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MADRAS RECORD OFFICE.

Government of Madras.

Financial DEPARTMENT.

G.O. No. 143 Press Mis. 146-147

Dated 24-8- 1814.

7/8

Not to be folded or roughly handled

No. 146. Read the following Proceedings of Government, in the Public Works Department, dated 10th August 1874, No. 2203:—

Read the following papers:—

From the Superintending Engineer, Coimbatore, dated 31st March 1874, No. 120.
From do. do. „ 27th April „ „ 12.

No. 450-J.

Note by the Chief Engineer for Irrigation.

In G.O. of the 30th January 1874, No. 221, certain proposals for altering the Velan tank, in the municipal limits of Coimbatore, were communicated to the District Engineer for report, and Colonel Bean, just before making over the charge of the district, forwarded the letter of the 31st March last, No. 120, and the survey of the locality now submitted.

2. The Collector, supported by the opinions of the Sanitary Commissioner and the Civil Surgeon, proposed to lower the level of the water in the Velan tank one foot, and to preserve that of the supply in the Peria tank, the two reservoirs being at present in direct communication by the bridge on the Pothanore road (No. 55 on plan), by converting this bridge into a sluice with regulating shutters.

3. From this modification he anticipated considerable benefit to the town, and very little loss of storage capacity.

4. The Velan tank is long and narrow, but it plays a not unimportant part in the irrigation of the lands in the neighbourhood, and it is not a shallow tank, for at the railway bridge I observed that the water marks were 12 to 14 feet above ground level.

Colonel Bean shows that the Velan tank holds 1·415 millions of cubic yards of water up to the crest of its calingulah, and 0·303 millions up to the top of the shutters, which is one foot above the crest. Between one-fourth and one-fifth of the storage would, therefore, be lost were the depth decreased one foot; on the other hand, the survey shows how small would be the difference as regards the area of the tank were the water level lowered one foot or to the calingulah crest level, or even to one foot below this. The present capacity of the Velan tank being 1·718 and the acreage irrigated 913 acres, the storage is equivalent to 1,870 cubic yards an acre, a very moderate allowance.

Again, it is reported that the Peria tank holds 2·211 millions of cubic yards to its calingulah crest level, and 0·533 millions between that and the top of the shutters, which is a foot higher, or its total capacity is 2·744 millions of cubic yards. The area of irrigation is 1,291 acres, so that the storage is at the rate of 2,125 cubic yards an acre. The storage of the two tanks taken together is 2,000 cubic yards an acre, and assuming 7,000 cubic yards as the supply required (and, as probably there is a good deal of double crop land, this would seem to be a low estimate), the quantity stored does not seem to be more than sufficient to secure the cultivation during the intervals between freshes in the Noyel, whence the water supply is obtained.

5. Of course, diminished storage in the Velan tank could be compensated for by adding to the capacity of the large tank. Colonel Bean is in error in supposing that it would be necessary to raise the latter one foot, for six inches would about suffice; and his estimate of Rupees 6,800 for this work might, therefore, be reduced to Rupees 3,500. It is doubtful, however, whether the improvement would at all compensate for the outlay of even this small sum. Apart from the immaterial reduction of waterspread, the information now afforded shows that the town drains have at present a very fair outfall, some of them, indeed, all that can be desired in this respect.

6. The Municipal Commissioners have stated that their finances would not admit of their spending Rupees 6,800 upon the alterations proposed, and probably, when they understand how very small the benefit would be, they will be unwilling to spend anything at all.

7. The upper part of the bed of the Velan tank, to the east of the railway, is covered with a fibrous weed, which must be likely to cause an unpleasant smell. It does not extend to the deep part of the tank. The only improvement which appeared to me feasible was the exclusion from the bed of the tank of the bit of land to the north of a remains of a channel cut by the late Mr. W. Fraser, when District Engineer of Coimbatore, for the conveyance of sewage, an arrangement never carried out. This is not marked on the survey, but its position is indicated in pencil. It would be necessary to raise the south bank of this channel and to form a bund from it on each side of the channel or drain which runs parallel to the railway up to the road close to the tunnel marked "Railway Bridge." The work required would cost very little, and would not affect the capacity of the tank materially, while a considerable spread of very shallow water would be got rid of. The excluded land for short periods would have no efficient drainage, but the rainfall at Coimbatore is small, and probably no inconvenience would result from this circumstance.

