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MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No. 3406 Press ~~Mis.~~

458-59

Dated 22 10 1869.

Not to be folded or roughly handled

No. 458. Read the following Proceedings of the Board of Revenue, dated 23rd September 1869, No. 7,068 :—

Read the following letter from the Collector of Tanjore, to the Acting Secretary to the Board of Revenue, dated Point Calimere, Tritrapundi Talook, 21st June 1869, No. 115 :—

I HAVE the honour to submit my usual report on the operations of the Department of Public Works during the past official year 1868-69.

2. The following abstract shows the expenditure during the past year in comparison with that preceding :—

Works.	Expenditure of 1867-68.	Expenditure of 1868-69.	Difference. Increase.	Difference. Decrease.
	RS.	RS.	RS.	RS.
New Works.				
Civil buildings	6,630	40,193	33,563	.....
Agricultural	91,969	92,986	1,925	.....
Communication	30,563	27,810	.....	2,753
Miscellaneous Public Improvements	.....	.....	.....	.....
Total ...	1,29,153	1,60,989	34,589	2,753
Net ...	.....	.....	31,836	.....
Repairs.				
Civil buildings	2,365	1,323	.....	1,042
Agricultural	98,622	1,10,187	11,565	.....
Communication	56,147	36,076	.....	20,071
Miscellaneous Public Improvements ...	468	469	1	.....
Total ...	1,57,602	1,48,055	11,566	21,113
Net ...	.....	.....	.....	9,547
Grand Total ...	2,86,755	3,09,044	22,289	.....
Allotment.				
New works	1,68,268			
Repairs	1,59,766			
	.....	3,28,034		
Difference...	.....	18,990	.....	.....

3. It will be seen, from the above, that the total expenditure amounted to Rupees 3,09,044 or 18,990 less than the allotment, which was Rupees 3,28,034. Compared with 1867-68, the year under report has a net increase in expenditure of Rupees 22,289, which is the result of a gross increase of Rupees 46,155 and a gross decrease of Rupees 23,866. The largest increase occurs under "Civil Buildings." This has arisen from the construction of several Subsidiary Jails and Talook and Sub-Magistrates' Cutcherries, according to the new standard plan. The next item of increase is "Agricultural." The bulk of the decrease is under "Communication," and has arisen from many of the roads hitherto classed as Imperial having been transferred to the Local Funds during the past year.

4. I append below a tabular statement showing the more important of the new work executed during the past year :—

Names of Works.	Amount of Estimate.	Expenditure up to the end of the preceding year.	Expenditure during the year.	Total.
CIVIL BUILDINGS.	RS.	RS. A. P.	RS. A. P.	RS. A. P.
New Works.				
I. Constructing a Talook Cutcherry and Jail at Mayaveram	6,740	1,551 9 4	5,145 12 3	6,697 5 7
II. Constructing Court-house at Tanjore	56,440	.....	25,365 15 5	25,365 15 5
III. Constructing a Travellers' Bungalow at Tanjore ...	7,390	.....	7,417 5 8	7,417 5 8
AGRICULTURAL.				
New Works.				
IV. Lower Coleroon Anicut Works...	97,880	92,895 10 2	5,931 0 0	98,826 10 2
V. Regulating works for the improvement of the river Cauvery	70,400 1,28,210	33,946 14 8 28,309 1 4	12,072 0 0 59,870 10 10	46,018 14 8 88,179 12 2
Communication.				
VI. Opening the Canal between Negapatam and Vedaraniem.	70,410 37,782	61,452 15 8	27,810 0 0	89,262 15 8

5. The Talook Cutcherry at Mayaveram, on which an expenditure of Rupees 1,551-9-4 was incurred last year, has been completed at a total cost of Rupees 6,697-5-7.

6. The Court-house at Tanjore is under construction on an estimate of Rupees 56,440, which is made up of Rupees 48,570 originally, and Rupees 7,870 subsequently sanctioned on a supplemental estimate. The expenditure up to 31st March last, amounted to Rupees 25,365-15-5.

