

(1) Number of pages. _____

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MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.	20	(W)	Press.
B.P. No.			Mis.
Dated	4-1-		1876.

Not to be folded or roughly handled

No. 39. Read the following Proceedings of the Board of Revenue, dated 6th December 1875, No. 3,297 :—

Read the following letters :—

From J. H. GARSTIN, Esq., Collector of South Arcot, to H. E. STOKES, Esq., Acting Secretary to the Board of Revenue, dated Virdachellum, 1st July 1875, No. 347.

I HAVE the honor to submit my Public Works Report for 1874-75. The subject is dealt with under the two heads of Irrigation Works and Civil Buildings. Roads will be separately reported on in the Local Fund Report for the same year.

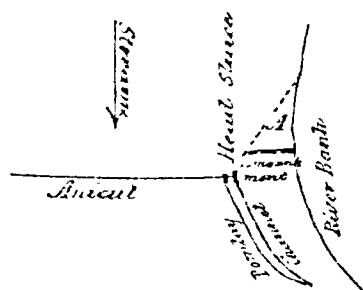
2. IRRIGATION WORKS (*New Works*).—Under this head the principal work in progress was the Palandorai Anicut. I inspected this work a few days after the close of the year under report. I had last seen it three years ago, and found that great progress had been made. The anicut and head sluice seem finished, and the work, so far as I could judge of it, appeared very good, excepting the up-stream wing-wall of the head sluice which was split from top to bottom in the middle of its curve, and as the crack was widest at the tops, and as I could detect no sinking, I concluded that the pressure of the earth thrown in behind the wall had been greater than it could bear. The matter has, I believe, been duly brought to the notice of the Consulting Engineer for Irrigation. From the anicut I went to Palamcottah where the channel from the anicut terminates, and on my way had several opportunities of inspecting the channel. A good deal of earth-work seems still unfinished, but most of the masonry works I saw were either completed or approaching completion. There is a very deep cutting near Strimushnam, and the people were very anxious to have two accommodation bridges thrown across it. I think one at the east end of the cutting will suffice, and this I believe it is under contemplation to construct. The channel ends in a string of three small tanks. These might, I think, be improved and made into one large reservoir, and the channel might possibly be made to discharge into the Viranum Tank with advantage. The total outlay on this work during the year was Rupees 20,000.

The Upalavadi Channel.—This small work has not yet been finished. It three times sustained great damage from floods during the year under report, and will always be liable to such damage until the Ponnair river is embanked. I am rather doubtful if the channel will ever be a success, and expect that the original estimate will be considerably exceeded before the work is finished.

The Embankment across the Bahoo Tank.—This small work is not yet finished. The allotment for the year seems to have been only Rupees 54, which apparently was all spent.

3. (*Repairs*).—*The Extension of the Ponnair Anicut*.—I have inspected this work two or three times. It was rendered necessary by the northern head sluice,

which supplied the Pombay Channel, having been destroyed during the floods in October last. The repairs have been vigorously pushed on under the supervision of the Range Officer Mr. Wiffen, and the work done seems very good. Large sound bricks made departmentally, and cement that sets well under water have been used in the repairs, and the way the work was being carried out struck me as very satisfactory. I may here remark that in my opinion it would be highly advisable that whenever works are being constructed in this district by the Public Works Department, the Range Officer should be ordered to make all bricks and tiles that may be required departmentally. I am confident the result would well repay any extra cost entailed by the manufacture. The weakest feature in connection with the anicut work appeared to me to be the embankment thrown



up from the head sluice of the Pombay Channel to the north bank of the river. If this embankment is breached the head sluice will be turned and the channel choked or swept away. I annex a small sketch in the margin to illustrate my meaning. The plot of ground marked A should be all planted up with bamboos or trees or nanul grass to break the set of the water of the river and to divert it from the embankment. Some little planting has been done, and it is very possible that what I suggest

is intended to be carried out, but the sooner it is done the better.

