vaccinator. If more than one child have to be vaccinated in a house, it should be so stated in the application and a fee of one anna must be paid in the case of every additional child. No separate fee need be charged for inspection."

This rule remedies the defect pointed out by the Sanitary Commissioner.

10. The various suggestions are being attended to. The nuisance inspectors have also been directed to note down in their diaries the daily occurrences of birth and death in their respective divisions. This will be an additional help to the registrar. The registrar himself is ordered to peregrinate the town every day before 10 A.M. From these various improvements, better and more satisfactory results may be expected in future.

Inspection Notes.

(*d*) The demand for return to the depôt for examination as to result is not strictly enforced. This should be attended to, as it enables more work to be done by the vaccinator, and thus decreases the chances of persons escaping protection. Where rank or disinclination dictates that the parents or guardians would prefer the vaccinator to proceed to their houses for the operation or for verification, a fee should be required in all instances so as to discourage this as much as possible.

10. *Registration.*—One registrar is employed. The people do not report at the office in the first place, but expect this man to discover occurrences and then they will proceed on threat to the office. This can only be due to want of firmness on the part of the municipality. The law as to registration should be occasionally proclaimed by tom-tom throughout the town, and boards also declaring the same facts should be placed in suitable public spots. After this, prosecutions should be carried out. Only one prosecution took place under section 253 during last year. The following is the result of registration up to date :—

—	Ratio of births per mille of estimated population.	Ratio of deaths per mille of estimated population.	Percentage of deaths from						Ratio of deaths of infants under one year of age per mille to registered births in the preceding year.	Ratio per mille of deaths of infants between one and five years of age to population of that age.
			Cholera.	Small-pox.	Fevers.	Dysentery and Diarrhœa.	Injuries.	Other causes.		
1892	29·4	36·3	11·1	..	31·3	8·7	2·4	46·5	291·0	239·9
1893	33·4	24·7	3·1	..	31·4	5·6	3·1	56 8	202·8	162·3
1894	33·0	26·9	2·4	..	30·4	5·6	3·3	58·3	235·4	165·1
1895 (up to August 1895.)	30·0	23·7	..	..	32·2	5·2	3·5	59·1	194·2	149·7

Whether or not the death-rate is correct the birth-rate is evidently below what should be expected. The high death-rate from cholera, dysentery and diarrhœa points conclusively to the fact that the municipality would have done well in acting upon my advice to protect the water-supply after the various methods suggested in my report in G.O., No. 438 M., dated 3rd April 1894, instead of ignoring it in favour of deepening the existing tank to very little purpose.

Inspection Notes.

11. *Sanitary Administration.*—No less than six "sanitary inspectors" are employed by this municipality. None of them have received any training, and their standard of education is not such as would entitle them to be thus termed. These men should after due notice be got rid of—thus saving Rs. 82, which might be expended with better results. One certificated sanitary inspector on Rs. 45 and one assistant certificated sanitary inspector on Rs. 25, a staff of 25 sweepers (or one per thousand of population) ought also to be quite sufficient for requirements, *if the cartmen are not included* in the number of 44 returned by the municipality. The 34 scavengers might well be increased to 50 or two per thousand of the population. Two men returned as excavators of night-soil trenches at Rs. 7 each seem to me an unnecessary charge. The total amount of work daily in good gravel soil would be to form trenches 18″ × 18″ and 168·5 feet long; it is probable the work could be fulfilled more cheaply on contract. The revised charge would be as follows :—

Chairman's Remarks

11. The matter of re-organization of the sanitary staff is referred to a sub-committee consisting of the Chairman, Dr. Fernandez, Rev. L. B. Wolf, Messrs. B. Kanakaraju Pantulu, B.A., and A. M. Sundara Siva Aiyar, B.A., which is requested to send in its report at an early date.

Present staff.	Salary per mensem.	Proposed staff.	Salary per mensem.
	Rs.		Rs.
1 conservancy inspector	17	1 sanitary inspector, Rs. 45—60	45
1 do.	15	1 assistant do. Rs. 25—35	25
1 do.	14	2 conservancy overseers, Rs. 10 each ..	20
3 conservancy inspectors at Rs. 12 each ..	36	8 peons at Rs. 6	48
5 peons at Rs. 6 each	30	25 female toties at Rs. 6	150
1 peon at Rs. 5	5	25 sweepers at Rs. 5	125
23 scavengers at Rs. 5 each	115	2 scavengers on cess-pool to work pump at Rs. 5.	10
11 do. „ 6 do.	66		
44 do. „ 5 do.	220		
2 excavators of night-soil pits at Rs. 7 each	14		
Private scavengering.			
2 maistries at Rs. 7 each	14		
7 scavengers—private privies at Rs. 6 each.	42		
5 do. at „ 5 do.	25		
4 do. on cess-pools.	20		
Total ..	633		423

12. The following improvements have been effected in this town since my last inspection :—

(*a*) Wish's choultry has been cleaned and repaired.

(*b*) Eleven night-soil conservancy buckets have been purchased.

(*c*) One corrugated iron latrine has been formed.

(*d*) A market has been completed.

(*e*) Twenty-four dust-bins have been purchased.

Inspection Notes.

(*f*) A sheep slaughter-house has been erected on the Sanitary Board's standard plan.

(*g*) A bullock slaughter-house has been made.

(*h*) A sluice to enable the silt from the bottom of the tank to be got rid of has been constructed.

13. The following desirable recommendations made during the last two years have not been attended to :—

(*a*) That a plan suitable for private latrines should be adopted for general use according to designs to be supplied by the Sanitary Board.

(*b*) That the water of the service reservoir attached to the black tank should be protected from pollution by mechanical means.

(*c*) That ruined houses and walls should be removed.

(*d*) The filling in of the Hussain Sahib's Gunta.

(*e*) Improvement of the condition of private premises as to rubbish collection.

(*f*) The provision of a suitable plot of ground to enable ryots to store manure outside their dwellings.

(*g*) To prevent the dhobies washing in sewage.

(Sd.) W. G. KING, Surgn.-Lieut.-Col.,
Sany. Commr. for Madras.

Chairman's Remarks.

13 (*a*). The councillors when consulted consider such latrines as are recommended by the Sanitary Commissioner to be too expensive to be undertaken by them.

(*b*) *Vide* reply to note No. 5.

(*c*) „ „ „ 1 (*a*).

(*d*) „ „ „ 3 (*b*).

(*e*) „ „ „ 7 (*a*).

(*f*) „ „ „ 7 (*b*).

(*g*) „ „ „ 3 (*a*).

(Sd.) P. VENKATAKRISTNAYYA,
Chairman.

EXTRACT from the Proceedings of the Municipal Council, Guntúr, at a meeting held on the 13th November 1895.

* * * * *

I. Read inspection notes of the Sanitary Commissioner for Madras for 1895 on the Guntúr Municipality.

The notes are read and the Chairman is requested to prepare remarks basing them on the suggestions thrown out by the council and he will place the report before the council for approval.

* * * * *

EXTRACT from the Proceedings of the Municipal Council, Guntúr, at a meeting held on the 30th November 1895.

* * * * *

I. Read inspection notes of the Sanitary Commissioner and the replies of the Chairman based on the suggestions thrown out by the council on the 13th November 1895, for approval.

Resolution.—Approved.

* * * * *

No. N. D. 1705-Eng.

Submitted to Government, Local and Municipal Department, with enclosures.

(Signed) J. N. ATKINSON,
Collector.

4th December 1895.

ORDER—No. 56 M., dated 11th January 1896.

Recorded, with the following remarks :—

(1) The attention of the Sanitary Commissioner will be drawn to the remarks of the Chairman on paragraphs 4 and 5 (*d*) of the inspection notes.

(2) Steps should at once be taken to prevent the surface washings of the China Bazaar latrine from entering the Red tank.

(True Extract.)

for *Chief Secretary.*

To the Chairman, Municipal Council, Guntúr.
„ Collector of Kistna.
„ Sanitary Commissioner.
„ Sanitary Engineer.
Editors' Table.