7. The Travellers' Bungalow at Tanjore was commenced and has been completed in the past year. The estimate was Rupees 5,130, subsequently increased to Rupees 7,390 by a supplemental estimate. The cost was Rupees 7,417, of which Rupees 2,565 were debited to the Public Bungalow Fund, and the remainder was advanced from the District Road Fund as a loan to Imperial Funds. The building was opened to the public from the 22nd March 1869. Captain Oakes informs me that he has taken steps to repay the advance in question.

8. Under "Civil Buildings" several other works have been commenced, such as Subsidiary Jails and Talook Cutcherries, according to the approved standard plan; but, as the expenditure on them was small, I have not enumerated them in the foregoing statement in detail.

9. The expenditure under the Lower Coleroon Anicut Works was, as observed in last year's report, under two estimates. Of these, the sluice and the seven arches, which were estimated at Rupees 97,880, have been completed at a cost of Rupees 98,826, of which Rupees 5,931 were expended during 1868-69. The other estimate, amounting to Rupees 70,400, was for completing a front and rear retaining wall

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and apron along the south branch. Of this amount Rupees 16,750 provided for the front retaining wall, but the work was not carried out as it was decided that it was not required. The work is reported to have been all but completed, there being but a small quantity of rough stone to be brought down. The expenditure up to 31st March last was Rupees 46,019, of which Rupees 12,072 appertain to 1868-69.

10. The regulating works for the improvement of the Cauvery consist of the following items :—

	Estimate.
	RS.
Constructing dams for the Cauvery and Kodamurti... ...	1,00,000
Do. for do. Arasalur	16,970
Do. for do. Veerasholen ...	11,270

Cauvery and Kodamurti Dams.—The expenditure on these works up to 31st March last was Rupees 63,042, of which Rupees 42,240 were spent in 1868-69. The works are reported to be in a fair state of progress. The expenditure on the Cauvery and Arasalur dams during the past year was Rupees 12,316, which being added to the sum spent in the previous year, makes a total of Rupees 13,440. The Arasalur dam has been completed, and the one on the Cauvery is in an advanced stage of progress. The Cauvery and Veerasholen dams have been completed, and 1,660 cubes for the extended rough apron are ready. The expenditure up to 31st March 1869 was Rupees 11,698, including Rupees 6,383 spent in 1867-68.

11. In my last report I stated the canal was opened for traffic, and that the widening of the artificial portions of it from 10' to 20' was progressing fairly, as also were several masonry works under the original estimate of Rupees 70,410. In November last, a supplemental estimate, amounting to Rupees 37,782 was sanctioned for widening and sloping the sides, for removing shoals and silt, and for the construction of the several masonry works. The canal was not closed till the middle of March, and the widening, therefore, was hardly commenced, as some time was required for allowing the water to evaporate. The masonry works also do not appear to have been begun though the materials for them were being prepared. The actual amount spent in 1868-69 was Rupees 27,810, and this has been laid out in completing the masonry works which were in progress the previous year.

12. The total amount of expenditure under "Repairs" was Rupees 1,48,055, or Rupees 9,547 less than in 1867-68, being the result of a gross decrease of Rupees 21,113 and a gross increase of Rupees 11,566. The largest amount of decrease is under "Communication," which, as has been observed elsewhere, is owing to the transfer of many of the District Roads to Local Funds. The increase occurs under "Agricultural," and is therefore a matter for satisfaction.

13. The number of Irrigation works repaired during the past year, and the mileage of communication kept in order, are annexed below :—

Irrigation Canals	73
Tanks...	7
Dykes...	421
Drainage	3
Navigable Channels...	15
Roads, miles...	196
Civil buildings...	15

14. From the foregoing the Board will observe that the regulating works at the heads of all the principal branches of the Cauvery are in a satisfactory state of progress. It is also satisfactory to know that similar works are to be put in hand at the heads of branches thrown off by the Vennar, since provision has been made in the sanctioned Budget of the current year for their execution.

15. In paragraph 11 of their Order, dated 11th November 1868, No. 2,831, the Government direct that the progress made in improving roads may be specially noted in the report on the progress of Public Works. In this order the following roads are classed as Main lines and Salt.

Main lines.

II. Branch of the Great Southern road from Tindivanum to Negapatam and another from Vikravandi to Combaconum.

XI. Branch of the Great Southern road from Shealli to Salem, *via* Grand Anicut.

Salt roads.