8. In G.O., Financial Department, of the 29th May 1872, No. 701, sanction was given to certain reclamation proposals described in the letter from Mr. Wedderburn, printed in Proceedings, Madras Government, Financial Department, No. 159, of the 7th February 1872, and it was laid down that it would be necessary to impose stringent conditions to ensure the reclamation being carried out properly. The settlement of the conditions and their enforcement were left to the Municipal Commissioners. The essential condition was that reclamation was to be effected by taking soil out of the bed of the tank to raise the ground along its margin, thus reducing the waterspread and maintaining the capacity. The District Engineer points out in paragraph 8 of his letter that this condition has not been properly enforced, and that the storage space has been reduced. Reclamation should be carried on from the edge of the waterspread inwards, and banks for cutting off unraised land should not be allowed. When I visited the locality in April last, I observed that reclamation was in progress under totally different arrangements to those sanctioned. Near the junction of the two tanks at the west end of the Velan tank a large quantity of town refuse had been deposited and was being levelled; in time, if this be allowed to go on, there will be very little tank left to the west of the railway. The District Engineer, being the officer responsible for the efficiency

of these irrigation works, should, I think, be authorized to stop any interference with them other than that sanctioned by Government, in the Financial Department, in May 1872. Town refuse, moreover, will certainly not make the nearness of the water in these tanks to the town less objectionable in a sanitary point of view, for, on the water receding, the mud exposed to the air will give out gases much more hurtful than those arising from ordinary silt.

OOTACAMUND, *27th June* 1874. (Signed) JOHN MULLINS, Lieut.-Col., R.E., *Chief Engineer for Irrigation.*

The papers submitted appear to indicate that the advantages, which would be secured by reducing the water level of the Velan tank at Coimbatore would be very small, and that it would not be worth the while of the Municipality to incur for this purpose even the reduced expenditure stated by the Chief Engineer for Irrigation as likely to be sufficient for storing in the Peria tank the water reduced in the Velan tank.

2. The slight improvement referred to in paragraph 7 of Lieutenant-Colonel Mullins' Note may be carried out by the Municipality if the Superintending Engineer, on examining into the details, sees no objection to its execution.

3. The circumstances brought to notice, as to the way in which reclamations on the margins of the tanks have been carried out contrary to the conditions prescribed when such work was allowed to be undertaken, will be referred to the Financial Department, in which the sanction was accorded. The Superintending Engineer will take care that, should any more work likely to affect the efficiency of the tanks as irrigation works be undertaken or be now in progress, the attention of the Municipality will at once be called to any objections which may present themselves to the judgment of the Superintending Engineer, and, if not attended to, this officer will report to the Government for orders.

(True Extract.)

(Signed) JOHN MULLINS, Lieut.-Col., R.E.,
Joint Secretary to Government.

No. 147. ORDER THEREON, 24th August 1874, No. 1413.

Referred to the President of the Coimbatore Municipal Commission for early report regarding the circumstances under which deviation has been permitted from the conditions prescribed for carrying out reclamations on the margin of the Velan tank.

2. He will also state the measures which he would propose to remedy the damage already done and to ensure the due observance of the conditions in future.

(True Extract.)

D. F. CARMICHAEL,
Acting Chief Secretary.

To the President of the Municipal Commission, Coimbatore.
,, Public Works Department.

Exd. J. H. Burns.

Govt. of [illegible] 1874 [illegible]

FINANCIAL.

To

THE PRESIDENT OF THE
MUNICIPAL COMMISSION,
COIMBATORE,
&c., &c., &c.

Dated August, 24th.

Recd.

Read.

G.O., 24th August 1874, No. 913.

AUGUST.
Nos. 146-147.

Velan Tank, Coimbatore Municipality.—The President of the Municipal Commission, Coimbatore, requested to report regarding the circumstances under which deviation has been permitted from the conditions prescribed for carrying out [illegible] on the margin of the Velan tank.

Proceedings of the Madras Government, Public Works Department, 10th August 1874.

Read the following papers :—

No. 202. From Supg. Engineer, Coimbatore, dated 31st March 1874, No. 120.
No. 203. From do. do. ,, 27th April ,, ,, 12.

No. 450-J.

