

(1) Number of pages 6 17

(2) Date of repair \_\_\_\_\_

(3) Initials of the Referencer \_\_\_\_\_

**MADRAS RECORD OFFICE.****Government of Madras.***Public Works* **DEPARTMENT.**G.O. No. 170Press  
Mis.Dated 6 5 1877Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department,  
6th March 1877. No. 770.

Read the following:—

No. 129-W.

No. 139.

Note by the Chief Engineer for Irrigation.

THE following estimates from the Serur Range are forwarded by the Superintending Engineer, Chingleput, with his letter marginally noted:—

| Taluq.          | Village.             | Work.         | Amount. |
|-----------------|----------------------|---------------|---------|
|                 |                      |               | RS.     |
| Trivalore .. .. | Melvelagam .. ..     | V. Tank .. .. | 843     |
| Do. .. ..       | Nemmeli Agaram .. .. | V. Tank .. .. | 1,120   |
|                 | Total ..             |               | 1,963   |

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 5 years. | Highest Revenue for 5 years. | OUTLAY.                      |                                             |          |                                                  |
|---------------------------|--------------|-------------|------------------------------|------------------------------|------------------------------|---------------------------------------------|----------|--------------------------------------------------|
|                           |              |             |                              |                              | During the previous 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.                                    |
| Melvelagam Tank .. ..     | 81           | 241         | 186                          | 223                          | NIL                          | 330                                         | 513      | 90.6                                             |
| Nemmeli Agaram Tank .. .. | 154          | 492         | 399                          | 537                          | ..                           | 210                                         | 910      | 56.1                                             |
| Total ..                  | 235          | 733         | 585                          | 760                          | ..                           | 540                                         | 1,423    | 67.1                                             |

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. |
|------------------------|-----------------------|-----------------------|----------------------|-------------------|------------|-------------------------|--------------|--------------------------------------------|--------------|
|                        |                       | 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.          |
| Melvelagam Tank .. ..  | 2.0                   | 893                   | ..                   | NIL<br>E 219      | NIL<br>219 | 1.25<br>3.0             | 0.0<br>1.5   | 0.0<br>1,114.9                             | 1            |
| Nemmeli Agaram Tank .. | 2.0                   | 893                   | ..                   | E 450<br>E 450    | 450<br>450 | 2.0<br>3.75             | 0.5<br>2.25  | 2,290.9<br>2,290.9                         | ..           |

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 flush crest. 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:—

*Melvelagam Tank.*—This tank is supplied by the surplus of the Nanthavady Tank situated in the Carvet Nugger Estate, which tank is reported to be in fair order.

Proceedings of the Madras Government, Public Works Department,  
6th March 1877. No. 770.

The bund of the Melvelagam Tank is low and weak. It is provided with one irrigation sluice which is insufficient. The tank has no surplus work.

The estimate provides for raising and repairing the bund and for constructing an irrigation sluice and a rough stone escape.

*Nemmeli Agaram Tank.*—This tank breached in 1874, and its bund is low and weak. It has one irrigation sluice. It surpluses over the natural surface of the ground beyond one end of its bund.

The estimate provides for—

(1.) Raising and repairing the bund.

(2.) Constructing an irrigation sluice at such a level as to irrigate by gravitation lands hitherto baled to.

(3.) Paving the surface of the natural escape.

The length of the escape for the *Melvelagam Tank* need not as far as the information given shows be more than 180 feet, and the estimate for the work is reduced to Rupees 100.

The level of the natural surface of ground in rear of proposed irrigation sluice should have been shown on the plan. The returns of the rear wings should be at least 3 feet 9 inches long. The step up in the level of the foundations of floor between the front wings is not advisable, the foundation platform should be uniform in thickness for 10 feet in length, and then step up to the reduced thickness as shown on plan. For the *Nemmeli Agaram Tank* 180 feet length of escape will be sufficient if spill from the river be excluded as it should be.

The remarks about the plan for the sluice for the Melvelagam Tank are applicable to the one for this tank excepting that in this case 3 feet for length of rear wing returns and 6 feet for length of extra thickness of foundation platform at front end of sluice will do.

It is noted that the Superintending Engineer has arranged for examination of the parts of the Corteliar, where overflow took place in 1874, injuring the tanks under notice with a view to embanking such places.

The estimates are recommended for sanction.