4. *Minor New Works.*—From the District Engineer's Administration Report it seems that twenty-three sluices and one waste weir were constructed during 1874-75, while two head sluices, eleven surplus sluices, and two distribution sluices were supplied to canals and channels, besides which three channels and a spring-pond and channel were constructed, and two tunnels built over the channels.

Minor Repairs.—The following works were carried out under this head, and at the cost specified opposite to each :—

	Number in the Dis- trict.	Number repaired dur- ing 1874-75.	Outlay.
1. Anicuts	179	18	RS. 17,394
2. Embankments	32	17	18,202
3. Canals or Channels	947	60	39,789
4. Tanks	3,511	199	56,910
5. Spring-channels	225	8	2,581
6. Preliminary Works for improving the irrigation in the Chekkadi Jaghire.	...	...	5
Total ...	...	...	1,34,881

5. The season was a very peculiar one. Heavy floods in the Ponnai in May and October and heavy rain in all the intervening months did much damage to the following works :—

On the Ponnai	{ The Ponnai Anicut. The Koriyar Embankment.
On the Gaddilam	{ The Trivadi Anicut.
On the Cheyaur	{ The Chengam do. The Kottakulam Anicut.
On the Gingee river	{ The Yeriur do. The Porkunam do. The Modayur do. The Chendur do.

The greater number of the anicuts and channels which suffered have had repairs to them carried out.

6. I inspected a new tank at Kottakulam which has been recently constructed in consequence apparently of a promise made by a neighboring land-holder that if the work was carried out he would take up and irrigate a large quantity of land lying waste near the tank. The tank and sluice have been constructed, but the land has not been cleared of jungle or irrigated, and the land-owner told me his reason for not clearing the land was, that the tank did not dominate the land and would not hold water. The bund of this tank is a prolongation of the bund of the large tank of Kottakulam, which is fed by the Kottakulam Anicut Channel, and has a calingulah which discharges into the new tank when the old one is full to overflowing; but when I saw the two tanks, the old one had five or six feet of water in it in the deepest part, but the new one was quite dry, and the bed of it seemed to me to slope too rapidly to admit of its waterspread being very extensive; and as the Range Officer (Mr. Baker) admitted that the floor of the sluice only dominated the general level of the land to be irrigated by six inches, I am afraid this work in its present condition is not likely to be immediately remunerative.

7. I called on my Divisional Officers to submit reports of their inspections of public works in their different divisions, and submit a copy of that sent to me by the Acting Head Assistant Collector Mr. Kough. The Acting Sub-Collector and Acting Deputy Collector on general duties having only recently joined the district have not submitted reports. I quite concur with Mr. Kough that the allotments for agricultural repairs are totally inadequate to the wants of the district. It would greatly assist the revenue officers of the district in their inspections of minor irrigation works in their divisions if they could be supplied through the Collector with lists of the works proposed to be repaired during each year before its commencement. At present, I am in ignorance of what works of this kind the District Engineer proposes to carry out each year. I only know on receipt of the Irrigation Budget that a certain lump allotment has been made for minor irrigation works in the district for the year, and throughout its course I have estimates submitted to me for sanction and countersignature which are probably intended to be worked off against the lump allotment; but what is wanted is a complete register of all minor irrigation works which need repair and of the repairs required, and a certain proportion of the annual allotment should then be annually distributed among the taluqs for repairing these works in them, the selection of the tanks resting with the Divisional Officer in consultation with

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the Range Officer. The former would then know where to look out for work going on and could inspect it easily, but at present he is in complete ignorance on the subject unless the monthly progress reports are sent to him, when he can learn what works are being repaired, but not otherwise.

8. The total expenditure on irrigation works in the district during the year under report was Rupees 1,75,855, as detailed below:—

From Extraordinary Grant—	rs.
New Works	20,000
From Ordinary Grant—	
New Works	13,328
Minor New Works	7,602
Repairs	1,31,882
Tools and Plant	43
Total...	1,75,855

9. CIVIL BUILDINGS, IMPERIAL AND PROVINCIAL (*Imperial*).—The only expenditure under this head was Rupees 68 on tools and plant, which was probably met from the allotment of Rupees 70 for repairs, on which account no expenditure seems to have been incurred.

