Archives I 10,006—16-8 77.

(1) Number of pages 4

(2) Date of repair 9-6-88

(3) Initials of the Referencer [illegible]

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Revenue **DEPARTMENT**

G.O. No. / ~~B.P. No.~~	1369	Press. / Mis.
Dated	3-6-1878	197 .

Not to be folded or roughly handled

327

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

13th May 1878, No. 404 I.

Irrigation.
Account.

Read the following paper :—

No. 63. From Lieutenant-Colonel H. L. PRENDERGAST, R.E., Officiating Superintending Engineer, North Arcot, to the Chief Engineer for Irrigation, dated Vellore, 20th February 1878, No. 4,535.

With reference to your memorandum communicated in G.O., No. 1,462, dated 13th June 1876, I have the honor to submit for sanction plans and estimates, amounting to Rupees 20,050, for repairs and improvements to the Doosy Mamundoor tank in the Arcot taluq.

1 Section.
7 Plans.
2 Detailed Estimates.
2 Abstract do.
2 Specifications.
1 Accompaniment.
1 General Abstract.
1 Memorandum.

2. The arrangements were determined on your orders by Major Pennycuick, but nothing has been done as yet in the way of the alterations to the calingulahs.

3. The area of discharge by sluices is greater than that shown by you to be essential ; and with the number of vents allowed, viz., 20, the under sluices are necessarily placed in the longer south weir, as there would not be space for them in the north weir.

4. The plans have been a long time on hand, and I beg they may be accepted without being of the uniform size as directed in your Circular No. 23 C of the 20th December 1877.

5. I request that the enclosures may be returned when no longer required.

No. 92 I.

No. 63-A. *Note by the Chief Engineer for Irrigation.*

The Officiating Superintending Engineer, North Arcot, forwards, with his letter marginally noted, two estimates in connection with the Doosy Mamundoor Hissa tank which is the terminal one of the Doosy channel of the Palar Anicut System, and is situated in the Arcot taluq, Vellore range.

Dated 20th February 1878, No. 4,535.

2. The nature of the work proposed for execution and the heads of account to which it is chargeable are as follow :—

PALAR ANICUT SYSTEM.

(2.)—Main Canals and Branches, Doosy Channel.
N—Tanks and Reservoirs, Doosy Mamundoor Hissa Tank.
Revenue.
IA—Extensions and Improvements.

		Rs.
Improving the lower calingulah	... ...	3,585
Constructing a store-room	... ...	250
Improving the upper calingulah	.. ..	321
Do. the Mamundoor low level sluice	... ...	10,112
Do. the Doosy low level sluice	... ...	2,812

II.—Raising and Repairs.

Raising and repairing the bund	2,420
Repairing the Mamundoor high level sluice	643
Do. the Doosy high level sluice	27
Total ...	30,000

3. The following particulars of this tank are recorded :—

Ayacut area	Acres 3,419
Assessment	Rupees 21,000
Average revenue	20,424
Highest do.	Not stated.
Expenditure during the previous four years	Rupees 3,000

The area of the catchment basin is 60 square miles, the maximum flood supply is calculated at 7,540 cubic feet per second, for discharging which we supplies there are two calingulahs, the lower one 284 feet in length, and the upper one 119 feet, the aggregate length of both being 403 feet or 224 feet effective. These calingulahs are at present at different levels, their crests being at 2·77 and 5·82 feet below F.T.L.

This tank is to some extent supplied from the Doosy channel, and it may be convenient to consider it as belonging to the Palar Ayacut System, but its principal supply is received by the Rajahkal from the Palar many miles below the anicut. The Rajahkal is regulated by a head sluice, and the channel was lately cleared by famine labor from Famine Funds.

It is proposed to remove the dam stones of the south or lower calingulah and to construct a set of sluices 36 feet with self-acting revolving shutters. The wing walls will be raised to the level of the bund. A store-room 8 feet square inside measurement is to be constructed at one end of this weir. The modifications shown on the plan should be made, 13 sluice vents will suffice and a good deal of cut stone work will be saved.

It is proposed to convert the north calingulah into a weir by removing the dam stones and raising the body wall to F.T.L., the wing walls will also be raised. The crest of the body wall should not be of brick work but of stone, and probably the removed upright stones can be used to form the crest. The small vent in the crest wall of this weir can be required only for irrigation purposes, and instead of a revolving shutter, as provided for in the estimate, it should have a sliding shutter. A rough-stone apron 17½ feet wide is to be added in rear of the present apron.

Portions of the bund of this tank are low and weak and need to be raised and sectioned.

There are four irrigation sluices, of which two are called the Doosy high and low level sluices, and the other two the Mamundoor high and low level sluices. The high level sluices are in need of repairs, and the low level sluices were found* to need extensive restorations and improvements, and these have already been carried out. Work was in progress at the Mamundoor low level sluice as far back as March 1876. The plans of the sluices show the nature and extent of the repairs and improvements which have been effected. Approaches to the heads of the sluices have also been found to facilitate regulation.

