

(1) Number of pages 6
 (2) Date of repair _____
 (3) Initials of the Referencer _____

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Revenue DEPARTMENT

G.O. No.	475	Press.
B.P. No.		Mis.
Dated	10.2.1977	197 .

Not to be folded or roughly handled

275/2

*Proceedings of the Madras Government, Public Works Department,
5th February 1877. No. 395.*

Read the following :—

No. 91-W.

No. 157.

Note by the Chief Engineer for Irrigation.

The following estimates from the No. 1 or Northern Range are forwarded by the
No. 154, dated 3rd January 1877. Officiating District Engineer, Tinnevely,
with his letter marginally noted :—

Taluq.	Village.	Work.	Amount.
Sattoor ..	Chuttrum Rottiaputti ..	Paraikulam Tank ..	Rs. 1,490
Sankarnaimarcoil ..	Theroovengadam ..	Paraikulam Tank and Supply Channel ..	2,630
Do. ..	Keelathonnai ..	Padanthapooly Tank ..	775
Do. ..	Palamcottay ..	Kallathikulam Tank ..	625
Total ..			5,420.

2. The financial and hydraulic details of the Irrigation works concerned are exhibited in the following statement :—

I.—Financial Details.

Name of Work.	Ayeut Area.	Ascendmt.	Average Revenue for 5 years.	Highest Revenue for 5 years.	OUTLAY.			
					During the pre-vious 4 years.	PROPOSED ORDINARY AGRICULTURAL IRRIGATION.		
						Original Works.	Repairs.	Average annual proportion of charges to Revenue.
	ACRES.	RS.	RS.	RS.	RS.	RS.	RS.	RS. Per cent.
Paraikulam Tank ..	92	665	696	Not stated.	357	..	1,490	53.0
Paraikulam Tank and Supply Channel ..	302	1,841	1,486	1,579	Nil.	743	1,887	35.3
Padanthapooly Tank ..	37	194	190	223	..	245	530	81.5
Kallathikulam Tank ..	34	186	177	181	150	155	370	76.2
Total ..	465	2,806	2,549	..	507	1,148	4,277	46.5

II.—Hydraulic Details.

Name of Work.	Catchment Basin Area.	MAXIMUM SUPPLY.		LENGTH OF ESCAPE OR AREA OF SURPLUS SURCH VENTS.		AVERAGE HEIGHT OF BUND.		Surplus discharged at M. T. L. per Second.	Tanks above.
		Catchment per Second.	Channels per Second.	Total.	Effective.	Above F.T.L.	Above M.T.L.		
Paraikulam Tank	SQ. M. 4.5	C. FT. 930	..	{ C 100 S 66 W 100 S 42	{ FT. 85 66 100 42	2.65	0.55	1806.1	6
Perikulam Tank and Supply Channel	3.5	762	606	58	56	Not stated.		518.0	1
Padanthapooly Tank	1.5	418	..	80 70	150	4.5	2.5	1425.4	..
Kallathikulam Tank	1.5	410	..	43	NIL. 43 NIL. 65	1.35 4.5 Not stated. 3.75	0.0 2.5 2.25	0.0 408.6 0.0 401.1	NIL. 1

NOTE.—The proposed dimensions of escapes and bunds are in small type. The following abbreviations are used:
E.—Escape at ground level. B.—Bund of tank.

Printed in large type. The existing dimensions of dam stones. W.—Weir with flush crest.

3. The following is a summary of the work proposed to be carried out in each case—

Paraikulam Tank.—This tank is the last of a series of seven tanks, the surplus of which crosses the South Indian Railway. The bund of this tank is low and weak, being in many places only 2 and 2.5 feet above F.T.L. The rough stone revetment of the front slope is in a ruined condition for a length of 100 yards. The bund needs raising and the revetment rebuilding.

The tank has a calingulah 100 feet in length with three vents in fair order and of sufficient capacity to discharge the surplus; but its crest is at three different levels, and the wing walls are exceedingly low. It is proposed to remove the dam stones and the centre wing wall so as to give a clear water-way of 100 feet, and to raise the crest to a uniform height, viz., F.T.L., and the wing walls 3.5 feet above crest level.

There are four Irrigation sluices in the tank, of which three are in good condition and the other, which is in a ruined state, needs reconstruction.

The estimate provides for the necessary repairs, viz., raising and repairing the bund, reconstructing an Irrigation sluice and converting the calingulah into a weir.

Periakulam Tank and Supply Channel, Revised Estimate.—This tank, in addition to the supply it receives from its catchment basin, is supplied by a channel from the Nitchupanathy river. The bund and masonry sluices of the tank are now undergoing repair under an estimate sanctioned by the Collector on the 16th March 1875 for Rupees 1,500, but this did not provide for rebuilding and extending the surplus works which are necessary, or for repairing the supply channel, the bed of which is silted up and contracted, and the bank very low and weak. The tank has only at present a discharging sluice with two vents, each 4 feet x 7 feet, and the greater portion of the surplus has to be discharged through openings made in the bund at both ends. It is therefore proposed to rebuild and convert the discharging sluice at the south end into a weir 80 feet in length, and to construct an additional weir 70 feet in length at the north end. The revised estimate provides for raising and repairing the bund, repairing three Irrigation sluices, rebuilding and converting the discharging sluice into a weir at the south end, and constructing an additional surplus weir at the north end, and also for clearing the bed and raising the banks of the supply channel.