(*Provincial*).—The total expenditure under this head was—

For New Works	rs.
„ Repairs	16,139
„ Tools and Plant	4,384
	115
Total...	20,638

on the following works:—

Taluq Cutcherry with Sub-jail at Kallakurchi.—The progress made in the construction of these buildings was very slow. Out of an allotment of Rupees 4,000, only Rupees 2,059 were expended during the year. I inspected them just after the close of the year. The work done seemed fairly good, but the latrines were built on an erroneous principle. Little more than the foundations of the Cutcherry itself had been erected.

Deputy Tahsildar's Cutcherry with Sub-Jail at Ulundurpett.—This building is progressing and the work seems fairly good, except that the iron doors for the wards of the sub-jail are a little too large and do not shut as neatly as they might. Unless hollows are scooped in the walls near the staples, there will probably be some difficulty in padlocking the doors. The record-room has no window, but three doors. Two of these should, I think, be turned into windows.

District Munsif's Court-house at Villapuram.—Out of an allotment of Rs. 2,500, a sum of Rupees 1,475 was expended on this building, which was commenced during the year under report. The work done seems good.

District Munsif's Court-house at Virdachellam.—The whole of the year's allotment, Rupees 2,500, was worked out on this building during the year under report. The work seems fairly good.

The Registration Office at Chidamberam has been completed, but at a cost somewhat in excess of the estimate.

The Head Assistant's Office and the Range Office at Tindivanam are both enlarged, and the work done is reported in each instance to be good.

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Sub-Jails at the following places were under course of construction during the year; Chengam, Gingee, Trikalore, Chidamberam and Villapuram.

Chengam Sub-jail.—The work done appeared good except the iron doors, upon which a special report was submitted to G.O., Public Works Department, No. 1,107, Government, and on which orders* have been passed. The jail was empty when

I last inspected it, and, owing to the staples being too small to admit the padlocks, the doors could not be locked.

Gingee Sub-jail.—The latrines here are built on a wrong principle and are useless. The iron doors are like those at Chengam, weak and of bad construction. The estimate for this sub-jail was Rupees 2,798, but the expenditure has been Rupees 3,022. The District Engineer points out in his Administration Report that this apparent excess is really only Rupees 52, because certain materials purchased at a cost of Rupees 598 for the hospital shed were sold at a loss of Rupees 178, when the construction of the shed was countermanded.

Trikalore Sub-jail.—This sub-jail has been *in statu quo* for some time. It has not yet been taken over by the Revenue Department. The latrines are built on a wrong principle and are useless. The iron doors of the same bad pattern as those at Gingee and Chengam are being tarred or pitched. The well is reported to have sunk like a pipe. The top of the well is at any rate only flush with the ground.

The Sub-jail at Chidamberam is reported by the District Engineer in his Administration Report to be finished and within the estimate. The Taluq Overseer reported this to be the case to that officer; but, when I examined the jail in the middle of April last, I found that, though the estimate provided for teak posts and bressummers for the verandah, all of them were of common white junglewood, several of the posts actually suffering from dry rot. The passage leading from the jail to the Cutcherry was, moreover, so narrow that two men could not walk along it side by side, while the bressummers and wall plates were so thin and jointed in so many places that, standing at one end of the passage and looking down it, the bressummers presented a series of concave curves on either side. Now, considering that the estimate provided for teakwood everywhere, except the reebers and rafters, the above state of affairs seems to me to be very discreditable. In the original estimate Rupees 922 are allowed for teakwood, and the Overseer informed me that, up to July 1869, Rupees 1,032 had been spent on teakwood, that work was then stopped for two years, and everything deteriorated, and that Mr. Hicken, the Supervisor, estimated the amount of deterioration at Rupees 250, which sum was sanctioned in addition to the original amount of the estimate and worked out, so that while some Rupees 1,100 have been spent on teakwood for this building, it was not easy to find any in the building when I inspected it. The Overseer told me he acted under Mr. Hicken's orders in carrying out the work, and I think that Mr. Hicken should, therefore, be called on for explanation. I wrote to Mr. Norfor

bringing the matter to his notice, and he, after inspecting the jail, replied that he considered the work simply disgraceful, and ordered all the junglewood to be removed and teak substituted.*