No. 204. *Note by the Chief Engineer for Irrigation.*

IN G. O. of the 30th January 1874, No. 221, certain proposals for altering the Velan tank, in the Municipal limits of Coimbatore, were communicated to the District Engineer for report, and Colonel Bean just before making over the charge of the district forwarded the letter of the 31st March last, No. 120, and the survey of the locality now submitted.

2. The Collector, supported by the opinions of the Sanitary Commissioner and the Civil Surgeon, proposed to lower the level of the water in the Velan tank 1 foot, and to preserve that of the supply in the Peria tank, the two reservoirs being at present in direct communication by the bridge on the Pothanore road (No. 55 on Plan), by converting this bridge into a sluice with regulating shutters.

3. From this modification he anticipated considerable benefit to the town, and very little loss of storage capacity.

4. The Velan tank is long and narrow, but it plays a not unimportant part in the irrigation of the lands in the neighbourhood, and it is not a shallow tank, for at the Railway bridge I observed that the water-marks were 12 to 14 feet above ground level.

Colonel Bean shows that the Velan tank holds 1·415 millions of cubic yards of water up to the crest of its calingulah, and 0·303 millions up to the top of the shutters, which is 1 foot above the crest. Between one-fourth and one-fifth of the storage would therefore be lost were the depth decreased 1 foot; on the other hand, the survey shows how small would be the difference as regards the area of the tank were the water level lowered 1 foot or to the calingulah crest level, or even to 1 foot below this. The present capacity of the Velan tank being 1·718 and the acreage irrigated 913 acres, the storage is equivalent to 1,870 cubic yards an acre, a very moderate allowance.

Again, it is reported that the Peria tank holds 2·211 millions of cubic yards to its calingulah crest level, and 0·533 millions between that and the top of the shutters, which is a foot higher, or its total capacity is 2·744 millions of cubic yards. The area of irrigation is 1,291 acres, so that the storage is at the rate of 2,125 cubic yards an acre. The storage of the two tanks taken together is 2,000 cubic yards an acre, and assuming 7,000 cubic yards as the supply required, and as probably there is a good deal of double crop land, this would seem to be a low estimate, the quantity stored does not seem to be more than sufficient to secure the cultivation during the intervals between freshes in the Noyel, whence the water-supply is obtained.

5. Of course diminished storage in the Velan tank could be compensated for by adding to the capacity of the large tank. Colonel Bean is in error in supposing that it would be necessary to raise the latter 1 foot, for 6 inches would about suffice, and his estimate of Rupees 6,800 for this work might therefore be reduced to Rupees 3,500. It is doubtful, however, whether the improvement would at all

compensate for the outlay of even this smaller sum. Apart from the immaterial reduction of waterspread, the information now afforded shows that the town drains have at present a very fair outfall, some of them, indeed, all that can be desired in this respect.

6. The Municipal Commissioners have stated that their finances would not admit of their spending Rupees 6,800 upon the alterations proposed, and probably when they understand how very small the benefit would be, they will be unwilling to spend anything at all.

7. The upper part of the bed of the Velan tank, to the east of the Railway, is covered with a fibrous weed, which must be likely to cause an unpleasant smell. It does not extend to the deep part of the tank. The only improvement which appeared to me feasible was the exclusion from the bed of the tank of the bit of land to the north of a remains of a channel cut by the late Mr. W. Fraser, when District Engineer of Coimbatore, for the conveyance of sewage, an arrangement never carried out. This is not marked on the survey, but its position is indicated in pencil. It would be necessary to raise the south bank of this channel and to form a bund from it on each side of the channel or drain, which runs parallel to the Railway up to the road close to the tunnel marked "Railway bridge." The work required would cost very little, and would not affect the capacity of the tank materially, while a considerable spread of very shallow water would be got rid of. The excluded land for short periods would have no efficient drainage, but the rainfall at Coimbatore is small, and probably no inconvenience would result from this circumstance.

