

(1) Number of pages - 1 - 1/2

(2) Date of repair - - - - -

(3) Initials of the Referrer - - - - -

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

DEPARTMENT

GO No	1556	Press
BP No		Mis
Dated 1 / 1 / 11		

Not to be jolled or roughly handled

Annex 1-1006-19-4 79

[Handwritten signature]

1082
1

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

11th April 1878, No. 322 L.

Irrigation.
Account.

Read the following papers :—

No. 53. From Colonel F. J. MOBERLY, R.E., Superintending Engineer, Chingleput, to the Chief Engineer for Irrigation, dated St. Thomas' Mount, 31st October 1877, No. 3,143.

I HAVE the honor to forward the undermentioned tank estimates, amounting to Rupees 7,075, for Attupattukottaipunji tank series in Madraatikam Taluq, No. 3 or Chingleput Range, for the sanction of Government.

2. The estimate for the Mugundaray tank connected with the above group has been returned to Range Officer for revision, as the amount was very high compared with the average revenue.

HEAD OF SERVICE—IRRIGATION.

Fund—Ordinary Agricultural.

	RS.
Repairing Perambakkam tank	1,130
Do. Tandalam do.	1,380
Do. Sittamur do.	660
Do. Kannimangalam do.	430
Do. Parikkal large do.	1,040
Do. Perukkaranai large tank	785
Do. do. thangal	280
Do. do. small tank	255
Do. do. Pattur do.	720
Do. do. Thetty Coopram thangal	345
Total	7,075

No. 91 I.

No. 53-A.

Note by the Chief Engineer for Irrigation.

The following estimates from the No. 3 or Chingleput Range are forwarded by the Superintending Engineer, Chingleput, with his letter marginally noted. These tanks appertain to the group which Attupattukottaipunji tank is the terminal, for the repairs of the latter tank an estimate of Rupees 1,720 was sanctioned in G.O., No. 2,903 of 11th October 1875.

Taleq.	Village.	Work.	Amount.
Madurantikam	Perambakkam S. No. 188	V. Tank	Rs. 1,150
Do.	Tandalam	Do.	1,380
Do.	Sittamur	Do.	660
Do.	Kannimangalam	Do.	430
Do.	Parakkal	V. Large tank	1,040
Do.	Perukkaralai	Do.	785
Do.	Do.	V. Thangal	280
Do.	Do.	V. Small tank	255
Do.	Do. Puttur	V. Tank	770
Do.	Parakkal	V. Thotty Cooppan Thangal	315
Total			7,975

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

1.—Financial Details.

Name of Work.	Acreage.	Assessment.	Average Revenue for five years.	Highest Revenue for five years.	During the previous four years.	OUTLAY.		
						Proposed		
						Ordinary Agricultural, Irrigation.		
						Original Works.	Repairs.	Average Annual proportion of Charges to Revenue.
Perambakkam tank	140	369	365	411	..	Rs.	Rs.	per cent.
Tandalam	177	377	314	334	..	1,150	87.4	
Sittamur	61	314	294	314	..	1,380	87.9	
Kannimangalam	45	171	179	192	..	660	44.9	
Parakkal large	157	414	309	326	..	430	48.0	
Perukkaralai large tank	59	249	397	428	..	1,040	67.3	
Do. Thangal	59	215	145	170	..	785	39.5	
Do. small tank	75	223	157	207	..	65	21.5	38.6
Perukkaralai Puttur	80	320	437	573	..	38	217	32.4
Parakkal Thotty Cooppan Thangal	40	147	89	103	..	770	35.2	
Total	974	2,302	2,465	2,663	..	171	6,904	82.5

II.—Hydraulic Details.

Name of Work.	Catchment Basin Area.	MAXIMUM SUPPLY.		LENGTH OF ESCAPE.		AVERAGE HEIGHT OF BUND.		Surplus discharged at M.T.L. per Second.	Tanks above.	Area irrigated per Square Mile of direct drainage.
		Catchment per Second.	Channels per Second.	Total.	Effective.	Above F.T.L.	Above M.W.L.			
Perambakkam tank	SQ. M. 1.25	C. FT. 647	C. FT. ..	FEET. 134	FEET. 134	FEET. 1.5 to 2.0	FEET. 0.0	C. FEET. 0.0	NO. ..	ACRES. 111
Tandalam	1.25	647	..	E 134	134	4.5	2.5	636.7	..	141
Sittamur	0.5	354	..	E 134	134	4.0	2.0	636.7	..	182
Kannimangalam	0.5	354	..	E 114	114	3.0	1.5	351.8	..	90
Parakkal large	8.5	2,342	..	E 114	114	3.0	1.5	351.8	6	..
Perukkaralai large tank	3.5	1,296	..	E 114	114	4.5	2.5	2,345.2	4	..
Do. Thangal	1.0	562	..	E 253	253	1.5 to 2.0	0.0	910.5	..	59
Do. Small tank	0.5	354	..	E 182	182	3.0	1.5	561.6	..	152
Perukkaralai Puttur tank	2.0	893	..	E 114	114	3.5	2.0	351.8	2	..
Parakkal Thotty Cooppan Thangal	1.5	737	..	E 240	240	3.0	1.5	740.6	1	..