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

| Name of Tank.       | Items of Estimate.                                         | FUND, ORDINARY AGRICULTURAL, IRRIGATION. |          | Total for each Tank, &c. |
|---------------------|------------------------------------------------------------|------------------------------------------|----------|--------------------------|
|                     |                                                            | Original Works.                          | Repairs. |                          |
| Melvelagam Tank     | Raising and repairing the bund ..                          | RS. 210                                  | RS. 513  | 823                      |
|                     | Constructing an irrigation sluice ..                       | 100                                      | ..       |                          |
|                     | Constructing a rough stone escape ..                       | ..                                       | 910      |                          |
| Nemmeli Agaram Tank | Raising and repairing the bund ..                          | 105                                      | ..       | 1,120                    |
|                     | Constructing an irrigation sluice ..                       | ..                                       | ..       |                          |
|                     | Converting the natural escape into a rough stone escape .. | 105                                      | ..       |                          |

FORT ST. GEORGE,  
25th February 1877.

(Signed) G. T. WALOH,  
Acting Dy. Chief Engineer for Irrigation,  
for Chief Engineer for Irrigation.

To the Secretary to Government, Public Works Department.

Proceedings of the Madras Government, Public Works Department,  
6th March 1877. No. 770.

No. 140. ORDER THEREON, 6th March 1877, No. 770.

IRRIGATION, No. 13.

Account.

No. 129—W, dated 28th February 1877.

THE following estimates for Irrigation Works in the Serulur Range, Chingleput 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. |
|----------------------|------------------------|------------------------------------------|---------|-------------------------|
| Melvelagam Tank      | Repairing bund ..      | ..                                       | RS. 513 | 1                       |
|                      | Irrigation sluice ..   | ..                                       | 210     | 2                       |
|                      | Rough stone escape ..  | ..                                       | 100     | 3                       |
| Nemmeli Agaram Tank. | Repairing bund ..      | ..                                       | 910     | 1                       |
|                      | Irrigation sluice ..   | ..                                       | 105     | 2                       |
|                      | Rough stone escape ..  | ..                                       | 105     | 3                       |

2. These sanctions are registered as shown above.

(True Extract.)

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

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

Exd. E. C. Shunker.

Spare Copies

No. 129.W. J. H. George. 28 February 1877.

Notr by the Chief Engineer for Irrigation.

No. 3964

Dated 14 Feb 1877

Encl. 12

The following Estimates from the *Seruleur* Range are forwarded by the *Superintending* Engineer *fringlopet* with his letter marginally noted:—

Taluq.

Village.

Work.

Amount

Rs.

*Trivellore Melvelagam. V. Tank 843*

*do Nemmeli Agaram. V. Tank 1120*

*Total Rupees 1963.*

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 5 years. | Highest Revenue for 5 years. | During the previous 4 years. | OUTLAY.     |             |                                                  |
|----------------------------|--------------|-------------|------------------------------|------------------------------|------------------------------|-------------|-------------|--------------------------------------------------|
|                            |              |             |                              |                              |                              | Proposed    | Actual      | Average annual proportion of Charges to Revenue. |
|                            | Acres.       | Rs.         | Rs.                          | Rs.                          | Rs.                          | Rs.         | Rs.         | Rs.                                              |
| <i>Melvelagam Tank</i>     | <i>81</i>    | <i>241</i>  | <i>186</i>                   | <i>223</i>                   | <i>Nil</i>                   | <i>330</i>  | <i>513</i>  | <i>90.6</i>                                      |
| <i>Nemmeli Agaram Tank</i> | <i>154</i>   | <i>492</i>  | <i>399</i>                   | <i>537</i>                   | <i>210</i>                   | <i>910</i>  | <i>56.4</i> |                                                  |
| <i>Total</i>               | <i>235</i>   | <i>733</i>  | <i>585</i>                   | <i>760</i>                   | <i>210</i>                   | <i>1240</i> | <i>1077</i> | <i>67.1</i>                                      |

## 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 Sec. | 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.                                     |              |
| Melvelagam Tank   | 2.0                   | 593                   | "                    | Nil               | Nil        | 25.0                    | 0.0            |                                         | 1            |
| Kemmeligaram Tank | 2.0                   | 593                   | "                    | E. 450            | 450        | 2.0                     | 0.5            | 270.9                                   | "            |

Note.—The proposed dimensions of escapes and heights of bund are entered in red. The existing dimensions in black. The following abbreviations are used:—K.—Kalingalah with dam stones. W.—Weir with flash crest. 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—:

Melvelagam Tank. This tank is supplied by the surplus of the Northam tank situated in the Carvet Nigger Estate which tank is reported to be in fair order.

The bund of the Melvelagam tank is low and weak. It is provided with one irrigation sluice which is inefficient. The tank has no surplus work.

The estimate provides for raising and repairing the bund and for

Note for Bunds—Red figures in this note are to be printed in clear and type and not in para 2 altered to suit.

Constructing an irrigation sluice and a rough stone escape.

