Archives I—10,006—16-8 77.

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# TAMIL NADU ARCHIVES

## GOVERNMENT OF TAMIL NADU

Revenue DEPARTMENT

| | | |
|---|---|---|
| G.O. No. / B.P. No. | 1552 | Press. / Mis. |
| Dated 26.6.1878 | | 197 . |

*Not to be folded or roughly handled*

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

3rd June 1878, No. 465 I.

Irrigation.
Account.

Read the following papers :—

No. 12. From Major H. R. MEAD, R.E., District Engineer, South Arcot, to the Chief Engineer for Irrigation, dated Cuddalore, 9th March 1878, No. 336.

Four estimates.
Four sheets of sections.
Four sketches.
Two specifications of Alagramam tank and anicut.
One plan of Alagramam anicut.

I HAVE the honor to submit, for the sanction of Government, the undermentioned four estimates for repairs to irrigation works in the Tindevanam Division :—

| | RS. |
|---|---|
| 1. Repairing the bund, two calingulahs, and two sluices of the Alagramam tank and raising wing walls of anicut and making up flood bank in the Tindevanam Taluq ... ... ... ... ... ... ... | 5,470 |
| 2. Repairing the bund of Seebantheenammiendel tank in the Trinomalay Taluq ... ... ... ... ... ... ... ... ... | 450 |
| 3. Repairing the bund of Thandrampett tank in the Trinomalay Taluq ... ... ... ... ... ... ... ... ... | 123 |
| 4. Repairing the bund of Alliendelpoliem tank in the Trinomalay Taluq. | 212 |
| Total ... | 6,255 |

2. These tanks, as it will be seen from the levels, are in very bad order and in much need of the repairs proposed ; the average revenue derived from the works is, however, in each case below the proposed outlay as may be seen from the financial details given below :—

| Name of Works. | Ayacut. | Assessment. | Average Revenue for five years. | OUTLAY. | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | During the previous four years. | PROPOSED | | | |
| | | | | | Ordinary Agricultural Irrigation. | | | |
| | | | | | New Works. | Repairs. | Total. | Average Annual Proportion of Charges to Revenue. |
| | ACRES. | RS. | RS. | RS. | RS. | RS. | RS. | PER CENT. RS. |
| Alagramam tank and anicut repair .. | 936 | 4,720 | 4,505 | .. | .. | 5,470 | 5,470 | 23·7 |
| Seebantheenammiendel do. | 61 | 286 | 210 | 180 | .. | 450 | 450 | 42·8 |
| Thandrampett tank .. .. | 41 | 245 | 36 | .. | .. | 123 | 123 | 68·3 |
| Alliendelpoliem do. .. .. | 33 | 167 | 171 | .. | .. | 212 | 212 | 24·8 |
| Total .. | 1,070 | 5,418 | 5,022 | 180 | .. | 6,255 | 6,255 | 24·9 |

The hydraulic details are as follow :—

| 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. |
|---|---|---|---|---|---|---|---|---|---|
| | | Catchment per Second. | Channels per Second. | Total. | Effective. | Above F.T.L. | Above M.T.L. | | |
| | SQ.-M. | C. FT. | C. FT. | FT. | FT. | FT. | FT. | C. FT. | NO. |
| Alagramam tank .. .. | 12 | 2,358 | 600 | C. 110 | 170 | 7·5 | 4·5 | 2,974 | 4 |
| | | | | C. 94 W. 30 | W. 204 | | | 3,565 | |
| Seebantheenammiendel tank .. | 2 | 721 | 500 | W. 30 E. 200 | 230 | 4·5 | 2·5 | 1,513 | 1 |
| Thandrampett tank .. .. | 4 | 1,134 | .. | W. 57 E. 140 | 197 | 4·5 | 2·5 | 1,245 | 2 |
| Alliendelpoliem do. .. .. | ½ | 283 | .. | E. 264 | 264 | 4·5 | 3 | .. | .. |

The first two tanks are fed by anicuts, the last two are rain-fed tanks, the last however receives the surplus of some paddy cultivation above it.

The estimate for Alagramam tank includes Rupees 425 for the repairs of the anicut, the wing walls of which were tipped in 1877, and in consequence the banks on each side injured, the wings are to be raised 3 feet above this flood which was an extraordinary one.

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No. 12-A. No. 151 I.

*Note by the Chief Engineer for Irrigation.*

THE following estimates from the No. 2 or Tindivanam Range are forwarded by the District Engineer, South Arcot, with his letter marginally noted :—

No. 336, dated 9th March 1878.

| Taluq. | Village. | Work. | Amount. |
|---|---|---|---|
| Trinomalay ... | Seebantheenammiendel ... ... | V. tank ... ... | RS. 450 |
| | Alliendelpoliem ... ... | | 212 |
| | | Total ... | 662 |