17. Vadaraniem to Manargudi (thirty-four miles).
18. Adrampatam to Gundracottah (thirty-two miles).
19. Puttucottah to Tanjore (forty miles).
20. Kattumavadi to Arandanghi (twenty miles).

This classification could not be carried out in its entirety during the past year, and sums have thus been laid out from Imperial Funds on roads which are now declared Local, and from District Road Funds on those classed as Main lines or Salt roads. I, however, annex a list of roads actually maintained last year from Imperial Funds:—

	Rs.
Trunk Road No. 9, or the branch from Vikravandi to Combaconum (thirteen miles)...	2,024
No. 1,—Tanjore to Negapatam, west of Tanjore (seventy-two miles)	9,324
No. 2,—Shealli to Grand Anicut (eight-two-and-a-half miles)	9,577
No. 35,—Paralem to Tritrapundi (twenty-eight miles)	2,910

16. I enclose a report* from the Head Assistant Collector, Mr. Burrows, on the Public Works in his division. In paragraph 6 of his letter, Mr. Burrows complains of channels being unprovided with sluices at their heads and of their inefficiency where they exist. He also in paragraph 8 notices that the channel called Vikramanar is said to be so inefficacious that the lands under it are "either waste or shavi." These two paragraphs will be brought to the notice of the Superintending Engineer, in order that steps may be taken, if possible, to introduce a better state of things.

* To be returned.

Proceedings of the Madras Government, Public Works Department, 22nd October 1869.

From L. R. BURROWS Esq, Acting Head Assistant Collector of Tanjore, to the Collector of Tanjore, dated Shealli, 17th April 1869, No. 47.

I HAVE the honour to submit the usual report on the state of the Public Works in this division.

2. *Firstly,*—Under the head of "Buildings," I have to report that the Subsidiary Jail at Mayaveram which was put in thorough repair last year, is now being demolished to make room for a properly planned Jail consisting of six wards, with a latrine, within the Jail enclosure. The Range Officer reports that all the materials are ready for commencing the work, which will be pushed on with as soon as the old buildings have been removed. The commencement of building the newly sanctioned Cutcherries at Porayar and Shealli is only delayed until the arrangements for taking over the sites are completed. A separate report on the Public Bungalows has been already submitted—Letter No. 39, dated 7th April 1869.

3. *Secondly,—Irrigation works.*—It appears from the progress report last sent in by the Range Officer that the total expenditure on repairs to the Irrigation works of this division carried out by the Public Works Department, amounts for the whole year to Rupees 7,240-10-0. The annual revenue derived from the lands irrigated by these works is about Rupees 7,75,075. It is not necessary for me to point out that the expenditure on the repair of Irrigation works has not been excessive.

4. Nothing great has been done. Strengthening banks here and there has absorbed the greater part of the money. Repairing a few sluices has taken the remainder. It must be allowed that the channel banks are in good order, for there were no breaches during the last wet season. It may be said that this immunity from breaches may perhaps be due to the deficiency of the water-supply last year, but although it must be admitted that the water-supply was on the whole deficient, yet it is also certain that one of the highest freshes known for years came down the Cauvery in the middle of August, and that all the banks stood the test satisfactorily.

5. The innumerable small sluices, dams, and aqueducts scattered all over these two talooks, are also generally in an efficient state of repair. To keep them so, requires the unceasing care and attention of the officers of the Public Works Department. It is not difficult to find dams, sluices, and aqueducts that would be all the better for some slight repairs, for the villagers are not slow in pointing out any defects of this sort; but, generally speaking, these works are in fair condition.

6. The great defect in the irrigation system of this division appears to me to be the paucity of works at the heads of channels for regulating their water-supply. In some cases also these works, where they do exist, are inefficacious.