Ex̲d̲. A. Raitt.

Govt. of {1896} Madras.

LOCAL AND MUNICIPAL.

A.S.

Proof for approval

Issued.

Recd. Encl.

G.O., No. 56 M., 11th January 1896.

JANUARY.

Please strike off S.S.

3.2.96

Inspection Notes.

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

P. Annusamy

56 11 Jany. 1896

No. M., Local and Municipal, December 1895.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

Read—the following paper:—

From M.R.Ry. P. VENKATAKRISTNIAH NAIDU GARU, B.A., Chairman, Municipal Council, Guntúr, to the Chief Secretary to Government (through the Collector of Kistna), dated 30th November 1895, No. 520.

In obedience to G.O., No. 1765 M., dated 23rd December 1893, I have the honour to submit herewith (by packet post) inspection notes of Sanitary Commissioner for Madras with my replies to the several remarks made therein and copies of resolutions of the council, dated 13th and 30th instant.

Enclosures.

Inspection Notes of the Sanitary Commissioner for Madras.

KISTNA DISTRICT.

Guntur Municipality.

Inspected 6th and 7th August 1895.

Population per census of 1891 .. .. 23,359.

Inspection Notes.

Dwellings (*a*).—No action seems to have been taken in the direction of getting rid of ruined dwellings within the town as advised on my last inspection. This is most desirable. Every useless wall means so much obstruction to the perflation of houses, and, moreover, every ruined house affords shelter for the commission of nuisance.

(*b*) The new suburb of Nagampaliem is possibly on private ground; but, in sanctioning buildings, the municipality should arrange to prevent extensions of their limits so as to block all pretence at communication through the locality. Small portions should, if necessary, be bought so as to maintain open roads throughout.

Chairman's Remarks.

(*a*) Nuisance inspectors have been directed to submit lists of all dilapidated buildings, ruinous walls and other objectionable structures and the lists have been received. Notices are being issued to the parties concerned to restore the buildings or walls to order, or to remove them and clear the sites. Compliance will be enforced on pain of prosecution.

(*b*) The works overseer is directed to submit a plan of the Nagaramvaripalem with his opinion as to the suggestions of the Sanitary Commissioner.

2. *Roads.*—These are in fair order.

3. *Surface drainage* (*a*).—The red tank receives the surface drainage of the town. In this the dhobies wash. As this tank is divided into certain portions by intervening banks, there is no reason why the dhobies should be allowed to wash where they like as at present. They should be confined to one special tank. Still better

would it be that washing direct in the tank should not take place. It would be a simple matter to arrange that the whole process should be conducted on the bank, and that the excellent gravel should be under-drained, so as to filter the refuse water before its return to the tank. In any case the dhobies should, by exercise of section 154 (ii), be prevented from washing where they choose, and especially the Sanjaid gunta should not be employed for this purpose, it being formed of surface water from inhabited area and of sewage.

Hussain Gunta (*b*)—I pointed out on my last inspection that it was most desirable this should be filled in, and the surface drainage in the neighbourhood be re-arranged. Since then I understand a man who did not belong to the town attempted to cross it with a child in his arms during a period of rainfall; both the man and the child were drowned. In the interests of human life, irrespective of sanitary reasons, this place should be so sectioned as to be relieved from the lodgment of rain-water, and should be provided with a well-made culvert that would be above flood-level at all times. Seeing that the public road passes through this "gunta," none but an initiated inhabitant of Guntúr would, for a moment, imagine that it terminated in a man trap.

4. *Sewerage.*—It being out of the question to make a sewerage scheme till the more urgent demand for protected water is met, the municipality should do their best to make short lengths of drains of Messrs. Burn and Co.'s glazed half-tiles. By this means the sewage could be discharged upon suitable plots of ground where the cultivation of vegetables, grass, or ornamental shrubs could be pursued. When cess-pools are used, it should be seen that they are of the pattern prescribed by the sanitary board. To empty these cess-pools, carts with pump attached, of which Massey and Co., Madras, have the pattern, should be employed. Their use would save labour and secure efficiency; but when poverty prevents the use of such correctly designed cess-pools, the Vizianagram sewage filter should be employed (*vide* diagram enclosed).

2. Needs no remarks.

3. (*a*) The red tank is no regular tank but the pits made from time to time in years past have been converted into a number of tanks connected by culverts. They are fed by rain-water and have no regular supply channels. They contain water only after heavy rainfall, otherwise being empty. Even then, the water does

not last for more than three or four months, and it is not at all used for drinking purposes. The council beg to state that if such a restriction as is proposed by the Sanitary Commissioner be put upon the dhobies, they would be put to much inconvenience.

Some years ago an attempt was made to confine the washermen to carry on their washings in one tank, but this restriction gave rise to much discontent, leading to a strike, and the then council deemed it wise not to interfere with the long existing privilege of the dhobies. If an attempt be now made, the council apprehends similar results. As for the other suggestion of the Sanitary Commissioner in this connection, the council prefer it better to postpone action for the present as the arrangement suggested, apart from its cost to the municipality, will entail much difficulty upon the people in bringing water from the tank to the tank bund, when the cleaning can be conducted very easily near the water. Not only dhobies but even high caste people resort to these tanks for the purpose of washing and they would think it derogatory to carry water outside the tank for this purpose. Such restrictions may be insisted upon if these tanks were used for any other purpose than washing, but this being not the case, the council have resolved not to give effect to these proposals for some time.

Washing in the Sangadigunta will be stopped, and the nuisance inspector has been directed to do it at once.

(*b*) Notice has been served on the owner and vigorous steps will be taken to enforce the filling in of this gunta. The works overseer is also directed to suggest means for the drainage of rain-water in this part of the town.

4. The suggestions of the Sanitary Commissioner as to how drains have to be constructed have not been clearly and thoroughly understood by the council and the various diagrams forwarded with the notes in this connection also require further and more detailed elucidation. The council requests the Sanitary Commissioner for fuller information, and as soon as this is received, his suggestions will receive the earnest attention of the council.

Inspection Notes.

5. *Water-Supply* (*a*)—The water in the reservoir below the black tank is open to gross contamination by reason of persons entering it for the drawing of water. Some confusion having arisen in the minds of the municipal council as to the scope of my advice in regard to protection of this supply, I explained the matter fully at a meeting held on the subject, when they all agreed that it would be advisable to lift the water by a small steam-engine to an elevated tank for distribution, instead of permitting persons to enter it. This mode is successfully pursued at Negapatam and has been of the greatest utility to the inhabitants of the area.

(*b*) Portable engines can be procured at about the following prices.

A tank with fittings would cost from Rs. 680 to 1,800 according to the size required.

Bore of steam cylinder instrument	4	5	6	6	8	8	9	10	10	10
Bore of water cylinder instrument	3	3	4	6	6	8	6	5	8	12
Gallons of water raised per hour, approximate ..	1,830	1,830	3,260	7,300	7,300	13,000	7,300	5,100	13,000	29,000
Height in feet water can be lifted with 40 lb. steam pressure	117	162	132	60	105	60	132	240	90	45
Price of pump and boiler mounted on wheels	Rs. 1,150	1,350	1,500	1,650	2,100	2,350	2,600	2,850	3,100	3,750

(*c*) Should the municipality so elect, the water could be sent from the tank by pipes as far as the sub-magistrate's choultry where persons were so anxious a couple of years back to make an open tank supplied by water from this point. It is more than possible from what I understand that, with a small grant from the municipality, the public would subscribe for the carrying out of so useful a measure. This little scheme must, of course, be distinctly understood to imply simply the protection of the water from contamination and in no sense to replace the large public water scheme which is under preparation by the Sanitary Engineer, but which it is unlikely, in spite of his best intentions, his department could undertake for some time to come. When that scheme is introduced, the municipality would be able to use the machinery for some other municipal purpose such as lifting water for dhobies, or sell it without much loss.

Chairman's Remarks.

