Read the following paper :—

No. 1,157.

No. 157. *Note by the Chief Engineer for Irrigation.*

No. 2,385, dated 14th September 1875. THE following estimates have been submitted by the Superintending Engineer, Chingleput :—

Attooputty Kotapunjy Tank.	Repairs	Rupees	1,435
Dry stone escape 152 feet	... ...	,,	285
	Total ...		1,720
Ayacut area		Acres	173
,, assessment		Rupees	412
Average revenue		,,	311

The only expenditure incurred recently has been for part of the work provided for in this estimate, which has been undertaken to save the revenue. The area of the catchment basin is reported to be 5 square miles, and there are seven tanks above, two of which are Zemindary. For one of these—the Thundalum Tank—an estimate has been received, and for the whole group a sketch map should have been forwarded showing the relative positions of the several tanks and their connection with each other. The necessity for saving revenue and attending therefore first to breached tanks no doubt interferes much with the treatment at one time of entire groups, but at any rate sketch plans should not in future be omitted, together with such information as may be available regarding those members of a group, for which the preparation of estimates may have to be postponed.

The Attooputty Kotapunjy Tank had a masonry calingulah 30 feet long and a dry stone escape of equal length. The former was washed away in 1872; 182 feet* of escape altogether are to be provided. The bund is to be $4\frac{1}{2}$ feet above F. T. L., and the difference between the latter and M. W. L. will be 2 feet.

* 152 feet of dry stone escape additional.

2.	Ladakarnay Large Tank.	Repairs	Rupees	915
	Dry stone escape		,,	295
	Ayacut area		Acres	397
	,, assessment		Rupees	1,481
	Average revenue		,,	612

No expenditure except on emergent work provided for in this estimate has been incurred in recent years.

The catchment basin is a part of that of the Madranticum Tank, and is reported to be 2 square miles, and this coupled with the average revenue, which indicates that about 160 Acres are irrigated, shows that the ayacut needs to be revised, and much of the land included therein should be transferred permanently to dry. It is useless to expect that the drainage of 2 square miles will effectively irrigate nearly 400 Acres. Surplus has hitherto been discharged by a cut 36 feet wide at the north end of the bund, except that since 1874 further relief has been afforded by cutting down the

bund at the south end to F. T. L. It is now intended to construct a dry stone escape 99 feet long at the north end. The temporary measures proposed, pending the completion of the escape, *viz.*, cutting down the bund and planting tank grass, will not afford the requisite relief, and should be avoided if possible by the early construction of the escape with stone. The surplus runs into the Balasamoodrum Tank, but in this batch of estimates there is none for that tank, though it is indicated in the report that the latter is not in a fit state to receive the surplus.

3. Savoor or Sanoor Tank. Repairs ... ... Rupees 360
   Sluice ... ... ,, 135
   Ayacut area ... ... Acres 87
   ,, assessment ... ... Rupees 325
   Average revenue ... ... ,, 93

The catchment basin is said to measure half a square mile. This is another case in which the ayacut area is incapable of effective irrigation, and a transference of at least 50 Acres to dry will be the proper arrangement. The tank has no surplus works, and it is proposed to cut down 63 feet of the bund to F. T. L., and to plant the ground thus lowered with tank grass. It seems to be supposed that this space will be as effective as if left perfectly clear, but really the space so planted must be double the length required to dispose of the surplus were there no grass, and this should be attended to. The bund is to be 3 feet above F. T. L. and M. W. L. 1½ feet above that level. A masonry sluice is to be substituted for a pot sluice.

4. Vadaputnum Vanju Tank. Repairs... ... ... Rupees 455
   Sluice... ... ... ,, 135
   Ayacut area ... ... Acres 66
   ,, assessment ... ... Rupees 281
   Average revenue ... ... ,, 229

No repairs have been executed in recent years, except that some of the work included in this estimate has been carried out on emergency. The catchment basin is about 1½ square miles, so that the full ayacut should be capable of irrigation. It has no surplus work, and it is intended to lower the bund for a length of 99 feet to F. T. L. and to plant the lowered ground with tank grass. The proper length under this arrangement will be 186 feet. The soil is said to be very sandy, the grass may prevent its being cut away, but this is somewhat doubtful; however the experiment may be tried. A masonry sluice is to be built in lieu of a pot sluice.

5. Nelvoypolliem Tank. Repairs ... ... Rupees 370
   Dry stone escape ... ... ,, 130
   Ayacut area ... ... Acres 40
   ,, assessment ... ... Rupees 168
   Average revenue ... ... ,, 157

Rupees 327 were expended on the tank in 1872-73.

The tank breached in 1872 and again in 1874. Its catchment basin is three-quarters of a square mile, and surplus has been discharged over a limited and inadequate length (18 feet) of rocky ground at the east end, while since 1874 a length of bund at the other end has been cut down to F. T. L., and it is proposed to construct a dry stone escape 62½ feet long, which with 18 inches of water passing over will afford the required relief.