* Note by Acting Sub-Collector in charge.—This was not done, as the District Engineer in a letter, No. 125, of 13th July 1875, to the address of the Sub-Collector, stated that such alteration was unnecessary.

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4th January 1876.*

The Villapuram Sub-Jail.—This building was completed during the year under report. The work seems very good, but the latrine, is built on a wrong principle—the wall of the compound is split in the corner near the latrine, and the glass on the top of the wall is loose in some places, owing probably to its not having been stuck into the mortar when freshly put on. The ground outside the jail wall near the latrine is also so high that it is easy for a man to get over it. The hospital shed has been roofed over and converted into an additional cook-room. I found, however, that the prisoners' food was being prepared on the ground outside, for fear, so I was told by the warder, of blackening the walls. One objectionable feature about the jail compound is, that a door from the Cutcherry opens into it.

Police Lines and Station-houses.—Two sets of lines at Vanoor and Chonian Chavady and a station-house at Pinnalūr were under construction during the year. I have not inspected the lines at Chonian Chavady, but those at Vanoor I saw in December 1874, and found the work so bad that I wrote to the then District Engineer, Mr. Sage, about them, and the result was the work done was all condemned and the Overseer in charge was dismissed. I am informed that the lines have been rebuilt and again condemned on account of the badness of the work. The Acting Head Assistant Collector animadverts on these lines in his report. A sum of Rs. 988 has been expended on them.

The Pinnalūr Station-house was officially reported to the District Engineer as completed shortly after the close of the year under report; but on Mr. Norfor's inspecting it, he found that only 800 tiles to the square, instead of 1,500 as provided in the estimate, were worked into the roofing. The tiling has been ordered to be done over again.

10. *Repairs to Civil Buildings.*—The repairs to the Collector's Cutcherry which were much needed were commenced; but, judging from the fact that in two instances I detected new palmyra rafters being put in which were made of two pieces nailed together, I am doubtful if the work done is all as good as it ought to be. During the Range Officer's absence in his range, the supervision of this work seemed to me very inefficient. The Collector's house, which is the property of Government, had nothing done to it during the year, though the garden railings were repaired. It stands much in need of external cleaning and repair. A small wing containing bath-rooms has been declared by the Range Officer to require rebuilding as being unsafe, and the bed-rooms are totally destitute of glass windows, so much so that, if the rain be heavy and the wind high, the former is driven through the venetians and makes those rooms almost uninhabitable for a time. The bungalow also requires repairs. I would suggest that the Government be moved to direct the District Engineer to carry out all necessary repairs during the current year.

11. In conclusion, I would respectfully beg to record my opinion that the state of public works in this district is not satisfactory. If the officers of the Department of Public Works were altogether relieved of the execution and supervision of Local Fund Works, and if all irrigation works were in an efficient state, the task of supervising the latter alone and keeping them in repair would, in my opinion, entail on the existing establishment as much or more than they could

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efficiently accomplish; and, when to this task is superadded that of looking after and repairing all the roads and bridges in the district, is it to be wondered at that the general complaint of villagers at jamabandi is that their tanks are neglected and out of repair? To remedy the state of affairs, and put the administration of public works on a sound footing, three things appear to me to be necessary: 1st, the appointment of a separate establishment for Local Fund Works; 2nd, the increase of European supervision for public works proper; and, 3rd, the enactment of a law which will distinctly define what are to be considered works to be executed by "kudimaramut," and a provision in that law for enforcing the responsibility of ryots in that respect in a summary manner.