5. (*a*) (*b*) *and* (*c*)—Water-supply is indeed defective. For a thorough study of this question and suggestions of means for improving it on the lines suggested by the Sanitary Commissioner, a sub-committee consisting of Messrs. A. A. G. Malet, R. P. Gill, A. P. Fernandez M.R.Ry. A. M. Sundara Siva Iyer, B.A., and Ch. Lakshmama Garu has been formed; and on the receipt of its report the council will take the matter into deep consideration.

Inspection Notes.	Chairman's Remarks.
(*d*) Bannerjie's well requires repair badly.	(*d*) There is no well of this name in this municipality. It is not known what well is precisely referred to by the Sanitary Commissioner under this name.
(*e*) The Subadar's well should have a parapet and basement provided.	(*e*) Notice has been issued to the owner who has already begun collecting materials; the improvements suggested will be made at an early date.
(*f*) The well in the dhobies' tank Sunjada gunta can only yield filtered sewage. It should be closed, and if a source in this neighbourhood is required, a new well should be sunk in the neighbouring fields.	(*f*) Referred to the works overseer for early action in reference to the various suggestions herein made.
6. *Night-soil conservancy* (*a*).—The new latrines at Kabar Gudem would be of more use were a path at the edge of the fields and a small foot-bridge made over the stream that passes at its side. The ground is, I know, private property, but I should think the owner ought to readily come to terms; the inhabitants at present use his ground for easement as testified to by its filthy condition.	6. (*a*) The works overseer has been directed to report after consulting the owner as to the plot of ground required for laying out a small bridge. He has also been asked to submit an estimate for giving effect to the other suggestions and provision will be made for the same in the next budget.
(*b*) The China bazaar latrine drains direct with the red tank; either it should be abolished or it should be provided with a roof, and thus prevent surface washings making their way from the latrine.	(*b*) The China bazaar latrine is so very serviceable that its abolition on the ground of its draining into the red tank will entail on the people residing in this portion of the town much inconvenience and hardship; China bazaar is chiefly inhabited by Muhammadans who, being very poor, have no latrines of their own, neither would their women, being gosha, resort to any distant latrine in case this be done away with. Its abolition consequently entails hardship on the poor people and the council are not therefore prepared to adopt the suggestion of the Sanitary Commissioner. Nor does the Council think it advisable to roof the latrine, because a latrine of the large dimensions as the one in question will cost a good deal for its roofing, and even if covered, it will not serve the purpose so well as the open one now in use. It also emits a very disgusting smell for want of free play of the air and sunshine. Moreover, the rainy season lasts for a short time and if proper measures be taken during this period to remedy the one defect pointed out by the Sanitary Commissioner, the advantages from keeping the latrine open during the remaining seasons are so many and so manifest that the council have resolved to keep this proposal in abeyance for the present, and in the meantime the sanitary inspector of the division is strictly instructed to inspect the latrine at regular intervals and see that it is kept in a thorough sanitary condition
(*c*) Notwithstanding the recent purchase of eleven mounted buckets, it is impossible for the total night-soil of the town to be so removed even were the urine neglected. The whole question of conservancy should receive careful consideration from the municipality. They should arrange for the removal of 5·9 tons of human excreta in two trips. This would require four of Richardson and Cruddas 200 gallon carts drawn by two bullocks, or 21 single bullock iron carts of 12 cubic feet capacity.	
(*d*) The night-soil buckets should then be relegated to their proper place in conservancy, that is, the collection of fœcal matter from latrines by the toties and the meeting of the night-soil carts at certain spots, so as to secure rapid disposal.	
(*e*) An increase of 20 latrines on the standard plan should be obtained by allotments made year by year.	
(*f*) The new latrine near the market is too near the stalls and should be used only for stall-holders as soon as a greater provision for public latrines is feasible.	
7. *Rubbish conservancy* (*a*).—In the matter of care as to cleanliness of premises, the municipality of Guntúr is	

exhibiting a steady decline, although the list of public improvements effected reflects much credit upon the management otherwise.

(*b*) In the case of the parts of the town chiefly inhabited by agriculturists, I advised purchase of a small plot of ground for storage of their manure. It cannot, with land at a cost not exceeding Rs. 100 per acre, be regarded as an improvement beyond the means of the municipality and it undoubtedly would go far towards securing air and soil purity within this special area, whilst not depriving the ryots of the manure they are naturally anxious to store.

(*c*) During the hot season, a site near the dhobie's tank is employed for the storage of night-soil and rubbish. This certainly cannot be regarded as a suitable spot.* Neither can the more constantly used place within the catchment of the black tank, which forms the chief source of water-supply of the town, be considered as suitable. A little tracing of the night soil depôt surface drainage will show that it goes straight into the tank. This can neither be good for the retention of caste nor the cause of health. A site well removed from the catchment area of the tanks should be sought for. If no site for rubbish disposal prior to its purchase by ryots can be obtained outside the catchment area of the black tank, incineration of rubbish should be undertaken in one or other of the modern type of apparatus.

(*d*) The rubbish carts employed are certainly not in keeping in a municipality which has recently made so much advance in the way of erecting structures on improved plans. It is imposible (as shown by the state of backyards of houses) that the rubbish could be withdrawn from the town by so inferior an agency. Indeed, I consider that, as the single buffaloes and miniature rubbish carts execute the work at so slow a pace, it is calculable that what they do accomplish is too highly paid for. Seven two-bullock carts would be required for the correct removal of rubbish at three trips per day.

8. *Markets* (*a*).—The arrangements for butchers are very inferior and should be remedied without delay. There should be a drain along each meat stall, and preferably also beside all stalls. In the case of the butchers a smooth stone slab polished

(*c*) This will be attended to.

(*d*) This will be attended to.

(*e*) Adequate provision will be made year by year for the construction of latrines on the standard plan until the number recommended is duly supplied.

(*f*) The council deem it advisable to remove the latrine altogether from its objectionable locality. It is so very near the markets that flies resorting to the latrine may be attracted to the markets and thus alight on the floodstaff sold. Moreover, if the use of the latrine be restricted to stall-holders, it is not possible to distinguish this class of people from the general public and so it will be used as a public latrine notwithstanding this limitation. The Civil Surgeon is of opinion that a urinal will suffice the stall-holders, and the council agree with him.

7. (*a*) Measures are being taken to ensure cleanliness of premises. The sanitary inspectors have been ordered to report on the condition of backyards and to issue notices to keep them clean. Cleanliness will be enforced on pain of prosecution.

(*b*) The arrangement suggested herein, though commendable and valuable, does not appear practicable; the council will be only too glad to give effect to it if it were so. The ryots are, however, strictly warned to make their own arrangements for the speedy removal of rubbish, &c., from their compounds. Vigorous steps are being taken by the council to enforce this.

(*c*) Since adolished. The council will see that this does not occur in future.

* Referred to the Civil Surgeon who has been requested to kindly select a suitable site for the rubbish and night-soil depôt. Early steps will be taken to put this valueable recommendation into effect. The rubbish carts now in use will be gradually

Inspection Notes.

by preference should replace the present filthy boxes, and steel hooks should be used instead of bits of dirty ropes as at present.

(*b*) The walls and wooden pillars should be painted with silicate paint.

(*c*) For both a fish and beef market proposals have already been submitted by the municipality to the Sanitary Board.

8 (*a*) *Cattle and sheep slaughter-houses.*—These are neatly kept. Arrangements should be made to provide for lifting the water from a well sunk outside to an elevated cistern, whence the supply should be distributed by pipes and taps.* It would be advisable to make a garden in the immediate vicinity of the slaughter-house, and there bury the offal and use the washings of all healthy animals.