6. Seroonulloor Tank. Repairs ... ... Rupees 715
   Dry stone escape ... ... ,, 135
   Ayacut area ... ... Acres 101
   ,, assessment ... ... Rupees 443
   Average revenue ... ... ,, 424

No repairs have been done for many years. The catchment basin is said to be 1½ square miles, and in this area is included the Moothoocaray Tank which irrigates about 40 Acres. Consequently about 137 Acres are the total irrigation from the drainage of 1½ square miles, or over 90 Acres per square mile. It is thought that the area of the basin must have been under-estimated. The tank has a calingulah 31 feet long in fair order, and this is to be supplemented by a dry stone escape 68 feet in length. The tank suffered in 1872 and 1874, but did not breach. The top of the bund is to be 3¾ feet above F. T. L. and M. W. L. is intended to be 2 feet above that level.

7. Moothoocaray Tank. Repairs ... ... Rupees 505
   Ayacut area ... ... Acres 45
   ,, assessment ... ... Rupees 181
   Average revenue ... ... ,, 154

Rupees 31 were expended in 1873-74.

The area of the catchment basin is about 1 square mile. It has no surplus work, but a cut 18 feet wide in the bund which is to be closed and surplus is proposed to be discharged by cutting the bund down to F. T. L. for a length of 96 feet, but, as this ground is to be planted, the proper length will be 180 feet. The bund is to be 3½ feet above F. T. L., which will allow a margin of 2 feet above M. W. L.

8. Karoonacarachary Tank. Repairs ... ... Rupees 350
   Ayacut area ... ... Acres 71
   ,, assessment ... ... Rupees 196
   Average revenue ... ... ,, 172

No outlay has been incurred on maintenance except in connection with this estimate.

The catchment basin is put at three-quarters of a square mile, which is somewhat small for the effective irrigation of about 63 Acres. Surplus has been discharged at a cut 9 feet wide, and 96 feet of bund are to be removed to F. T. L., and the ground planted. The length over which surplus is to be discharged will have to be double that intended.

9. Kolamunggalum Tank. Repairs... ... ...Rupees 295
   Ayacut area ... ... Acres 16
   ,, assessment ... ... Rupees 67
   Average revenue ... ... ,, 79

There has been no recent expenditure on the tank.

The area of the catchment basin is entered as a quarter of a square mile, which appears to be small for the actual cultivation of 18 or 19 Acres. Surplus has gone over the ground at one end of the bund, and a length of 79 feet which should be increased to 150 feet will be levelled and planted with grass.

10. Nanampoondy Tank. Repairs... ... ...Rupees 295
    Ayacut area ... ... Acres 20
    ,, assessment ... ... Rupees 73
    Average revenue ... ... ,, 70

There has been no recent expenditure except on emergent work included in the present estimate.

The tank was breached in 1874; the catchment basin is three-quarters of a square mile. Surplus has gone over the ground at one end of the bund and this is to be levelled. The length at F. T. L. with tank grass planting should be 150 instead of 75 feet. The bund is to be 3 feet above F. T. L. and M.W.L. will not exceed $1\frac{1}{2}$ feet above that level.

11. Thiroovadoor Small Tank. Repairs ... ... Rupees 545
Ayacut area ... ... Acres 39
„ assessment ... ... Rupees 157
Average revenue ... ... „ 162

Rupees 92 were expended in 1873-74. Prior to 1873 no outlay had been incurred for many years. The tank breached in 1872 and again in 1874. The catchment basin is 1 square mile. There is no surplus work, and surplus was discharged at a small cut. The ground is to be levelled to F. T. L., and the length should be 180 feet instead of 90 feet, as it is to be protected from erosion by tank grass planting. M.W.L. will be 18 inches and the top of bund 3 feet above F. T. L.

12. Nulloor Large Tank. Repairs ... ... Rupees 975
Dry stone escape ... ... „ 180
Ayacut area ... ... Acres 133
„ assessment ... ... Rupees 500
Average revenue ... ... „ 285

There has been no outlay in recent years. The drainage basin is 1 square mile and is occupied principally by wet lands under the Ootramalloor Tank. It seems to be doubtful whether it would not be better to bring the Nulloor tank bed and ayacut under the former tank which has a river supply, and this point should be considered by the Superintending Engineer and if there be *prima facie* grounds for such an arrangement the Collector should be consulted. The tank has no surplus work, but water has been discharged at a cut 30 feet wide. It is intended to provide a dry stone escape $62\frac{1}{2}$ feet long and to make M. W. L. 2 feet, and the top of the bund 4 feet above F. T. L.

13. Nekoondrum Tank. Repairs ... ... Rupees 1,785
(Revenue) Dry stone escape ... ... „ 245
Ayacut area ... ... Acres 383
„ assessment ... ... Rupees 1,111
Average revenue ... ... „ 1,019

No expenditure has been incurred in recent years except upon emergent work included in this estimate.