7. To give an instance, there is a large channel in the Mayaveram Talook called the Munja Voikal, irrigating upwards of 2,000 velis of land. This channel is fed by the Veerasholen, the head being in the north bank of the Veerasholen, very near to the Travellers' Bungalow at Teruvalancaud. About a mile from the point, where the Munja Voikal separates from the Veerasholen, it throws off a branch to the right called the Mahi Mali. The latter is also a large channel irrigating about 1,000 velis, that is, about half as much as the Munja Voikal. There is no masonry or other work at the point of bifurcation of these channels; the proportion of water which each channel receives is a matter of pure chance; and last year, the Mahi Mali, owing to its having a greater fall, and there being fewer dams thrown across it, took off more than half the water, although properly speaking it should have only taken one-third. There has been a great loss of revenue this year under the Munja Voikal, and the loss of the Mirassidars owning lands under that channel has been still greater. I am sorry I am not able to give exact statistics (they will be known as soon as the remission account of the Mayaveram Talook is completed); but I estimate the loss of the Government at about Rupees 4,000. I do not say that this might have been altogether averted if the water had been properly distributed between the Mahi Mali and the Munja Voikal but the loss would have been more fairly distributed between the Ryots, whilst the loss to the Government would, at all events, not have been increased.

8. Again, there has been a great loss this year under the Vikramanar which is a large channel branching from the north bank of the Cauvery at a point about two miles west of Coottallam. The bed of the Cauvery at this point was formerly very wide, but has latterly been greatly confined by

the planting of Nanul reed, which has almost blocked up the mouth of the Vikramanar, the head-sluice of which is built in the old bank of the Cauvery. Almost the whole of the Mahanum of Korakay, which is irrigated by this channel, is either waste or *shavi*, and where crops have been raised, they have been very poor and unremunerative. I am informed by the Range Officer that it is contemplated to still further narrow the bed of the Cauvery by planting Nanul near the head of the Vikramanar. If this be done, I am of opinion that it would be both to the interest of Government and the Ryots to assess all the lands now irrigated by the Vikramanar to Punjah, levying only a water-tax on the small extent of land which would be cultivated with wet crop. I should, however, recommend that the attention of the Public Works Department be first directed to the state of the Vikramanar head, with a view to its being ascertained how a more adequate supply of water might be turned down that much neglected channel.

9. During the year under review, the value of the work done in Kudimaramut is estimated by the Tahsildars to exceed 10,000 rupees. The chief item under this head was the clearing of the bed of the Cauvery. It has been denied that the clearing of the Cauvery would secure any advantage or that it was necessary. But when it is considered that the Ryots holding lands under the lower course of the Cauvery are unanimous in declaring that the bed of that river is gradually becoming silted up, and support their opinion by volunteering the supply of a large body of labourers every year for the clearing away of the silt, I think it can scarcely be doubted that the clearing of the Cauvery is both a useful and necessary work ; for the Mirassidars of this part of the district are no mean authorities on the subject of irrigation, and their opinion could not be expressed in any more forcible manner on this disputed point than by their voluntarily supplying labourers at their own cost in the manner they do.

10. Besides, it should be remembered that the Cauvery, unlike the Arasalur, Veerasholen, and the other large rivers which drain off its waters towards the south, has no direct communication with the sea, but is gradually narrowed by the numerous channels which branch from it, to the dimensions of a minor irrigating channel. In fact, it may be said to terminate within the limits of the village of Radanallur, where a dam is thrown across it, and a few channels led off to villages lying towards the east. This is about three miles from the sea-coast west of Caveripatam.

11. The greatest part of the deposit brought down by the Cauvery must, therefore, be left in its bed, for there being no through current to carry it off, it can go nowhere else. The irrigation of the Cauvery to the east of Mayavaram has been very unsatisfactory this year, notwithstanding all that the Ryots have done in clearing the bed. This I believe, however, to be owing to the unusually short supply of water ; the remedy for which is beyond human control. It will not be necessary to do much this year except to deepen the channel for a short distance above the dam before-mentioned.

12. I am not aware whether the Board's Circular No. 3 of 1869 is intended to apply to the Irrigation works of this district, but I am convinced that it would be conducive to the ready despatch of work both in the Revenue and Public Works Departments, and would also tard, in a great measure, to prevent irrigation disputes ; if a complete register of all Irrigation works were to made and kept. This register should give all the information required in the form prescribed by the Board, and should also contain accurate information of turns (முறை) between villages wherever that system may be found to exist.

13. The present system of settling irrigation disputes is most unsatisfactory ; it is all in favour of the aggressor, who knows that he cannot lose anything, and may gain considerably by interfering with his neighbour's water. If an authoritative register were kept either in the Revenue or Public Works Departments, any acts of aggression or mischief, such as are now commonly passed over, could be detected and punished without difficulty. A good register would, in my opinion, completely obviate the necessity for further legislation in the matter of irrigation disputes.