NOTE.—The proposed dimensions of escapes and heights of bund are printed in large type; the existing dimensions in small type. The following abbreviations are used:—C.—Culminal with dam stones. W.—Weir with overfall. E.—Escape at ground level. B.—Bund of tank. V.—Village. S.—Revenue Survey.

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

Perambakkam Tank.—This tank is situated in latitude 12° 22' 0", longitude 79° 56' 0". It has not been repaired for a long time, and the wear and tear of more than twenty years has reduced the height of the bund almost to M.W.L. The tank has two irrigation sluices, their face walls and a portion of the tunnels need to be dismantled and rebuilt. The tank having no surplus work, the surplus is discharged round the end of the bund.

The estimate provides for raising and repairing the bund, and planting the water slope with tank grass up to F.T.L., also repairing two irrigation sluices and forming an escape planted with grass.

Tandalam Tank.—This tank is situated in latitude 12° 25' 30", longitude 79° 54' 30". The tank has not been repaired for a considerable time, and the bund is consequently very low. The tank has two irrigation sluices, their face walls and a portion of their tunnels are in bad order and need to be dismantled and rebuilt. The tank has no surplus work, the surplus is discharged through two breaches at the ends of the bund.

The estimate provides for—

1st.—Raising and repairing the bund, planting kuskus up to F.T.L., and turfing above that level, repairing two irrigation sluices and extending the breaches, and converting them into escapes planted with grass.

Sittamur Tank.—This tank is situated in latitude 12° 24' 0", longitude 79° 56' 0". It has not been repaired for upwards of fifty years; the bund is low and weak and the

irrigation sluice is in need of repairs. The tank is without a proper surplus work and the surplus escapes through breaches in the bund.

The estimate provides for raising and repairing the bund, planting kuskus up to F.T.L., repairing the irrigation sluice and forming an escape planted with grass.

Kannimangalam Tank.—This tank is situated in latitude $12^{\circ} 23' 0''$, longitude $79^{\circ} 56' 0''$. It has not been repaired for upwards of twenty years, consequently the bund is low and weak. The tank has no surplus work, the surplus is discharged by means of two breaches in the bund and the irrigation sluice is in need of repair.

The estimate provides for raising and repairing the bund, securing the water slope with a belt of kuskus up to F.T.L., repairing the irrigation sluice and forming an escape planted with grass.

Parakkal Large Tank.—Is situated in latitude $12^{\circ} 23' 0''$, longitude $79^{\circ} 54' 36''$ and has not been repaired for upwards of twenty years, consequently the bund is very much worn down. The tank has two irrigation sluices, one a masonry sluice and the other a pot sluice; the former needs to be repaired and the latter to be replaced by a masonry sluice. The tank has two calingulabs and a natural escape (a breach), the calingulabs are in need of repairs; they will be repaired and converted into weirs and an additional escape will be formed at a site where the soil is rocky.

The estimate provides for—

1st.—Raising and repairing the bund, securing the water slope with a belt of kuskus up to F.T.L.

2nd.—Repairing the masonry irrigation sluice.

3rd.—Substituting a brick or masonry sluice for the existing pot pipe sluice.

4th.—Forming a natural escape over hard ground.

5th.—Repairing the two calingulabs and converting them into weirs.

Perukkaranai Large Tank.—This tank is situated in latitude $12^{\circ} 23' 0''$, longitude $79^{\circ} 55' 0''$. Its bund is worn down very much and the irrigation sluice is in need of repairs. The surplus is discharged by means of a dry stone escape 30 feet in length and a breach 90 feet long. The escape is in need of slight repairs.

The estimate provides for raising and repairing the bund and securing the water slope with a belt of kuskus up to F.T.L., repairing the irrigation sluice and dry stone escape, and also for forming an escape planted with grass.