8. In G. O., Financial Department, of the 29th May 1872, No. 701, sanction was given to certain reclamation proposals described in the letter from Mr. Wedderburn, printed in Proceedings Madras Government, Financial Department, No. 159, of the 7th February 1872, and it was laid down that it would be necessary to impose stringent conditions to ensure the reclamation being carried out properly. The settlement of the conditions and their enforcement were left to the Municipal Commissioners. The essential condition was that reclamation was to be effected by taking soil out of the bed of the tank to raise the ground along its margin, thus reducing the waterspread and maintaining the capacity. The District Engineer points out in paragraph 8 of his letter that this condition has not been properly enforced, and that the storeage space has been reduced. Reclamation should be carried on from the edge of the waterspread inwards, and banks for cutting off unraised land should not be allowed. When I visited the locality in April last, I observed that reclamation was in progress under totally different arrangements to those sanctioned. Near the junction of the two tanks at the west end of the Velan tank a large quantity of town refuse had been deposited, and was being levelled; in time, if this be allowed to go on, there will be very little tank left to the west of the Railway. The District Engineer being the officer responsible for the efficiency of these irrigation works, should, I think, be authorized to stop any interference with them other than that sanctioned by Government, in the Financial Department, in May 1872. Town refuse, moreover, will certainly not make the nearness of the water in these tanks to the town less objectionable in a sanitary point of

Proceedings of the Madras Government, Public Works Department,
10th August 1874.

view, for on the water receding the mud exposed to the air will give out gases much more hurtful than those arising from ordinary silt.

OOTACAMUND, *27th June* 1874. (Signed) JOHN MULLINS, Lieut.-Colonel R.E., *Chief Engineer for Irrigation.*

No. 205. ORDER THEREON, 10th August 1874, No. 2,203.

IRRIGATION, No. 12.

THE papers submitted appear to indicate that the advantages, which would be secured by reducing the water level of the Velan tank at Coimbatore would be very small, and that it would not be worth the while of the Municipality to incur for this purpose even the reduced expenditure stated by the Chief Engineer for Irrigation as likely to be sufficient, for storing in the Peria tank the water reduced in the Velan tank.

2. The slight improvement referred to in paragraph 7 of Lieutenant-Colonel Mullins' Note may be carried out by the Municipality if the Superintending Engineer, on examining into the details, sees no objection to its execution.

3. The circumstances brought to notice, as to the way in which reclamations on the margins of the tanks have been carried out contrary to the conditions prescribed when such work was allowed to be undertaken, will be referred to the Financial Department, in which the sanction was accorded. The Superintending Engineer will take care that should any more work likely to affect the efficiency of the tanks as irrigation works be undertaken, or be now in progress, the attention of the Municipality will at once be called to any objections which may present themselves to the judgment of the Superintending Engineer, and if not attended to this officer will report to the Government for orders.

(True Extract.)

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

To the Superintending Engineer, Coimbatore.
,, Chief Engineer for Irrigation.
,, Public Department.
,, Financial Department.

Exd. S. T. Austin.
6 Spare Copies

Financial Department

Govt. of {1874} Madras.

PUBLIC WORKS.

To

THE SUPERINTENDING ENGINEER,

COIMBATORE,

&c, &c, &c

Dated August 10th.

Recd. - 4 - 20 Encl.

G. O., 10th August 1874, No. 2,203.

AUGUST.

Nos. 202-205

R. 1703

Govt 4/13

Velan Tank.—Passing orders on Not by the Chief Engineer for Irrigation, o the proposed alterations to the tank in the Coimbatore Municipality.

Financial Department.

PROCEEDINGS of the MADRAS GOVERNMENT.

Read the following letter Proceedings of Government, P. W. Department, dated 10th August 1874. No 2203.

Order thereon, dy 24th Augt 1874 No 1413.

Referred to the President of the Coimbatore Municipal Commission for early report regarding the circumstances under which deviation has been permitted from the conditions prescribed for carrying out reclamations on the margin of the Velan tank.

2. He will also state the measures which he would propose to remedy the damage already done, and to ensure the due observance of the conditions in future.

To

The Presdt. of the Coimbatore Municipal Commission dispd 2/8 with No 2213

P. W. Deptt. dispd 2/8

21/8

Govt. of {1874} Madras.

Irrign

To

The President of the
Coimbatore Municl Council
&c

Dated 24 August
Recd. 1874, No 1413

Nos 146 - 147

Velan tank Coimbatore Municipality. Vice President of the Municl Council Coimbatore requested to report regarding the circumstances under which deviation has been permitted from the conditions prescribed for carrying out

Reclamations on the ~~on the~~ margin of the Velan tank -