9. *Vaccination.*—(*a*) The following table exhibits the state of vaccination up to the end of August 1895 :—

—	1891.	1892.	1893.	1894.	1895 up to end of August.
Number vaccinated	1,290	871	1,051	1,247	684
,, ,, successfully	1,135	855	1,010	1,215	616
,, ,, under one year of age	482	515	591	818	472
,, verified by inspecting officers	820	764	493	630	..
Births	701	710	820	up to Aug. 824	509

The following table shows the results of infantile vaccination :—

Total births during preceding six months, *i.e.*, 1st January to 30th June 189[illegible].	Number vaccinated successfully.	Number vaccinated unsuccessfully the 1st time.	Number vaccinated a second time because first operation proved unsuccessful.		Postponed on medical certificate at the end of six months.	Died.	Left the town.	Unaccounted for.	Ratio of successful vaccinations to total births per cent.	Prosecutions for failure to accept vaccination during the year up to 31st July 1895.		
			Successful.	Unsuccessful.						Number of suits filed.	Number of cases disposed of by Magistrate.	Number of convictions.
383	240	2	2	..	63	90	40	1	63·19	* 186	162	12

* Of this number there are still eight on medical certificate and sixteen pending in Magistrate's office.

(*b*) Of 32 children examined haphazard on the roads, 21 or 65·6 per cent. were found protected, 7 or 21·9 were unprotected, and 4 or 12·5 had suffered from small-pox.

(*c*) The vaccine depôt is unfit for its purpose. A design should be sought for from the Sanitary Board.

Chairman's Remarks.

replaced by wooden skeleton carts lined with sheet iron and provided with covers. There being some provision in the current year's budget, the Sanitary Commissioner's recommendation will receive immediate attention as far as funds permit.

8 (*a*) *and* (*b*). Estimates will be called for and due provision made for carrying out the works suggested.

(*c*) The construction of a fish and a beef market will be commenced ere long.

8 (*a*) The improvements suggested will be made at an early date.

* This is being attended to immediately.

9 (*c*). The Civil Surgeon is requested to make provision in the new hospital buildings scheme for a vaccine depôt on the standard plan and he will also kindly address the Sanitary Board for a design for the same.

(*d*) The council has framed the following rule in reference to the fee to be paid for the vaccinator to visit houses :—

Chairman's Remarks.

"If any parent or guardian wishes to have his child vaccinated in his house, he may send an application to the Chairman or Civil Surgeon accompanied by a fee of two annas for the vaccinator. If more than one child have to be vaccinated in a house, it should be so stated in the application and a fee of one anna must be paid in the case of every additional child. No separate fee need be charged for inspection."

Inspection Notes.

(*d*) The demand for return to the depôt for examination as to result is not strictly enforced. This should be attended to, as it enables more work to be done by the vaccinator, and thus decreases the chances of persons escaping protection. Where rank or disinclination dictates that the parents or guardians would prefer the vaccinator to proceed to their houses for the operation or for verification, a fee should be required in all instances so as to discourage this as much as possible.

2. *Registration.*—One registrar is employed. The people do not report at the office in the first place, but expect this man to discover occurrences and then they will proceed on threat to the office. This can only be due to want of firmness on the part of the municipality. The law as to registration should be occasionally proclaimed by tom-tom throughout the town, and boards also declaring the same facts should be placed in suitable public spots. After this, prosecutions should be carried out. Only one prosecution took place under section 253 during last year. The following is the result of registration up to date:—

	Ratio of births per mille of estimated population.	Ratio of deaths per mille of estimated population.	Percentage of deaths from						Ratio of deaths of infants under one year of age per mille to registered births in the preceding year.	Ratio per mille of deaths of infants between one and five years of age to population of that age.
			Cholera.	Small-pox.	Fevers.	Dysentery and Diarrhœa.	Injuries.	Other causes.		
1892	29·4	36·3	11·1	..	31·3	8·7	2·4	46·5	291·0	239·9
1893	33·4	24·7	3·1	..	31·4	5·6	3·1	56·8	202·8	162·3
1894	33·0	26·9	2·4	..	30·4	5·6	3·3	58·3	235·4	165·1
1895 up to August 1895.)	30·0	23·7	..	..	32·2	5·2	3·5	59·1	194·2	149·7

This rule remedies the defect pointed out by the Sanitary Commissioner.

10. The various suggestions are being attended to. The nuisance inspectors have also been directed to note down in their diaries the daily occurrences of birth and death in their respective divisions. This will be an additional help to the registrar. The registrar himself is ordered to peregrinate the town every day before 10 A.M. From these various improvements, better and more satisfactory results may be expected in future.

Whether or not the death-rate is correct the birth-rate is evidently below what should be expected. The high death-rate from cholera, dysentery and diarrhœa points conclusively to the fact that the municipality would have done well in acting upon my advice to protect the water-supply after the various methods suggested in my report in G.O., No. 438 M., dated 3rd April 1894, instead of ignoring it in favour of deepening the existing tank to very little purpose.

Inspection Notes.

11. *Sanitary Administration.*—No less than six "sanitary inspectors" are employed by this municipality. None of them have received any training, and their standard of education is not such as would entitle them to be thus termed. These men should after due notice be got rid of—thus saving Rs. 82, which might be expended with better results. One certificated sanitary inspector on Rs. 45 and one assistant certificated sanitary inspector on Rs. 25, a staff of 25 sweepers (or one per thousand of population) ought also to be quite sufficient for requirements, *if the cartmen are not included* in the number of 44 returned by the municipality. The 34 scavengers might well be increased to 50 or two per thousand of the population. Two men returned as excavators of night-soil trenches at Rs. 7 each seem to me an unnecessary charge. The total amount of work daily in good gravel soil would be to form trenches 18″ × 18″ and 168·5 feet long; it is probable the work could be fulfilled more cheaply on contract. The revised charge would be as follows :—

Chairman's Remarks

11. The matter of reorganization of the sanitary staff is referred to a sub-committee consisting of the Chairman, Dr. Fernandez, Rev. L. B. Wolf, Messrs. B. Kanakaraju Pantulu, B.A., and A. M. Sundara Siva ~~Iyer~~, B.A., which is requested to send in its report at early date.

Present staff.	Salary per mensem.	Proposed staff.	Salary per mensem.
	Rs.		Rs.
1 conservancy inspector	17	1 sanitary inspector, Rs. 45—60	45
1 do.	15	1 assistant do. Rs. 25—35	25
1 do.	14	2 conservancy overseers, Rs. 10 each ..	20
3 conservancy inspectors at Rs. 12 each ..	36	8 peons at Rs. 6	48
5 peons at Rs. 6 each	30	25 female toties at Rs. 6	150
1 peon at Rs. 5	5	25 sweepers at Rs. 5	125
23 scavengers at Rs. 5 each	115	2 scavengers on cess-pool to work pump at Rs. 5.	10
11 do. 6 do.	66		
44 do. 5 do.	220		
2 excavators of night-soil pits at Rs. 7 each	14		
Private scavengering.			
2 maistries at Rs. 7 each	14		
7 scavengers—private privies at Rs. 6 each.	42		
5 do. at Rs. 5 do.	25		
4 do. on cess-pools,	20		
Total ..	633		423

12. The following improvements have been effected in this town since my last inspection :—

(*a*) Wish's choultry has been cleaned and repaired.

(*b*) Eleven night-soil conservancy buckets have been purchased.

(*c*) One corrugated iron latrine has been formed.

(*d*) A market has been completed.

(*e*) Twenty-four dust-bins have been purchased.

Inspection Notes.	Chirmans's Remarks.
13 (*a*). The councillors when consulted consider such latrines as are recommended by the Sanitary Commissioner to be too expensive to be undertaken by them. (*b*) *Vide* reply to note No. 5. (*c*) *Vide* reply to note No. 1 (*a*). (*d*) *Vide* reply to note No. 3 (*b*). (*e*) Do. 7 (*a*). (*f*) Do. 7 (*b*). (*g*) Do. 3 (*a*).	(*f*) A sheep slaughter-house has been erected on the Sanitary Board's standard plan. (*g*) A bullock-slaughter house has been made. (*h*) A sluice to enable the silt from the bottom of the tank to be got rid of has been constructed. 13. The following desirable recommendations made during the last two years have not been attended to :— (*a*) That a plan suitable for private latrines should be adopted for general use according to designs to be supplied by the Sanitary Board. (*b*) That the water of the service reservoir attached to the black tank should be protected from pollution by mechanical means. (*c*) That ruined houses and walls should be removed. (*d*) The filling in of the Hussain Sahib's Gunta. (*e*) Improvement of the condition of private premises as to rubbish collection. (*f*) The provision of a suitable plot of ground to enable ryots to store manure outside their dwellings. (*g*) To prevent the dhobies washing in sewage.
(Sid.) W. G. KING, Surgn.-Lieut.-Col., *Sany. Commr. for Madras.* (Sd.) P. VENKATAKRISTNIAH, *Chairman.*	

EXTRACT from the Proceedings of the Municipal Council, Guntúr, at a meeting held on the 13th November 1895.