Kemmeligaram Tank. This tank breached in 1874 and its bund is low and weak. It has one irrigation sluice. It surpluses over the natural surface of the ground beyond one end of its bund.

- The estimate provides for—
- (1) raising and repairing the bund
  - (2) Constructing an irrigation sluice at such a level as to irrigate by gravitation lands hitherto baled to.
  - (3) paring the surface of the natural escape.

The length of the escape for the Melvelagam tank need not be as far as the information given shows be more than 180 feet. The estimate for the work is reduced to Rupees 100.

The level of the natural surface of ground in rear of proposed irrigation sluice should have been shown on the plan. The returns of the rear wings should be at least 3-9" long. The step

step up in the level of the foundations of floor between the front wings is not advisable, the foundation platform should be uniform in thickness for 10 feet in length and then step up to the reduced thickness as shown on plan. For the Nemmeli Agaram Tank 180 feet length of escape will be sufficient if spill from the River be included as it should be.

The remarks about the plan for the sluice for the Melvelagaram tank are applicable to the one for this tank excepting that in this case 3 feet for length of rear wing returns and 6 feet for length of extra thickness of foundation platform at front end of sluice will do.

It is noted that the Superintending Engineer has arranged for examination of the parts of the Cortelias wheris over flow took place in 1874 injuring the tanks under notice, with a

view to embanking such places. The estimates are recommended for sanction.

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

| Name of Tank        | Items of Estimate                                       | Fund<br>Ordinary, Agri.<br>Cultural, &c. |           |         | Total for work |
|---------------------|---------------------------------------------------------|------------------------------------------|-----------|---------|----------------|
|                     |                                                         | Wages                                    | Materials | Repairs |                |
| Melvelagaram Tank.  | Raising and repairing the bund                          | "                                        | "         | 575     | 823            |
|                     | Constructing an irrigation sluice                       | 210                                      | "         | "       |                |
|                     | Constructing a rough stone escape                       | 100                                      | "         | "       |                |
| Nemmeli Agaram Tank | Raising and repairing the bund                          | "                                        | "         | 910     | 1120           |
|                     | Constructing an irrigation sluice                       | 105                                      | "         | "       |                |
|                     | Converting the natural escape into a rough stone escape | 105                                      | "         | "       |                |

To  
The Secretary to Govt.  
Public Works Dept.

C. J. S.

C. J. S.  
Ag. Dy. Chief Engineer for Irrigation  
for Chief Engineer for Irrigation

h. h.

1877

From  
The Chief Engineer  
P.W.D.  
3 1877  
No. 2334

Dated 28 Feby. 1877 }  
Recd. 3<sup>rd</sup> March 1877 }

Encls. 12

No. 129-W

Melvelāgam & Kemmeli Agrani  
Tanks - Chingleput District  
Note recommending for sanction  
estimate for Rs. 8430 + 1120 for  
repairs to the —

No. 139 -

E. I. Form No. 3.

No. 770 31 March 1877

The following Estimates for Irrigation  
Works in the Seruleur Range,  
Chingleput District, forwarded by  
the Chief Engineer for Irrigation with his  
Memorandum marginally noted are sanctioned.

No. 129 W. of 28 Feby 1877

Irrigation.

| Name of Tank.              | Provision of Estimate. | Fund.<br>Ordinary, Agrical.<br>Irrigation | Amount | Irrigation<br>Register<br>No. |
|----------------------------|------------------------|-------------------------------------------|--------|-------------------------------|
| Melvelāgam<br>Tank         | Repairing bund         | Repairs                                   | 573    | 1                             |
|                            | Irrigation sluice      | original works                            | 210    | 2                             |
|                            | Rough stone            | — do —                                    | 100    | 3                             |
|                            | Escape                 | — do —                                    | 100    | 3                             |
| Kemmeli<br>Agrani<br>Tank. | Repairing bund         | Repairs                                   | 910    | 1                             |
|                            | Irrigation sluice      | original works                            | 105    | 2                             |
|                            | Rough stone            | — do —                                    | 105    | 3                             |
|                            | Escape                 | — do —                                    | 105    | 3                             |

2. These sanctions are  
registered as shown  
above.

S. S. Chingleput  
Collector

Ch. for I. work 12 Encls

P. W. D.

Rev. Dept.

Decd - 14-3-77

44 3/3

Encls

*1877*

Govt. of 1877 Madras.  
PUBLIC WORKS.

To *the S. C. Chingleput*

Dated

Issued

Recd.

Entl.

G. O. *for* *March* 1877, No. 770

Nos.

*139-140*

*Very urgent*

*Melvelagani and Meli Agaram Tanks,  
Chingleput Dt. The  
estimates amounting to  
Rs 1943 for repairs to  
—, sanctioned*

*For in Rs.*