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

*I.—Financial Details.*

| Name of Work. | Ayacut Area. | Assessment. | Average Revenue for five years. | Highest Revenue for five years. | OUTLAY. | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | During the previous four years. | Proposed Ordinary Agricultural Irrigation. | | |
| | | | | | | Original Works | Repairs. | Average Annual Proportion of Charges to Revenue. |
| | ACRES. | RS. | RS. | RS. | RS. | RS. | RS. | PER CENT. RS. |
| Seebantheenammiendel tank .. .. | 63 | 286 | 210 | Not stated. | 180 | .. | 450 | 60·0 |
| Alliendelpoliem tank .. .. .. | 33 | 187 | 171 | Do. | None. | .. | 212 | 24·8 |



*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 Drainage. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Catchment per Second. | Channels per Second. | Total. | Effective. | Above F.T.L. | Above M.T.L. | | | |
| | SQ. M. | C. FT. | C. FT. | FT. | FT. | FT. | FT. | C. FT. | NO. | ACRES. |
| Seebantheenammiendel tank. | 2 | 711 | 500 | E. 200+30 | 230 | 2·2 | 0·2 | 1,802·7 | 1 | .. |
| | | | | E 200+30 | 230 | 4·5 | 2·5 | 1,802·7 | None. | 67·5 |
| | | | | E 264 | 264 | 2·5 | 1·0 | 2,321·4 | | |
| Alliendelpoliem tank .. | 0·5 | 283 | .. | E 264 | 264 | 4·5 | 3·0 | 2,321·4 | | |

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.—Calingulah with dam stones. W.—Weir with overfall. E.—Escape at ground level. B.—Bund of tank. V.—Village.

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

*Seebantheenammiendel Tank.*—This tank is situated in latitude 12° 22′ 30″, longitude 79° 3′ 30″ nd has but one high lying tank which is stated to be in good order; both of these tanks receive a supply from the Cheyaur in addition to that received from their own drainage basins. The bund of the tank under review is very low and the soil bad in consequence of which it was breached in 1877. The surplus works are one 30-feet rough-stone escape, and a natural escape 200 feet in length, which are more than sufficient.

The estimate provides for repairing and raising the bund to 4½ feet above F.T.L. with slopes of 1·5 to 1.

It is observed from the longitudinal section that the natural escape is above F.T.L. and irregular, and as the rough-stone weir will discharge perhaps 30 × 8·2 = 246 cubic feet a second, definite arrangements should be made for the disposal of the remaining 711 — 246 = 465 cubic feet a second. Now, if the natural escape be made throughout 1 foot above F.T.L., the discharge will be 200 × 2·77 = 554 cubic feet a second, so 170 feet out of the 200 brought to this level would be about right if there were no river supply, but including this the 200 feet at the level named will not be too much.

The District Engineer should ascertain whether it is desirable to construct a sluice at the head of the river channel.

*Alliendelpoliem Tank.*—This tank is situated in latitude 12° 18′ 0″, longitude 78° 58′ 30″. The bund is low and weak and very much in need of repairs. The tank has an irrigation sluice in good order, and a natural escape of sufficient length to discharge the surplus.

The estimate provides for repairing and raising the bund to 4·5 feet above F.T.L., but as the M.W.L. is only 1½ feet above F.T.L. it will suffice to make the top of the bund 2 feet above M.W.L. and the estimate should be reduced accordingly.

Escapes should be made perfectly level. In this case the section shows that the escape at the left end of the section is much below F.T.L. It should be brought up to that level, otherwise the villagers will bund it and probably retain water above the proper level.

The following statement shows the proposed distribution of the outlay recommended for sanction :—

*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. |
|---|---|---|---|---|---|---|---|
| | | | | | | Rs. | Rs. |
| .. | .. | Seebantheenammiendel tank. | Repairing bund .. | Irrigation .. | Repairs .. | 450 | 450 |
| .. | .. | Alliendelpoliem tank. | Do. do. .. | Do. | Do. .. | 212 | 212 |

OOTACAMUND,
30th May 1878.

(Signed) JOHN MULLINS, Lt.-Col., R.E.,
Chief Engineer for Irrigation.

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

No. 13. ORDER THEREON, 3rd June 1878, No. 465 I.

THE following estimates for irrigation works in the No. 2 or Tindivanam Range, South Arcot District, forwarded by the Chief Engineer for Irrigation with his No. 151 I, dated 3rd May 1878. 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. |
|---|---|---|---|---|---|
| | | | | Rs. | |
| .. | Seebantheenammiendel tank. | Repairing bund .. .. | Repairs .. | 450 | 79 I. |
| .. | Alliendelpoliem tank .. .. | Do. do. .. .. | Do. .. | 212 | 80 I. |

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

Exd. T. D. Ryan.
Spare Copies

1558/3

Revenue 1878 Sept
No. 2673.

IRRIGATION.
ACCOUNT.

# Govt. of {1878} Madras.

## PUBLIC WORKS.

To

THE DISTRICT ENGINEER,
SOUTH ARCOT,
&c., &c., &c.

Dated June 3rd.

Issued
1
Read. — 21" Encl.

G. O., 3rd June 1878, No. 405 I.

JUNE.

Nos. 12-13.

No 1552

Communicated to the
Board of Revenue
26 June 1878

Tanks in Tindivanum Range, South Arcot District.—The estimates for the repair of two tanks sanctioned.

By order