Revenue Department.

No. 2854.

Govt. of {1869} Madras.

PUBLIC WORKS.

To

THE SUPERINTENDING ENGINEER,

6TH DIVISION.

&c., &c., &c.

Dated August, 20th.

Read 24th Inst.

G. O., 20th August 1869, *No.* 2,711.

AUGUST.

Nos. 432-433

Tanks.—Passing orders on the letter from the Superintending Engineer of the 6th Division, reporting on the state of certain tanks in the Trichinopoly District.

No. 117-26 Aug. 69.

North Arcot

No. 432. Read the following letter from the Superintending Engineer, 6th Division, to the Secretary to Government, Public Works Department, dated Tanjore, 17th July 1869, No. 493:—

I HAVE the honour to report upon the tanks noted in the margin, as directed in G. O., No. 1,652, dated 26th May 1868.

Maravanur, Savalur, Togamalai, and Kavanur.

2. The Maravanur tank is supplied by a channel branching from a jungle stream of the same name, and receives the drainage of about 12 square miles. A dam of rough stone 60 yards long across the drainage stream diverts water to the tank, which is well provided with masonry works having 3 sluices which are in good order, and 2 surplus weirs 36 and 19 feet long; the former is built of stone and brick-in-chunam, and is in good order; the latter of rough stone, without mortar, through which there is some wastage of water when the tank is full. The bed of the tank is somewhat silted, but this cannot be remedied, and the basin of the tank which covers an area of 224 acres cannot be enlarged, as the ground rises very gradually, and a large area of dry cultivation would be submerged if the water level were raised; however, the extension of the tank is unnecessary, for it is capable of holding 1,157,760 cubic yards of water, or nearly two-thirds of the supply required to bring the land dependent upon it to maturity, and, therefore, has only to be filled twice in a season; the tank does not appear to have been breached, and there has been no falling off of the revenue. Of course, if there is no rain in the water-shed, the tank will not fill. An estimate of Rupees 1,400 has lately been sanctioned to rebuild the rough stone calingulah with mortar for raising the bank and for improving the supplying channel.

	Acres.
Government land	214.45
Inam do.	154.6
	369.05

3. The Savalur tank is supplied by a dam taken from a rough stone dam across the Mamoondy river, a jungle stream which drains an area of about 90 square miles. The tank has two masonry sluices which are in good order, and a surplus sluice of two small vents; it has no surplus weir, and as the head of the supply channel is not provided with any masonry work, this tank runs the risk of being breached when the rain in the water-shed of the Mamoondy is heavy. The bank is in very fair order, and though the bed is silted, the tank is capable of containing nearly three-fourths of the supply required for the land dependent upon it, *viz.*, 266 acres; the area covered by the tank bed is 125 acres, and the tank is capable of containing 939,800 cubic yards of water. This tank is not capable of extension for the reason stated relative to the Maravanur tank.

Government	125¼
Inam	140½

4. The revenue derived by Government from this tank is Rupees 313 according to the ayacut, the average revenue of the last five years has been Rupees 312, and the highest Rupees 370-5-3. The revenue derived by Inamdars is Rupees 352 annually. For providing the channel head with a sluice for improving the dam across the jungle stream, and for placing the bank in thorough order and protecting a portion of it with a rough stone revetment, a sum of Rupees 1,610 is required;

this is more than five times the revenue derived by Government, though only about 2½ times the revenue derived by Government and Inamdars, but the latter do not appear to have hitherto contributed towards the repair of tanks, and I am in communication with the Collector on the subject of their liability.

5. There are two tanks at Togamalai which are supplied by jungle streams draining six and two square miles respectively. The acreage and assessment are as per margin; in the larger tank there is a sluice, but none in the smaller, and both tanks surplus over natural weirs at one extremity of the banks; the larger tank covers an area of 70 acres, and can contain 303,333 cubic yards of water, or about 25 per cent. above the quantity required for the land dependent upon it; and the smaller covers 25 acres, and contains 207,407 cubic yards, or about 66 per cent. above the quantity required; neither of the tanks are in bad order; they do not require extension, and the smaller would, if extended, submerge a portion of the village.

	Acres.	Rs.
Large tank	51	129
Small do.	21	54

6. Provision has been made for a new sluice in each of the tanks and for repairing the banks.

Kavanur.—There is no tank of this name. At Kavanur, however, there are three abandoned tanks, two named Rayen Yairy, and the third Iyah Pillay; it is not known to which Mr. Crole refers, as none of the tanks are to the N. N. W. of the village.

7. The Rayen Yairy tanks are one above the other, the surplus of the larger tank falling into the smaller; the upper tank is silted from 2 to 2½ yards above the level of the land dependent on it, clearing a tank is of course out of the question, for the removal of *4,840 cubic yards of earth from a tank bed to provide sufficient capacity to hold a supply for a single acre would be Rupees 608, supposing the bed not to be great and the work to be executed at 2 Annas per cubic yard, while the water cess for one acre would be about Rupees 2½ or $\frac{5}{12}$ per cent. on the outlay. I merely mention this because there seems to be a general impression among the Junior Civilians particularly, that tank beds can and ought to be cleared.

* With evaporation going on in tank this should probably be 50 per cent. higher, or 7,260.