12. I cannot conclude this report without expressing my deep sense of the loss which the South Arcot District has sustained by the death of Mr. Sage, the late District Engineer, an officer whose merits as an executive officer are too well known to need any comment from me, and who, during the few months he was in charge of the district, visited every part of it, made himself acquainted with all its chief wants, exercised a thorough supervision over his subordinates, and in his treatment of Local Fund matters left nothing to be desired.

ENCLOSURE No. 1.

From C. KOUGH, Esq., Acting Head Assistant Collector of South Arcot, to J. H. GARSTIN, Esq., Collector of South Arcot, dated Tindivanam, 14th May 1875, No. 238.

I HAVE the honor, with reference to your letter, No. 1,422, of the 11th December last, to submit, overleaf, my notes on inspection of works under progress in my division.

2. I have been prevented from seeing as many of these as I could have wished; firstly, because I was absent on duty in the sub-division until the 9th March, and the list of works did not reach me until the 23rd idem. By that time a large portion of the Tindivanam taluq had been settled by Mr. Thomson, and many of the works entered in the lists are in the portion so settled. Secondly, because the season was so far advanced, I had to concentrate my attention upon concluding the annual settlement.

3. From what I have seen, however, I am fully convinced that much may be gained by such inspection by Divisional Officers, and I would, therefore, solicit the favor of being supplied with lists of works in progress in future as early as possible, after they have been determined upon.

4. It seems to me that the allotment for agricultural repairs is as a drop in a bucket to what is wanted.

ENCLOSURES Nos. 2 and 3.—Acting Head Assistant Collector's notes on works in his division.

From J. H. GARSTIN, Esq., Collector of South Arcot, to H. E. STOKES, Esq., Acting Secretary to the Board of Revenue, dated Cuddalore, 29th October 1875, No. 453.

As called for in the Board's official memorandum, No. 1,369, of 26th August last, I have the honor to forward herewith a statement showing the expenditure on public works from Imperial, Provincial and Local Funds, in the form prescribed by the Board's Circular Memorandum, No. 1,678, of 14th October 1874.

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4th January 1876.*

2. This statement shows the total expenditure for 1873-74 under Imperial and Provincial as Rupees 1,94,756, while, according to paragraph 2 of the Public Works Report sent to the Board for that year (letter No. 413 of 8th August 1874), the expenditure was Rupees 2,00,566, or Rupees 5,810 more. Of this difference, Rupees 4,910 is the result of an error in the entries made in the report. Rupees 29,518, entered there as the expenditure on Buildings, New Works, should have been Rupees 24,608. The rest of the difference consists of items for which no headings are provided in the form circulated by the Board. They are as follow :—

(a.) Rupees 320 amount of

(a.) Rupees 320, amount of repairs to Imperial Civil Buildings.
(b.) Rupees 580, amount of repairs to Imperial Civil Buildings.

(b.) Rupees 580, amount paid by the Public Works Department to the Superintendent of Police for repairs carried out by his department.

3. There is also a difference of Rupees 795 between the amount of expenditure entered for 1874-75 in this statement and that entered in the Public Works Report submitted to the Board for that year as shown below. This is a charge of the nature of item (b) already explained, and has, therefore, been excluded from this statement.

Expenditure in 1874-75.	As per Public Works Report submitted to Board for 1874-75 (Letter No. 347 of 1st June 1875).	As per Statement herewith submitted.	Difference.
<i>Provincial Civil Buildings.</i>	RS.	RS.	RS.
New Works	16,139	Public Works Department. 15,686	
Repairs	4,384	Revenue Department ... 52	
		15,738	401
		3,990	394
Total ...	20,523	19,728	795

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[illegible]

(Signed) J. H. GARSTIN, Collector.

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4th January 1876.*

SUBMITTED for the information of Government.

2. The total allotment from Imperial and Provincial Funds was Rs. 2,09,205, of which Rupees 1,95,540 or 93 per cent. were expended. Under the head Local Funds the outlay was Rupees 2,55,051 against allotments aggregating Rupees 2,85,940, or nearly 90 per cent. The utilization of funds may, therefore, be considered satisfactory.