Perukkaranai Thangal.—This thangal is situated in latitude $12^{\circ} 22' 0''$, longitude $79^{\circ} 56' 0''$, and has not been repaired for a considerable time, consequently the bund is low and weak. The tank has a pot pipe irrigation sluice which it is proposed to replace by a brick sluice. The tank has no surplus work and the surplus is discharged round the end of the bund, and during heavy floods temporary cuts are made to relieve the tank.

The estimate provides for raising and repairing the bund, securing the front slope with a belt of kuskus up to F.T.L., substituting a brick sluice for the pot pipe sluice and for forming an escape planted with grass.

Perukkaranai Small Tank.—This tank is situated in latitude $12^{\circ} 22' 0''$, longitude $79^{\circ} 56' 0''$ and has not been repaired for the last twenty years, consequently the bund is considerably worn down. The irrigation sluice is a pot pipe which it is proposed to replace by a brick sluice. The tank has no surplus work and the surplus runs out at the ends of the bund, and during floods temporary cuts are made to relieve the tank.

The estimate provides for raising and repairing the bund, protecting the water slope with a belt of kuskus up to F.T.L., substituting a brick sluice for the pot pipe sluice and for forming an escape planted with grass.

Perukkaranai Pattur Tank.—This tank is situated in latitude $12^{\circ} 22' 0''$, longitude $79^{\circ} 56' 0''$ and has not been repaired for the last twenty years, consequently the bund is very much worn down. The tank has two irrigation sluices, one a masonry sluice which is in need of repairs and the other a pot pipe which is to be replaced by a brick sluice. The surplus of this tank is discharged by means of a calingulah 20 feet in length and by a breach 24 feet long; the former is to be converted into a rough stone escape and the latter to be extended.

The estimate provides for—

1st.—Raising and repairing the bund, securing its water slope with a belt of kuskus up to F.T.L., repairing the masonry irrigation sluice and dry stone escape, also for forming an escape planted with grass.

2nd.—Substituting a brick sluice for the pot pipe sluice.

Parakkal Tholly Coopam Thangal.—This thangal is situated in latitude $12^{\circ} 22' 0''$, longitude $79^{\circ} 55' 0''$ and has not been repaired for many years, the bund is consequently very much worn down. The tank has a pot sluice which is to be replaced by a brick sluice. The surplus is discharged at the ends of the bund and by means of temporary cuts during heavy floods as the tank has no proper surplus work.

The estimate provides for—

1st.—Raising and repairing the bund and securing the water slope up to F.T.L., with a belt of kuskus.

2nd.—Substituting a brick sluice for the pot pipe.

3rd.—Forming an escape planted with grass.

It is stated that the terminal tank of this series, viz., the Attuputty Cottapungy tank was breached during the cyclone of 1874, but has lately been repaired at a cost of Rupees 1,720.

Sketch maps of groups should be parts of Revenue Survey Maps, then the relative positions of the tanks will be more accurately denoted and the catchment basins more easily ascertained. There will also be a saving of time which can be much better spent than in making plans which are less suitable than the printed maps.

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

HEAD OF SERVICE—IRRIGATION.

Fund—Ordinary Agricultural.

Name of System or Group.	Distinguishing Number or Letter of Group.	Name of Tank or Channel.	Description of Work.	Main Head.	Class.	Amount of each item.	Amount to be separately accounted for.
Attupattukottapungy tank group.	..	Perambakkam tank.	Repairing bund and two irrigation sluices and forming an escape planted with grass.	Irrigation.	Repairs ..	1,130	1,130
Do. ..	..	Tandalam tank.	Repairing bund and two irrigation sluices and forming planted escapes.		Do. ..	1,380	1,380
Do. ..	..	Sittampur tank.	Repairing bund and irrigation sluice and forming a planted escape.		Do. ..	660	660
Do. ..	..	Kannimangalam tank.	Repairing bund and irrigation sluice and forming a planted escape.		Do. ..	430	430
Do. ..	..	Parakkal large tank.	Repairing bund ..		Do. ..	740	1,640
			Do. irrigation sluice.		Do. ..	75	
			Replacing pot sluice by brick pipe.		Do. ..	39	
			Forming escape ..		Do. ..	21	
			Repairing and converting east calingulah into weir.		Do. ..	117	
			Repairing and converting west calingulah into weir.		Do. ..	43	