8. To return to the Rayen Yairy tank. To restore it and to render it capable of containing a supply for 150 acres, which is stated to have been formerly dependent upon it, it would be necessary to raise the bank so as to admit of an average depth of 1⅛ yards of water being retained; the earth-work would alone cost about Rupees 4,000, retaining the water to the necessary level would necessitate the extension of the bank about half a mile to some high ground, and the water would submerge about one-quarter of a square mile, or about 160 acres of dry cultivation, which is not the property of the proprietors of the lands under the tank, and the bed of the tank which is now under dry cultivation would be thrown out of cultivation. Moreover the tank is badly situated, it is placed across a jungle stream draining about six square miles, and this stream brings down large quantities of silt which is retained in the tank.

117 Acres.

9. After a few years, therefore, the bank would have to be raised again. From what I have said above it is clear that the restoration of the tank is undesirable, and the return from the restoration of the tank would probably be Rupees 250 in excess of the revenue now derived from the dry lands above and below the tanks, while the restoration of the tanks would cost about Rupees 6,000. Moreover, the proprietors of the 160 acres which would be included in the water spread would require compensation for the land submerged. The tank is said to have been ruined about twenty-five years.

10. The Iyah Pillay tank is said to have been unused for forty years. I called upon the Tahsildar to inform me, if possible, why the tank was abandoned, but he has not yet replied; the area of the bed of the tank is about 67 acres, and it receives the drainage of only about half a square mile; it is said, however, to have been formerly supplied from a dam in the Iyaur, about three miles distant from the tank, and indications of portions of a channel exist. The tank is 22 feet below the crest of the calingulah in the Iyaur, but a deep cutting would be required through some high ground and to pass two hollows or drainage streams; and in the last 1,000 yards there would be a fall of about 10½ feet, or about 18 feet a mile; large quantities of soil would be brought into the tank which is small, and it would soon be filled up, while the cost of building masonry falls to prevent this would be very great,* and the restoration of the tank and the excavation of the channel would be about Rupees 4,500, while the anticipated return is only Rupees 361; so that the restoration of the tank is undesirable the more so as, under any circumstances, large quantities of silt would find their way into the tank.

* Rupees 6 or 7,000
4,500
11,500

11. Having now shown that the restoration of the tanks at Kavanur is undesirable, and that the condition of the other tanks adverted to by Mr. Crole is not so alarming as would appear from his report, I would observe that it is quite impossible for an unprofessional person to form an opinion on the capacity, &c., of a tank when it is dry, and hence his observation that the beds are convex; having disposed of the special cases mentioned, I would only observe with regard to the general statements, that though there is room for improvement in the tanks, it is not a fair representation of the condition of the works in Kulitalai and Museri to speak of their being "a plethora of public works unexecuted, neglected, and unrepaired," the more so as a very large number of tanks in the Kulitalai Talook are not the property of Government, or are so in so small a degree that the cost of improvement, as in the Savalur tank, is prohibitive when compared with the return to Government from the tanks.

Maravanur, Savalur, and Togamalai.

Paragraph 23.

12. Having heard from Mr. Crole that the people were anxious to take up contracts along the lines of road in progress, I proceeded through the Range very shortly after his visit, and found that the people were anxious to undertake the work on receiving advances, but not otherwise, and this system has very properly been put a stop to; the contractors, however, were in many places unable

In Kulitalai.

to obtain any assistance in the way of labour from the villages through which the roads passed, especially on that from Manaparai to Kulitalai, and were obliged to bring their coolies from the villages near the Cauvery. This road has been completed as far as Motooputty, but the work has been stopped, as there are no funds available for its extension; this is much to be regretted as the fourteen miles which are completed are of but little use, as the old track for a distance of nine miles from Motooputty to Manaparai is not practicable for a conveyance with springs.

No. 433. ORDER THEREON, 20th August 1869, No. 2,741.

IRRIGATION, No. 21.

THE Government are glad to find, from this letter from the Superintending Engineer, 6th Division, that the Maravanur, Savalur, and Togamalai tanks on which he was, in the order of the 26th May 1868, No. 1,652, specially called upon to report, are not in that inefficient state in which the late Acting Head Assistant Collector of Trichinopoly, after seeing them when dry or nearly so, thought them to be.

2. His Excellency the Governor in Council thinks it right to observe that Revenue Officers generally in commenting upon the condition of Irrigation works would find much advantage in consulting with the Public Works Officers of the Ranges in which they may be making tours of inspection, for they would thus be enabled to afford the Revenue Board more complete and correct information, which would embrace, not merely statements of the apparent condition of Irrigation works, but likewise particulars of the causes of that condition, of its effects, and of the nature and extent of the work that may be needed to improve them.

3. It is not quite clear whether Captain Oakes was able to find the ruined tank of Kavanur referred to in paragraph 14 of Mr. Crole's letter, but no one of the three tanks seen by the Superintending Engineer appears likely to be worth restoring as an Irrigation work.

(True Extract.)

Major, R.E.,
Acting Joint Secretary to Government.

To the Superintending Engineer, 6th Division.
,, Revenue Department.
To Superintending Engineers.

R.—117.
Comm. to the Board of Revenue

Exd. E. C. Shunker.