Vide paragraph 4 of memorandum, No. 292, of 12th May 1875, to District Engineer.

The cost, Rupees 10,112, of the work done to the Mamundoor low level sluice is very great, and the particulars given show that the opening of the bund, which is about 210 feet thick at this part, forming the ring bund and re-making the bund came to Rupees 4,456. Had this been considered before the work was undertaken, it would probably have cost less money to have built an entirely new sluice with its head 60 or 70 feet nearer the line of the top of the bund.

The estimate provides for—

1*st*.—Improving the south (lower) calingulah.
2*nd*.—Constructing a store-room.
3*rd*.—Improving the north (upper) calingulah.
4*th*.—Improving the Mamundoor low level sluice already carried out.
5*th*.—Improving the Doosy low level sluices already carried out.
6*th*.—Raising and sectioning the bund wherever required, gravelling the top, and turfing the rear and the unrevetted portions of the front slope.
7*th*.—Repairing the Mamundoor high level sluice.
8*th*.—Repairing the Doosy high level sluice.

The number of tanks lying above the one under review is not specified, but it is stated that they are mostly in fair order, the bunds of almost all of them having lately been put in order from Famine Funds.

Most of the work provided for in the present estimate, with the exception of the improvements to the calingulahs, is said to have been carried out.

There is nothing in the papers to show what has been done to render the Rajahkal safe from breaching by the upland drainage it receives. Instructions were given in May 1873 after an inspection, and if no surplus works have been built since that time the matter should be attended to at once. The channel had been repeatedly breached prior to 1873.

Memorandum No. 292.

The delay which has occurred in the submission of the estimates is not at all satisfactory. The subject has not been noticed by the District Engineer; the present Range Officer explains why a delay of more than 1½ years has occurred since he took charge, but the charge should not have been transferred without all necessary information being placed on record by the relieved officer.

Vide memorandum, dated 22nd January 1878.

The following statement shows the proposed distribution of the outlay recommended for sanction to the debit of the several heads of account involved ;—

Heads of Service.—Irrigation.

Fund.—Revenue.

Name of System or Group.	Distinguishing Number or Letter of Group.	Name of Tank or Channel.	Description of Work.	Main and Sub-heads.	Class.	Amount of each Item.	Amount to be separately accounted for.
						Rs.	Rs.
			Improving south weir.			3,585	3,585
			Constructing store-room.			250	250
			Improving north weir.			221	221
			Do. Mamundoor low level sluice.			10,112	10,112
			Do. Doosy low level sluice.			2,812	2,812
Palar Anicut System.	..	Doosy Mamundoor Hines tank.	Repairing bund ..	(2) Main Canals and Branches, Doosy Channel, No.—Tanks and Reservoirs.	IA Extensions and Improvements.	2,420	
			Do. Mamundoor high level sluice.		IB—Maintenance and Repairs.	623	2,970
			Do. Doosy high level sluice.			27	

FORT ST. GEORGE,
23rd March 1878.

(Signed) P. MONTGOMERIE, Major, R.E.,
Ag. Dy. Chief Engr. for Irrigation,
for Chief Engr. for Irrigation.

No. 64. ORDER THEREON, 13th May 1878, No. 404 I.

THE following estimates from the Vellore range, forwarded by the Officiating Superintending Engineer, are sanctioned :—

Head of Service.—Irrigation.

PALAR ANICUT SYSTEM.

(2) MAIN CANALS AND BRANCHES.

DOOSY CHANNEL.

N—Tanks and Reservoirs.

Doosy Mamundoor Hissa Tank.

Revenue.

IA—Extensions and Improvements.

		Rs.
WORK—Improving south weir		3,585
Constructing store-room		250
Improving north weir		321
Do.	Mamundoor low level sluice	10,112
Do.	Doosy low level sluice	2,812

IB—Maintenance and Repairs.

Repairing bund		2,420
Do.	Mamundoor high level sluice	523
Do.	Doosy high level sluice	27

To be carried out by the Public Works Department Officer in charge of Vellore range.

2. These sanctions have been registered as No. 57 I of 1878-79.

3. The delay in submitting estimates for work commenced nearly two years ago is not satisfactory.

(True Extract.)

(Signed) JOHN MULLINS, Lt.-Col., R.E.,
Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

(True Copy.)

Major, R.E.,
Under Secy. to Govt., P.W.D.,
Irrigation Branch.

To the District Engineer, North Arcot.
" Collector of North Arcot.
" Chief Engineer for Irrigation.
" Examiner of Public Works Accounts.
" Revenue Department.

Exd. E. C. Shunker.
15 Spare Copies

Revenue 1878 Appendix
pp 2360.

IRRIGATION.
ACCOUNT

Cobl. of [1878] Madras.

PUBLIC WORKS.

Presented

Both Houses

Read June 3rd

Ordered, 31st May 1878, &c. &c.

MAY.

Nos. 63-64.

Price

No 1369
Communicated to
the Board of Revenue
3 June 1878 Gth

Dowp Memorandum Public Works Accts
Irrigation for enquiry to the
Madras

Mr Chamier