3. The total expenditure on Irrigation Works amounted to Rupees 1,75,812 as compared with an outlay of Rupees 1,63,811 in the preceding year. The principal item under the head of New Works was the Palandorai Anicut and Channel, on which Rupees 20,000 were expended. The Board observe that in the report for 1873-74, it was stated that only Rupees 12,306 remained to complete the estimate. Mr. Garstin states that the work appeared to be very good, but that a good deal of earth-work remains unfinished. His remarks on the Ponnar Anicut deserve consideration, and the state of the Kottakulam Tank requires attention. The outlay on minor repairs amounted to Rupees 1,34,831 appropriated to 302 works of irrigation out of a total of 4,894 or only 6 per cent., from which it appears that the complaint of the inadequacy of the funds allotted to meet the wants of the district are well founded.

4. With reference to the remarks at paragraph 7, the Board observe that the preparation of lists of all minor Irrigation Works requiring repair annually would entail great and unnecessary trouble. The distribution of the allotment in the different taluqs should be arranged by the Revenue and Public Works Officers in consultation, and as the Collector countersigns the estimates and receives progress reports, he has the means of keeping himself and his Divisional Officers informed of what is going on throughout the district. The District Engineer would, of course, on application, furnish the Collector with any further information he may require.

5. There was no expenditure on Communications from Imperial or Provincial Funds. The outlay from Local Funds under this head amounted to Rs. 2,27,6 against allotments aggregating Rupees 2,47,319.

6. The expenditure on Civil Buildings was Rupees 19,728 out of allotment amounting to Rupees 24,264. The remarks of the Collector on the details of the Civil Buildings in progress deserve attention and seem to indicate want of efficient supervision; indeed the opinion of Collectors generally appears to be that the officers of the Public Works Department have more work than they can perform.

7. The report is full, and shows that considerable attention is bestowed by the Collector on the progress and condition of public works in the district.

(True Copies and Extract.)

(Signed) C. A. GALTON,
Acting Sub-Secretary.

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4th January 1876.*

No. 40.

ORDER THEREON, 4th January 1876, No. 20.

ESTABLISHMENT, No. 6.

COMMUNICATED to the District Engineer, South Arcot, and the Chief Engineer for Irrigation. The former officer will furnish explanation of the statements made in paragraphs 9 and 10 of the Collector's report on the defective work in the Civil Buildings described. The complement of Public Works Officers and Subordinates attached to the district has now been made up to the full strength, and two Probationary Assistants from Cooper's Hill sent to do duty in it.

(True Extract.)

Major-General, R.E.,
Secretary to Government.

H. 1875. No. 1.
Board of Revenue,
MADRAS.

P. 8152

PROCEEDINGS, 6TH DECEMBER 1875, No. 3,297

Dep. 22 Dec 75

Encl.

2

* Retd to the R.
Office - 17-1-76

Received 23. 12. 75

DECEMBER.

No. 3,297.

Public Works—executed in South Arcot
District during 1874-75.—Reviewing and sub-
mitting to Government Collector's report on —.

With order

No 20. 4 Jan 76
Communicated to the
District Engineer South
Arcot and the Chief
Engineer for Irrigation
the correspondence of
P. W. Officers and the
District has now
been made up to the
full strength, now of two

The former Officer

11. 12. 75

12. 12. 75

13. 12. 75

14. 12. 75

15. 12. 75

16. 12. 75

¹⁰¹
Gobt. of 1875 Madras
PUBLIC WORKS.

To *D. E. Larcot*

Printed

Issued

Recd.

Encl.

4 Jan'y. 1875 No. 10

Nos. 39-40

*Report on Public Works
for 1874. 75. South Arcot
Dist — Rep. of the
Board of Revenue
Submitting Collectors
under Comd. to the Dist
Eng. S. Arcot and to the
Chief Eng. for Irrigation*

Comd.