Name of System or Group.	Distinguishing Number or Letter of Group.	Name of Tank or Channel.	Description of Work.	Main Head.	Class.	Amount of each Item.	Amount to be separately accounted for.
Attapattukottai-punji tank group.	..	Perukkaranai large tank.	Repairing bund, irrigation sluice and dry stone escape, also forming a planted escape.	Irrigation.	Repairs ..	Rs. 735	Rs. 735
Do.	..	Perukkaranai Thangal.	Repairing bund and forming planted escape.		Do. ..	215	215
Do.	..	Perukkaranai small tank.	Replacing pot sluice by a brick pipe.		Original Works.	65	65
Do.	..	Perukkaranai small tank.	Repairing bund and forming planted escape.		Repairs ..	217	217
Do.	..	Perukkaranai small tank.	Replacing pot sluice by brick pipe.		Original Works.	38	38
Do.	..	Perukkaranai Puttur tank.	Repairing bund, irrigation sluice and calingulah, also forming a planted escape.		Repairs ..	735	770
Do.	..	Perukkaranai Puttur tank.	Replacing pot sluice by brick pipe.		Do. ..	35	
Do.	..	Parukkal Thotiy Cooppam Thangal.	Repairing bund ..		Do. ..	277	310
Do.	..	Parukkal Thotiy Cooppam Thangal.	Forming planted escape.		Do. ..	33	
Do.	..	Parukkal Thotiy Cooppam Thangal.	Replacing pot sluice by brick pipe.		Original Works.	35	25

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

FORT ST. GEORGE,
22nd March 1878.

To the Joint Secretary to Government, Public Works Department, Irrigation Branch.

No. 54.

ORDER THEREON, 11th April 1878, No. 322 I.

The following estimates for Irrigation Works in the No. 3 or Chingleput Range, Chingleput District, forwarded by the No. 91 I, dated 22nd March 1878. Chief Engineer for Irrigation with his Memorandum marginally noted are sanctioned:—

Head of Service—Irrigation.

Name of System or Group.	Name of Tank.	Description of Work.	Class.	Amount.	Irrigation Register Number.
Attapattukottai-punji tank group.	Perambakkam tank	Repairing bund and two sluices and forming planted escape.	Repairs ..	Rs. 1,130	21 I.
Do.	Tandalem tank	Do. do.	Do. ..	1,380	22 I.
Do.	Sittanur tank	Repairing bund and sluice and forming a planted escape.	Do. ..	690	23 I.
Do.	Kancinsagalam tank	Do. do.	Do. ..	430	24 I.
Do.	Parukkal large tank.	Repairing bund ..	Do. ..	745	1
Do.	Parukkal large tank.	Do. sluice ..	Do. ..	75	2
Do.	Parukkal large tank.	Replacing pot sluice by brick pipe ..	Do. ..	39	3
Do.	Parukkal large tank.	Forming escape ..	Do. ..	21	4
Do.	Parukkal large tank.	Repairing and converting east calingulah into weir.	Do. ..	117	5
Do.	Parukkal large tank.	Do. west do.	Do. ..	48	6
Do.	Perukkaranai large tank.	Repairing bund, sluice and dry stone escape, also forming a planted escape.	Do. ..	785	25 I.
Do.	Perukkaranai Thangal.	Repairing bund and forming planted escape.	Do. ..	215	1
Do.	Perukkaranai Thangal.	Replacing pot sluice by brick pipe ..	Original Works.	65	2
				280	

Name of System or Group.	Name of Tank.	Description of Work.	Class.	Amount.	Irrigation Register Number.
Attapattukottai-punji tank group.	Perukkaranai small tank	Repairing bund and forming planted escape.	Repairs ..	Rs. 217	1
Do.	Perukkaranai small tank	Replacing pot sluice by brick pipe ..	Original Works.	38	2
Do.	Perukkaranai Puttur tank.	Repairing bund, sluice and calingulah, also forming planted escape.	Repairs ..	735	1
Do.	Perukkaranai Puttur tank.	Replacing pot sluice by brick pipe ..	Do. ..	45	2
Do.	Parukkal Thotiy Cooppam Thangal.	Repairing bund ..	Do. ..	277	1
Do.	Parukkal Thotiy Cooppam Thangal.	Forming planted escape ..	Do. ..	33	2
Do.	Parukkal Thotiy Cooppam Thangal.	Replacing pot sluice by brick pipe ..	Original Works.	35	3
				345	

2. These sanctions are registered as shown above.

(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 Superintending Engineer, Chingleput.
" Collector of Chingleput.
" Chief Engineer for Irrigation.
" Examiner of Public Works Accounts.
" Revenue Department.

Ed. T. O'Connor
20 Spare Copies