* * * * * *

I. Read inspection notes of the Sanitary Commissioner for Madras for 1895 on the Guntúr Municipality.

The notes are read and the chairman is requested to prepare remarks basing them on the suggestions thrown out by the council and he will place the report before the council for approval.

* * * * * *

EXTRACT from the Proceedings of the Municipal Council, Guntúr, at a meeting held on the 30th November 1895.

* * * * * *

I Read inspection notes of the Sanitary Commissioner and the replies of the Chairman based on the suggestions thrown out by the council on the 13th November 1895, for approval.

Resolution.—Approved.

* * * * * *

No. N. D. 1705-Eng.

Submitted to Government, Local and Municipal Department, with enclosures.

(Signed) J. N. ATKINSON,
Collector.

4th December 1895.

No. 56 M., 11th January 1896.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

Read—the following paper:—

From M.R.Ry. P. VENKATAKRISTNAYYA NAYUDU GARU, B.A., Chairman, Municipal Council, Guntúr, to the Chief Secretary to Government (through the Collector of Kistna), dated 30th November 1895, No. 520.

In obedience to G.O., No. 1765 M., dated 23rd December 1893, I have the honour to submit herewith (by packet post) inspection notes of Sanitary Commissioner for Madras with my replies to the several remarks made therein and copies of resolutions of the council, dated 13th and 30th instant.

Enclosures.

Inspection Notes of the Sanitary Commissioner for Madras.

KISTNA DISTRICT.

Guntur Municipality.

Inspected 6th and 7th August 1895.

Population per census of 1891 .. .. 23,359.

Inspection Notes.

Dwellings (*a*).—No action seems to have been taken in the direction of getting rid of ruined dwellings within the town as advised on my last inspection. This is most desirable. Every useless wall means so much obstruction to the perflation of houses, and, moreover, every ruined house affords shelter for the commission of nuisance.

(*b*) The new suburb of Nagampaliem is possibly on private ground; but, in sanctioning buildings, the municipality should arrange to prevent extensions of their limits so as to block all pretence at communication through the locality. Small portions should, if necessary, be bought so as to maintain open roads throughout.

2. *Roads*.—These are in fair order.

3. *Surface drainage* (*a*).—The red tank receives the surface drainage of the town. In this the dhobies wash. As this tank is divided into certain portions by intervening banks, there is no reason why the dhobies should be allowed to wash where they like as at present. They should be confined to one special tank. Still better

Chairman's Remarks.

(*a*) Nuisance inspectors have been directed to submit lists of all dilapidated buildings, ruinous walls and other objectionable structures and the lists have been received. Notices are being issued to the parties concerned to restore the buildings or walls to order, or to remove them and clear the sites. Compliance will be enforced on pain of prosecution.

(*b*) The works overseer is directed to submit a plan of the Nagaramvaripalem with his opinion as to the suggestions of the Sanitary Commissioner.

2. Needs no remarks.

3. (*a*) The red tank is no regular tank, but the pits made from time to time in years past have been converted into a number of tanks connected by culverts. They are fed by rain-water and have no regular supply channels. They contain water only after heavy rainfall, otherwise being empty. Even then, the water does

No. 56 M., 11TH JANUARY 1896.

GOVERNMENT OF MADRAS.

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ENCLOSURES.

INSPECTION Notes of the Sanitary Commissioner for Madras.

KISTNA DISTRICT.

GUNTUR MUNICIPALITY.

Inspected 6th and 7th August 1895.

Population per census of 1891 .. .. 23,359.

Inspection Notes.	Chairman's Remarks.
Dwellings (*a*).—No action seems to have been taken in the direction of getting rid of ruined dwellings within the town as advised on my last inspection. This is most desirable. Every useless wall means so much obstruction to the perflation of houses, and, moreover, every ruined house affords shelter for the commission of nuisance.	(*a*) Nuisance inspectors have been directed to submit lists of all dilapidated buildings, ruinous walls and other objectionable structures and the lists have been received. Notices are being issued to the parties concerned to restore the buildings or walls to order, or to remove them and clear the sites. Compliance will be enforced on pain of prosecution.
(*b*) The new suburb of Nagampaliem is possibly on private ground; but, in sanctioning buildings, the municipality should arrange to prevent extensions of their limits so as to block all pretence at communication through the locality. Small portions should, if necessary, be bought so as to maintain open roads throughout.	(*b*) The works overseer is directed to submit a plan of the Nagaramvaripalem with his opinion as to the suggestions of the Sanitary Commissioner.
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Inspection Notes. Chairman's Remarks.

would it be that washing direct in the tank should not take place. It would be a simple matter to arrange that the whole process should be conducted on the bank, and that the excellent gravel should be under-drained, so as to filter the refuse water before its return to the tank. In any case the dhobies should, by exercise of section 154 (ii), be prevented from washing where they choose, and especially the Sanjaid gunta should not be employed for this purpose, it being formed of surface water from inhabited area and of sewage.

Hussain Gunta (*b*).—I pointed out on my last inspection that it was most desirable this should be filled in,and the surface drainage in the neighbourhood be re-arranged. Since then I understand a man who did not belong to the town attempted to cross it with a child in his arms during a period of rainfall; both the man and the child were drowned. In the interests of human life, irrespective of sanitary reasons, this place should be so sectioned as to be relieved from the lodgment of rain-water, and should be provided with a well-made culvert that would be above flood-level at all times. Seeing that the public road passes through this "gunta," none but an initiated inhabitant of Guntúr would, for a moment, imagine that it terminated in a man trap.

4. *Sewerage.*—It being out of the question to make a sewerage scheme till the more urgent demand for protected water is met, the municipality should do their best to make short lengths of drains of Messrs. Burn and Co.'s glazed half-tiles. By this means the sewage could be discharged upon suitable plots of ground where the cultivation of vegetables, grass, or ornamental shrubs could be pursued. When cess-pools are used, it should be seen that they are of the pattern prescribed by the Sanitary Board. To empty these cess-pools, carts with pump attached, of which Massey and Co., Madras, have the pattern, should be employed. Their use would save labour and secure efficiency; but when poverty prevents the use of such correctly designed cess-pools, the Vizianagram sewage filter should be employed (*vide* diagram enclosed).

5. *Water-Supply* (*a*).—The water in the reservoir below the black tank is open to gross contamination by reason not last for more than three or four months, and it is not at all used for drinking purposes. The council beg to state that if such a restriction as is proposed by the Sanitary Commissioner be put upon the dhobies, they would be put to much inconvenience.

Some years ago an attempt was made to confine the washermen to carry on their washings in one tank, but this restriction gave rise to much discontent, leading to a strike, and the then council deemed it wise not to interfere with the long existing privilege of the dhobies. If an attempt be now made, the council apprehends similar results. As for the other suggestion of the Sanitary Commissioner in this connection, the council prefer it better to postpone action for the present as the arrangement suggested, apart from its cost to the municipality, will entail much difficulty upon the people in bringing water from the tank to the tank bund, when the cleaning can be conducted very easily near the water. Not only dhobies but even high caste people resort to these tanks for the purpose of washing and they would think it derogatory to carry water outside the tank for this purpose. Such restrictions may be insisted upon if these tanks were used for any other purpose than washing, but this being not the case, the council have resolved not to give effect to these proposals for some time.