Padanthapooly Tank.—This tank is situated in the Nalli basin, the drainage of which crosses the South Indian Railway. The bund is low and weak and requires to be strengthened and raised. The tank has no masonry surplus work or Irrigation sluice, the surplus being discharged through an opening in the bund and the lands irrigated by means of a pot or earthenware sluice.

The estimate provides for raising and repairing the bund, constructing a masonry weir and a masonry irrigation sluice in lieu of the pot sluice.

Kallathikulam Tank.—The bund of this tank is low and weak and needs to be raised and strengthened. The tank has two Irrigation sluices of masonry, one of which is in a dilapidated condition and requires to be reconstructed. The tank has no surplus work which is much wanted.

The estimate provides for raising and repairing the bund, reconstructing an Irrigation sluice, and for constructing a masonry weir.

4. It should be noticed that the effect of lengthening the crest by removing the dam stones, &c., is to a great extent neutralised by the contracted approach to the surplus.

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

Name of Tank.	Items of Estimate.	FUND, ORDINARY AGRICULTURAL, IRRIGATION.		Total for each Tank, &c.
		Original Works.	Repairs.	
		RS.	RS.	RS.
Paraikulam Tank ...	Raising and repairing bund ...	...	1,140	1,490
	Reconstructing an Irrigation sluice ...	...	225	
	Improving the calingulah and converting it into a weir ...	...	125	
Periakulam Tank and Supply Channel (Revised Estimate).	Raising and repairing the bund, repairing three Irrigation sluices and supply channel ...	...	1,887	2,630
	Constructing a masonry weir ...	278	...	
	Rebuilding and converting discharging sluice into weir ...	465	...	
Padanthapooly Tank	Raising and repairing the bund ...	...	530	775
	Constructing an Irrigation sluice ...	170	...	
	Constructing a masonry weir ...	75	...	
Kallathikulam Tank	Raising and repairing the bund ...	...	243	525
	Reconstructing an Irrigation sluice ...	...	127	
	Constructing a masonry weir ...	155	...	

FORT ST. GEORGE,
31st January 1877.

To the Secretary to Government, Public Works Department.

(Signed) A. DEC. SCOTT, Major, B.E.,
Dy. Chief Engineer for Irrigation,
for Chief Engineer for Irrigation.

No. 158.

ORDER THEREON, 5th February 1877, No. 395.

IRRIGATION, No. 16.

Account.

No. 91-W., dated 31st January 1877.

The following estimates for Irrigation works in the No. I or Northern Range, Tinnevely District, forwarded by the Chief Engineer for Irrigation with his memorandum marginally noted are sanctioned:—

Irrigation.

Name of Tank.	Provision of Estimate.	Fund, Ordinary Agricultural, Irrigation.	Amount.	Irrigation Register No.
			RS.	
Paraikulam Tank...	1. Repairing bund ...	Repairs...	1,140	299-I
	2. Reconstructing an Irrigation sluice.	Do. ...	225	
	3. Converting calingulah into weir.	Do. ...	125	
Periakulam Tank and Supply Channel (Revised Estimate).	1. Repairing tank sluices and channel.	Do. ...	1,887	300-I
	2. Weir ...	Original Works.	278	
	3. Converting discharging sluice into weir.	Do. ...	465	
Padanthapooly Tank.	1. Repairing bund ...	Repairs...	530	301-I
	2. Irrigation sluice...	Original Works.	170	
	3. Weir ...	Do. ...	75	
Kallathikulam tank	1. Repairing bund ...	Repairs...	243	302-I
	2. Reconstructing Irrigation sluice.	Do. ...	127	
	3. Weir ...	Original Works...	155	

Proceedings of the Madras
5th Febru

ment, Public Works Department,
77. No. 395.

2. These sanctions are registered
estimate of Periakulam Tank and S
Engineer's sanction of the 16th Ma

own above; and the sanction to the revised
unnel cancels the Collector's and District

(tract.)

Wm. Lewis

Lieut.-Colonel, R.E.,
Secretary to Government.

To the District Engineer, Tinnevely.

„ Collector of do.
„ Chief Engineer for Irrigation.
„ Examiner of Public Works Accounts.
„ Revenue Department.

Revenue 1877 Dept
Govt. of 1877 Madras.

PUBLIC WORKS.

No 1182

To

THE DISTRICT ENGINEER,
TINNEVELLY,
Sd., Sd., Sd.

Dated February 5th.

Issued

Recd. 9 Febry.

Encl.

G. O., 5th February 1877, No. 395.

FEBRUARY.

Nos. 157-158.

12
10
Communicated to
the Board of Revenue

10 Feb 77

Tanks, Tinnevely District.—The estimates,
amounting to Rupees 5,420, for repairs to
— sanctioned.

28 B. M. 1877