14. Of the two talooks of Shealli and Mayaveram, I should say that the irrigation of Shealli was satisfactory, whilst that of Mayaveram was unsatisfactory. Under the large channels called the Palan Caveri and Muttappan Caveri in the latter talook, the crops have been very bad this year.

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15. *Third,—Roads.*—The roads, though still far from being good, are nevertheless in better condition than they were last year at this time. The Imperial Road No. 2 which goes from Anikaran Chuttrum, *via* Mayaveram to Combaconum, is, with the exception of a few bad places here and there, in fair order. The same may be said of the roads from Shealli to Tranquebar, and Mayaveram to Tranquebar as far as the point where they unite at Terucadayoor. From Terucadayoor to Tranquebar the road is in a disgraceful condition ; it is nothing better than a track of loose sand. From Pooriar to Tranquebar, for a distance of about one mile, the road was formerly kept in good condition by the convicts, but since the arrival of Dr. Wither at Tranquebar, the convicts have not been employed on the roads, and the consequence has been that that part of the road over which there is a heavy traffic to the Custom-house and Salt pans, is now in almost a dangerous state. The roads about Tranquebar are bad (the worst in the division,) and present a strong contrast to those of the neighbouring French territory of Karikal. The best roads are those within the Mayaveram Municipality.

16. The Range Officer reports the completion of the road from Tiruvalandoor to the Palavar bridge near Mannamodu. This was commenced last year by the Revenue Department and stopped at the instance of the Superintending Engineer on account of the misconstruction of two bridges over irrigating channels near the village of Natarajapuram. The misconstruction of these bridges was certainly owing to a mistake made by the Tahsildar, who was entrusted with the execution of the work, but his mistake arose from his implicitly carrying out, and not, as Captain Oakes affirmed, from his misunderstanding or neglecting the instructions of the Professional Department. To the north of these bridges an entirely new line of road has been marked out by Mr. Livesay, which is a great improvement on the line originally taken up. The importance oft his new road cannot be over estimated.

17. The road along the south bank of the Coleroon was in rapid progress when I visited it in January, and the Assistant Engineer now reports that the earth-work is almost completed as far as the seventh mile to the west of Anikar Chuttrum. When completed as far as the lower anicut, this road will be a great boon to the villages through which it runs.

18. A new road has also been made from Mannamodu to Papangoody on the Coleroon bank. This will be a useful communication between the villages about Mannamodu and the number 2 road leading to Madras and the north.

19. A new road is projected from Shealli to the village of Vuddarungam, which is also on the Coleroon bank, and another to bring Devicottah, Achapuram, and other villages in the north-east corner of Shealli Talook into communication with the number 2 road.

20. In conclusion, to revert to the Tranquebar roads, I would submit that the allowance of about 60 rupees annually per mile for the maintenance of the road between Terucadeyoor and Tranquebar is a perfectly useless expenditure of money. What is required in the first place is a *road*, and that cannot be constructed for less than about 1,500 rupees a mile. As it is in every way desirable that the serious nuisance which is now miscalled a road, should be as speedily as possible abated, I venture to request that you will take steps for securing a proper and adequate allowance for the renovation of the five miles of communication between Terucadeyoor and Tranquebar.

21. The 1,000 rupees which was allotted for the repair of tanks for drinking purposes in these two talooks was distributed by me in the proportion of Rupees 600 for Mayaveram and Rupees 400 for Shealli Talook.

22. The Shealli Tahsildar reports that the amount allotted for his talook was debited in the accounts before the expiration of the official year, and that the work will be all completed in about a week's time.

23. In Mayaveram, it appears that the tanks were too full of water to commence work in March, and that the Tahsildar has omitted to draw the money hitherto.

Cue 414

Govt. of {1869} Madras.

PUBLIC WORKS.

To The Superintending Engr.
6th Division

Dated &c., &c., &c.

Recd.

Encl.

G. O. 22nd October 1869, No. 3406

Nos. 458-459

Corresp. y Mr. Ord. y this Dept.
Reve reversing the sentence
the Collr. in Land Proceedings
in the Tanjore Dist. during 1868-69.
and other Offrs. concerned.