Washing in the Sangadigunta will be stopped, and the nuisance inspector has been directed to do it at once.

(*b*) Notice has been served on the owner and vigorous steps will be taken to enforce the filling in of this gunta. The works overseer is also directed to suggest means for the drainage of rain-water in this part of the town.

4. The suggestions of the Sanitary Commissioner as to how drains have to be constructed have not been clearly and thoroughly understood by the council and the various diagrams forwarded with the notes in this connection also require further and more detailed elucidation. The council requests the Sanitary Commissioner for fuller information, and as soon as this is received, his suggestions will receive the earnest attention of the council.

5. (*a*), (*b*) *and* (*c*).—Water-supply is indeed defective. For a thorough study of this question and suggestions of means for

Inspection Notes. Chairman's Remarks.

of persons entering it for the drawing of water. Some confusion having arisen in the minds of the municipal council as to the scope of my advice in regard to protection of this supply, I explained the matter fully at a meeting held on the subject, when they all agreed that it would be advisable to lift the water by a small steam-engine to an elevated tank for distribution, instead of permitting persons to enter it. This mode is successfully pursued at Negapatam and has been of the greatest utility to the inhabitants of the area.

(*b*) Portable engines can be procured at about the following prices.

A tank with fittings would cost from Rs. 680 to 1,800 according to the size required.

Bore of steam cylinder instrument	4	5	6	6	8	8	9	10	10	10
Bore of water cylinder instrument	3	3	4	6	6	8	6	5	8	12
Gallons of water raised per hour, approximate ..	1,830	1,830	3,260	7,300	7,300	13,000	7,300	5,100	13,000	29,000
Height in feet water can be lifted with 40 lb. steam pressure ..	117	162	132	60	105	60	132	240	90	45
Price of pump and boiler mounted on wheels	rs. 1,150	1,350	1,500	1,650	2,100	2,350	2,600	2,850	3,100	3,750

(*c*) Should the municipality so elect, the water could be sent from the tank by pipes as far as the sub-magistrate's choultry where persons were so anxious a couple of years back to make an open tank supplied by water from this point. It is more than possible from what I understand that, with a small grant from the municipality, the public would subscribe for the carrying out of so useful a measure. This little scheme must, of course, be distinctly understood to imply simply the protection of the water from contamination and in no sense to replace the large public water scheme which is under preparation by the Sanitary Engineer, but which it is unlikely, in spite of his best intentions, his department could undertake for some time to come. When that scheme is introduced, the municipality would be able to use the machinery for some other municipal purpose such as lifting water for dhobies, or sell it without much loss.

(*d*) Bannerjie's well requires repair badly.

improving it on the lines suggested by the Sanitary Commissioner, a sub-committee consisting of Messrs. A. A. G. Malet, R. P. Gill, A. P. Fernandez, M.R.Ry. A. M. Sundara Siva Aiyar, B.A., and Ch. Lakshmama Garu has been formed; and on the receipt of its report the council will take the matter into deep consideration.

(*d*) There is no well of this name in this municipality. It is not known what well is precisely referred to by the Sanitary Commissioner under this name.

Inspection Notes.

(*e*) The Subadar's well should have a parapet and basement provided.

(*f*) The well in the dhobies' tank Sunjada gunta can only yield filtered sewage. It should be closed, and if a source in this neighbourhood is required, a new well should be sunk in the neighbouring fields.

6. *Night-soil conservancy* (*a*).—The new latrines at Kabar Gudem would be of more use were a path at the edge of the fields and a small foot-bridge made over the stream that passes at its side. The ground is, I know, private property, but I should think the owner ought to readily come to terms; the inhabitants at present use his ground for easement as testified to by its filthy condition.

(*b*) The China bazaar latrine drains direct with the red tank; either it should be abolished or it should be provided with a roof, and thus prevent surface washings making their way from the latrine.

(*c*) Notwithstanding the recent purchase of eleven mounted buckets, it is impossible for the total night-soil of the town to be so removed even were the urine neglected. The whole question of conservancy should receive careful consideration from the municipality. They should arrange for the removal of 5·9 tons of human excreta in two trips. This would require four of Richardson and Cruddas 200 gallon carts drawn by two bullocks, or 21 single-bullock iron carts of 12 cubic feet capacity.

(*d*) The night-soil buckets should then be relegated to their proper place in conservancy, that is, the collection of fœcal matter from latrines by the toties and the meeting of the night-soil carts at certain spots, so as to secure rapid disposal.

(*e*) An increase of 20 latrines on the standard plan should be obtained by allotments made year by year.

(*f*) The new latrine near the market is too near the stalls and should be used only for stall-holders as soon as a greater provision for public latrines is feasible.

7. *Rubbish conservancy* (*a*).—In the matter of care as to cleanliness of premises, the Municipality of Guntúr is

Chairman's Remarks.

(*e*) Notice has been issued to the owner who has already begun collecting materials; the improvements suggested will be made at an early date.

(*f*) Referred to the works overseer for early action in reference to the various suggestions herein made.

6. (*a*) The works overseer has been directed to report after consulting the owner as to the plot of ground required for laying out a small bridge. He has also been asked to submit an estimate for giving effect to the other suggestions and provision will be made for the same in the next budget.

(*b*) The China bazaar latrine is so very serviceable that its abolition on the ground of its draining into the red tank will entail on the people residing in this portion of the town much inconvenience and hardship; China bazaar is chiefly inhabited by Muhammadans who, being very poor, have no latrines of their own, neither would their women, being gosha, resort to any distant latrine in case this be done away with. Its abolition consequently entails hardship on the poor people and the council are not therefore prepared to adopt the suggestion of the Sanitary Commissioner. Nor does the council think it advisable to roof the latrine, because a latrine of the large dimensions as the one in question will cost a good deal for its roofing, and even if covered, it will not serve the purpose so well as the open one now in use. It also emits a very disgusting smell for want of free play of the air and sunshine. Moreover, the rainy season lasts for a short time and if proper measures be taken during this period to remedy the one defect pointed out by the Sanitary Commissioner, the advantages from keeping the latrine open during the remaining seasons are so many and so manifest that the council have resolved to keep this proposal in abeyance for the present, and in the meantime the sanitary inspector of the division is strictly instructed to inspect the latrine at regular intervals and see that it is kept in a thorough sanitary condition.

Inspection Notes.

exhibiting a steady decline, although the list of public improvements effected reflects much credit upon the management otherwise.

(*b*) In the case of the parts of the town chiefly inhabited by agriculturists, I advised purchase of a small plot of ground for storage of their manure. It cannot, with land at a cost not exceeding Rs. 100 per acre, be regarded as an improvement beyond the means of the municipality and it undoubtedly would go far towards securing air and soil purity within this special area, whilst not depriving the ryots of the manure they are naturally anxious to store.

(*c*) During the hot season, a site near the dhobies' tank is employed for the storage of night-soil and rubbish. This certainly cannot be regarded as a suitable spot.* Neither can the more constantly used place within the catchment of the black tank, which forms the chief source of water-supply of the town, be considered as suitable. A little tracing of the night-soil depôt surface drainage will show that it goes straight into the tank. This can neither be good for the retention of caste nor the cause of health. A site well removed from the catchment area of the tanks should be sought for. If no site for rubbish disposal prior to its purchase by ryots can be obtained outside the catchment area of the black tank, incineration of rubbish should be undertaken in one or other of the modern type of apparatus.

(*d*) The rubbish carts employed are certainly not in keeping in a municipality which has recently made so much advance in the way of erecting structures on improved plans. It is imposible (as shown by the state of backyards of houses) that the rubbish could be withdrawn from the town by so inferior an agency. Indeed, I consider that, as the single-buffaloe's and miniature rubbish carts execute the work at so slow a pace, it is calculable that what they do accomplish is too highly paid for. Seven two-bullock carts would be required for the correct removal of rubbish at three trips per day.

8. *Markets* (*a*).—The arrangements for butchers are very inferior and should be remedied without delay. There should be a drain along each meat stall, and preferably also beside all stalls. In the case of the butchers a smooth stone slab polished

Chairman's Remarks.

(*c*) This will be attended to.

(*d*) This will be attended to.

(*e*) Adequate provision will be made year by year for the construction of latrines on the standard plan until the number recommended is duly supplied.

(*f*) The council deem it advisable to remove the latrine altogether from its objectionable locality. It is so very near the markets that flies resorting to the latrine may be attracted to the markets and thus alight on the foodstuffs sold. Moreover, if the use of the latrine be restricted to stall-holders, it is not possible to distinguish this class of people from the general public and so it will be used as a public latrine notwithstanding this limitation. The Civil Surgeon is of opinion that a urinal will suffice the stall-holders, and the council agree with him.

7. (*a*) Measures are being taken to ensure cleanliness of premises. The sanitary inspectors have been ordered to report on the condition of backyards and to issue notices to keep them clean. Cleanliness will be enforced on pain of prosecution.

(*b*) The arrangement suggested herein, though commendable and valuable, does not appear practicable; the council will be only too glad to give effect to it if it were so. The ryots are, however, strictly warned to make their own arrangements for the speedy removal of rubbish, &c., from their compounds. Vigorous steps are being taken by the council to enforce this.

(*c*) Since abolished. The council will see that this does not occur in future.

* Referred to the Civil Surgeon who has been requested to kindly select a suitable site for the rubbish and night-soil depôt. Early steps will be taken to put this valueable recommendation into effect. The rubbish carts now in use will be gradually

Inspection Notes.

by preference should replace the present filthy boxes, and steel hooks should be used instead of bits of dirty ropes as at present.

(*b*) The walls and wooden pillars should be painted with silicate paint.

(*c*) For both a fish and beef market proposals have already been submitted by the municipality to the Sanitary Board.

8 (*a*) *Cattle and Sheep slaughter-houses.*—These are neatly kept. Arrangements should be made to provide for lifting the water from a well sunk outside to an elevated cistern, whence the supply should be distributed by pipes and taps.* It would be advisable to make a garden in the immediate vicinity of the slaughter-house, and there bury the offal and use the washings of all healthy animals.

9. *Vaccination.*—(*a*) The following table exhibits the state of vaccination up to the end of August 1895 :—

—	1891.	1892.	1893.	1894.	1895 up to end of August.
Number vaccinated	1,290	871	1,051	1,247	684
,, ,, successfully	1,135	855	1,010	1,215	616
,, ,, under one year of age	482	515	691	818	472
,, verified by inspecting officers	820	764	493	630	..
Births	701	710	820	up to Aug. 824	509

The following table shows the results of infantile vaccination :—

Total births during preceding six months, *i.e.*, 1st January to 30th June 1895.	Number vaccinated successfully.	Number vaccinated unsuccessfully the 1st time.	Number vaccinated a second time because first operation proved unsuccessful.		Postponed on medical certificate at the end of six months.	Died.	Left the town.	Unaccounted for.	Ratio of successful vaccinations to total births per cent.	Prosecutions for failure to accept vaccination during the year up to 31st July 1895.		
			Successful.	Unsuccessful.						Number of suits filed.	Number of cases disposed of by Magistrate.	Number of convictions.
383	240	2	2	..	63	90	40	1	63·19	* 186	162	12

* Of this number there are still eight on medical certificate and sixteen pending in the Magistrate's office.

(*b*) Of 32 children examined haphazard on the roads, 21 or 65·6 per cent. were found protected, 7 or 21·9 were unprotected, and 4 or 12·5 had suffered from small-pox.

(*c*) The vaccine depôt is unfit for its purpose. A design should be sought for from the Sanitary Board.

Chairman's Remarks.

replaced by wooden skeleton carts lined with sheet iron and provided with covers. There being some provision in the current year's budget, the Sanitary Commissioner's recommendation will receive immediate attention as far as funds permit.

8 (*a*) *and* (*b*). Estimates will be called for and due provision made for carrying out the works suggested.

(*c*) The construction of a fish and a beef market will be commenced ere long.

8 (*a*) The improvements suggested will be made at an early date.

* This is being attended to immediately.

9 (*c*). The Civil Surgeon is requested to make provision in the new hospital buildings scheme for a vaccine depôt on the standard plan and he will also kindly address the Sanitary Board for a design for the same.

Inspection Notes.

(*d*) The demand for return to the depôt for examination as to result is not strictly enforced. This should be attended to, as it enables more work to be done by the vaccinator, and thus decreases the chances of persons escaping protection. Where rank or disinclination dictates that the parents or guardians would prefer the vaccinator to proceed to their houses for the operation or for verification, a fee should be required in all instances so as to discourage this as much as possible.

10. *Registration.*—One registrar is employed. The people do not report at the office in the first place, but expect this man to discover occurrences and then they will proceed on threat to the office. This can only be due to want of firmness on the part of the municipality. The law as to registration should be occasionally proclaimed by tom-tom throughout the town, and boards also declaring the same facts should be placed in suitable public spots. After this, prosecutions should be carried out. Only one prosecution took place under section 253 during last year. The following is the result of registration up to date :—

—	Ratio of births per mille of estimated population.	Ratio of deaths per mille of estimated population.	Percentage of deaths from						Ratio of deaths of infants under one year of age per mille to registered births in the preceding year.	Ratio per mille of deaths of infants between one and five years of age to population of that age.
			Cholera.	Small-pox.	Fevers.	Dysentery and Diarrhœa.	Injuries.	Other causes.		
1892	29·4	36·3	11·1	..	31·3	8·7	2·4	46·5	291·0	239·9
1893	33·4	24·7	3·1	.. ..	31·4	5·6	3·1	56 8	202·8	162·3
1894	33·0	26·9	2·4	.. ..	30·4	5·6	3·3	58·3	235·4	165·1
1895 (up to August 1895.)	30·0	23·7	..	..	32·2	5·2	3·5	59·1	194·2	149·7

Whether or not the death-rate is correct the birth-rate is evidently below what should be expected. The high death-rate from cholera, dysentery and diarrhœa points conclusively to the fact that the municipality would have done well in acting upon my advice to protect the water-supply after the various methods suggested in my report in G.O., No. 438 M., dated 3rd April 1894, instead of ignoring it in favour of deepening the existing tank to very little purpose.

Chairman' Remarks.

(*d*) The council has framed the following rule in reference to the fee to be paid for the vaccinator to visit houses :—

"If any parent or guardian wishes to have his child vaccinated in his house, he may send an application to the Chairman or Civil Surgeon accompanied by a fee of two annas for the vaccinator. If more than one child have to be vaccinated in a house, it should be so stated in the application and a fee of one anna must be paid in the case of every additional child. No separate fee need be charged for inspection."

This rule remedies the defect pointed out by the Sanitary Commissioner.

10. The various suggestions are being attended to. The nuisance inspectors have also been directed to note down in their diaries the daily occurrences of birth and death in their respective divisions. This will be an additional help to the registrar. The registrar himself is ordered to peregrinate the town every day before 10 A.M. From these various improvements, better and more satisfactory results may be expected in future.

Inspection Notes.

11. *Sanitary Administration.*—No less than six "sanitary inspectors" are employed by this municipality. None of them have received any training, and their standard of education is not such as would entitle them to be thus termed. These men should after due notice be got rid of—thus saving Rs. 82, which might be expended with better results. One certificated sanitary inspector on Rs. 45 and one assistant certificated sanitary inspector on Rs. 25, a staff of 25 sweepers (or one per thousand of population) ought also to be quite sufficient for requirements, *if the cartmen are not included* in the number of 44 returned by the municipality. The 34 scavengers might well be increased to 50 or two per thousand of the population. Two men returned as excavators of night-soil trenches at Rs. 7 each seem to me an unnecessary charge. The total amount of work daily in good gravel soil would be to form trenches 18″ × 18″ and 168·5 feet long; it is probable the work could be fulfilled more cheaply on contract. The revised charge would be as follows:—

Chairman's Remarks.

11. The matter of re-organization of the sanitary staff is referred to a sub-committee consisting of the Chairman, Dr. Fernandez, Rev. L. B. Wolf, Messrs. B. Kanakaraju Pantulu, B.A., and A. M. Sundara Siva Aiyar, B.A., which is requested to send in its report at an early date.

Present staff.	Salary per mensem.	Proposed staff.	Salary per mensem.
	Rs.		Rs.
1 conservancy inspector	17	1 sanitary inspector, Rs. 45—60	45
1 do.	15	1 assistant do. Rs. 25—35	25
1 do.	14	2 conservancy overseers, Rs. 10 each ..	20
3 conservancy inspectors at Rs. 12 each ..	36	8 peons at Rs. 6	48
5 peons at Rs. 6 each	30	25 female toties at Rs. 6	150
1 peon at Rs. 5	5	25 sweepers at Rs. 5	125
23 scavengers at Rs. 5 each	115	2 scavengers on cess-pool to work pump at Rs. 5.	10
11 do. „ 6 do.	66		
44 do. „ 5 do.	220		
2 excavators of night-soil pits at Rs. 7 each	14		
Private scavengering.			
2 maistries at Rs. 7 each	14		
7 scavengers—private privies at Rs. 6 each.	42		
5 do. at „ 5 do.	25		
4 do. on cess-pools.	20		
Total ..	633		423

12. The following improvements have been effected in this town since my last inspection:—

(*a*) Wish's choultry has been cleaned and repaired.

(*b*) Eleven night-soil conservancy buckets have been purchased.

(*c*) One corrugated iron latrine has been formed.

(*d*) A market has been completed.

(*e*) Twenty-four dust-bins have been purchased.

Inspection Notes.

(*f*) A sheep slaughter-house has been erected on the Sanitary Board's standard plan.

(*g*) A bullock slaughter-house has been made.

(*h*) A sluice to enable the silt from the bottom of the tank to be got rid of has been constructed.

13. The following desirable recommendations made during the last two years have not been attended to:—

(*a*) That a plan suitable for private latrines should be adopted for general use according to designs to be supplied by the Sanitary Board.

(*b*) That the water of the service reservoir attached to the black tank should be protected from pollution by mechanical means.

(*c*) That ruined houses and walls should be removed.

(*d*) The filling in of the Hussain Sahib's Gunta.

(*e*) Improvement of the condition of private premises as to rubbish collection.

(*f*) The provision of a suitable plot of ground to enable ryots to store manure outside their dwellings.

(*g*) To prevent the dhobies washing in sewage.

(Sd.) W. G. KING, Surgn.-Lieut.-Col.,
Sany. Commr. for Madras.

Chairman's Remarks.

13 (*a*). The councillors when consulted consider such latrines as are recommended by the Sanitary Commissioner to be too expensive to be undertaken by them.

(*b*) *Vide* reply to note No. 5.

(*c*) „ „ „ 1 (*a*).

(*d*) „ „ „ 3 (*b*).

(*e*) „ „ „ 7 (*a*).

(*f*) „ „ „ 7 (*b*).

(*g*) „ „ „ 3 (*a*).

(Sd.) P. VENKATAKRISTNAYYA,
Chairman.

EXTRACT from the Proceedings of the Municipal Council, Guntúr, at a meeting held on the 13th November 1895.

* * * * *

I. Read inspection notes of the Sanitary Commissioner for Madras for 1895 on the Guntúr Municipality.

The notes are read and the Chairman is requested to prepare remarks basing them on the suggestions thrown out by the council and he will place the report before the council for approval.

* * * * *

EXTRACT from the Proceedings of the Municipal Council, Guntúr, at a meeting held on the 30th November 1895.

* * * * *

I. Read inspection notes of the Sanitary Commissioner and the replies of the Chairman based on the suggestions thrown out by the council on the 13th November 1895, for approval.

Resolution.—Approved.

* * * * *

No. N. D. 1705-Eng.

Submitted to Government, Local and Municipal Department, with enclosures.

4th December 1895. (Signed) J. N. ATKINSON,
Collector.

Order—No. 56 M., dated 11th January 1896.

Recorded with the following remarks :—

(1) The attention of the Sanitary Commissioner will be drawn to the remarks of the Chairman on paragraphs 4 and 5 (*d*) of the inspection notes.

(2) Steps should at once be taken to prevent the surface washings of the China Bazaar latrine from entering the Red tank.

(True Extract.)

J. F. PRICE,
Chief Secretary.

To the Chairman, Municipal Council, Guntúr.
" Collector of Kistna.
" Sanitary Commissioner.
" Sanitary Engineer.
Editors' Table.

Exd. A. Baitt.

Govt. of {1896} Madras.

LOCAL AND MUNICIPAL.

Issued

Recd. *Encl.*

G.O., No. 56 M., 11th January 1896.

JANUARY.

Inspection Notes.

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for Cr.	654/	25/2/97		
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FURTHER PAPERS.

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

Statement Showing rs of taxes in the Gudiyatam Municip

Items	Arrears upto 1893-94			Amount for	Amount of years to which Col: 10 relate 1892-93			1893-94			1894-95			Remarks.
1	2			3	13			14			15			16
1 Tax on arts	107	8	8	690	-	-		1	8	-	103	11	3	
2 Tax on buildings	7	7	3	1103	-	-		-	-	-	44	9	6	
3 Tax on lands	57	11	2	301	-	10		-	-	-	26	-	11	
4 Private Scavenging fees	48	12	-	61	-	-		-	-	-	-	-	-	
5 Licence fees	3	4	-	14	-	-		-	-	-	11	4	-	
6 Tax on Vehicles	-	-	-	20	-	-		-	-	-	-	-	-	
7 Tax on Animals	22	10	6	144	-	-		-	-	-	24	-	-	
	247	5	7	2336	-	10		1	8	-	209	9	8	

V. Dyno

Collector

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

Encl 1
3850 M/95

Statement Showing the progress made in the Collection of arrears of taxes in the Godiyatam Municipality North Arcot District.

Items	Arrears up to 1893-94	Amount of 1894-95	Total of Cols 2 and 3	Amount written off as irrecoverable	Amount Collected from 1-4-95 to 30-11-95	Arrears Still outstanding and the reason therefor: Amount under distraint	Amount under prosecutions	Collectable balance	Total	Particulars of the amount in Col: 10 relate to the years: 1890-91	1891-92	1892-93	1893-94	1894-95	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 Tax on arts	107 8 8	690 8 -	798 - 8	149 - 8	531 12 9	42 - -	24 - -	51 3 3	117 3 3	- - -	12 - -	- - -	1 8 -	103 11 3	
2 Tax on buildings	7 7 3	1103 15 -	1111 6 3	21 8 -	1045 4 9	3 7 -	- - -	41 2 6	44 9 6	- - -	- - -	- - -	- - -	44 9 6	
3 Tax on lands	57 11 2	301 12 7	359 7 9	29 10 11	293 11 1	- - -	10 - 10	26 - 11	36 1 9	- - -	- - -	10 - 10	- - -	26 - 11	
4 Private Scavenging fees	48 12 -	61 11 -	110 7 -	40 11 -	69 12 -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	
5 License fees	3 4 -	14 4 -	17 8 -	2 - -	4 4 -	- - -	- - -	11 4 -	11 4 -	- - -	- - -	- - -	- - -	11 4 -	
6 Tax on Vehicles	- - -	20 - -	20 - -	14 - -	6 - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	
7 Tax on Animals	22 10 6	144 - -	166 10 6	21 2 6	115 8 -	2 - -	6 - -	22 - -	30 - -	4 - -	2 - -	- - -	- - -	24 - -	
	247 5 7	2336 2 7	2583 8 2	278 1 1	2066 4 7	47 7 -	40 - 10	151 10 8	239 2 6	4 - -	14 - -	10 - 10	1 8 -	209 9 8	

E.E. 20-11.

Collector