The tank was damaged in 1872 and breached in 1874. Its catchment basin is 6 square miles and it has a calingulah 71 feet long which is to have the dam stones removed, and it is intended to supplement this by a dry stone escape 93 feet long. This may do as a temporary arrangement, but it is thought that for a tank of this size it will be better to build a leaky wall in rubble masonry, so that water may be conveniently retained to the proper F. T. L. There are five tanks above, three of which are in private hands, and all are reported to be in need of repair, and it is said that they

will shortly be attended to. It seems to be doubtful whether the area of the catchment basin has not been under-estimated, for without any tank above to absorb a part of the drainage 57 Acres nearly per square mile would be a high proportion of cultivation to catchment basin. M. W. L. is intended to be $2\frac{1}{4}$, and the top of bund 5 feet above F. T. L.

14. Poloor Tank. Repairs ... ... Rupees 810
(Revenue) Dry stone escape ... ... „ 80
Ayacut area ... ... Acres 96
„ assessment ... ... Rupees 393
Average revenue ... ... „ 307

Rupees 350 were expended in 1872-73.

The catchment basin is three-quarters of a square mile, and is situated at the top of that of the Manicoopum Tank. It has a masonry surplus weir 30 feet in length, and that it breached must have been due to the bund being out of repair, for though a larger weir would be desirable all surplus could have been discharged with less than 3 feet going over; 30 feet of dry stone escape are to be given in addition. This would seem to be a case in which complete repairs in 1872-73 would have saved a good deal of money. M. W. L. is to be $1\frac{3}{4}$ feet, and top of bund 4 feet above F. T. L.

15. Poodooput Tank. Repairs ... ... Rupees 885
Dry stone escape ... ... „ 130
Ayacut area ... ... Acres 82
„ assessment ... ... Rupees 345
Average revenue ... ... „ 273

Rupees 592 were spent in 1873-74.

In 1872 there were three breaches, and in 1874 the tank breached again, but not so badly as in the former year.

The catchment basin is 2 square miles, and the tank has a masonry surplus weir $36\frac{1}{2}$ feet long. A dry stone escape $62\frac{1}{2}$ feet long is intended to be added. M. W. L. is to be 2 feet, and the top of bund 4 feet above F. T. L. It is reported that for about twenty years prior to 1873 there had been no expenditure on repairs at this tank. In that year also a sluice was built at a cost of Rupees 315.

16. The plan of disposing of surplus from petty tanks by simply levelling a considerable length of ground and then protecting this ground by planting tank grass is one which is well worthy of a trial, and if the obstruction caused by the grass be allowed for, and the space for discharge be made adequate, the reduction of velocity occasioned by the grass will no doubt save the ground from erosion and prevent the formation of channels which would lead to waste of water. On the other hand, it will have to be remembered that the tendency of the grass wherever it may grow luxuriantly and thickly will be to cause a deposit of silt, and therefore gradually to raise the F. T. L. It will be well therefore in all cases in which this method of getting rid of surplus may be introduced to fix a bench mark stone with the proper level of the tank water when full noted thereon, so that disputes may be avoided and the actual level of the water regulated from time to time as may be necessary.

OOTACAMUND,
5th October 1875.

(Signed) JOHN MULLINS, Lieut.-Colonel, R.E.,
Chief Engineer for Irrigation.

Proceedings of the Madras Government, Public Works Department,
11th October 1875.

No. 158. ORDER THEREON, 11th October 1875, No. 2,903.

IRRIGATION, No. 15.
Account.

THE following estimates are sanctioned.

Chingleput District.

			Capital	Revenue
			Rs.	Rs.
1.	Attooputty Kotapunjy	Tank	285	1,135
2.	Lodakarnay Large	do.	295	915
3.	Savoor or Sanoor	do.	135	360
4.	Vadaputnum Vanju	do.	135	455
5.	Nelvoypolliem	do.	130	370
6.	Seroonulloor	do.	135	715
7.	Moothoocaray	do.	...	505
8.	Karoonacarachary	do.	...	350
9.	Kolamungalum	do.	...	295
10.	Nanampoondy	do.	...	295
11.	Thiroovadoor Small	do.	...	515
12.	Nulloor Large	do.	180	975
13.	Nekoondrum	do.	...	2,030
14.	Poloor	do.	...	890
15.	Poodooput	do.	130	885

2. The sanction of the estimates for the Nulloor Large Tank will be considered to be conditional, on its being ascertained that the maintenance of this tank will be preferable to bringing its ayacut under the Ootramulloor Tank.

3. The attention of the Superintending Engineer will be given to the remarks in the foregoing reviews of the estimates, and especially to the concluding paragraph of the note.

(True Extract.)

Major-General, R.E.,
Secretary to Government.

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

Fwd. E. C. Shunker,
Spare Copies

No 1157.

Note by the Chief Engineer for Irrigation.

The following estimates have been submitted by the Superintending Engineer Chingleput.

No 2385- 24
Sept 24/75.

Enclosure 24

Attoopatty Kotapunjy Tank

Repairs. Rupees 1435

Dry stone escape 152 feet " 285

Total " 1720

Ayacut area acres 173

" Assessment Rupees 612

Average revenue " 311

The only expenditure incurred recently has been for part of the work provided for in this estimate, which has been undertaken to save the Revenue. The area of the catchment basin is reported to be 5 square miles, and there are 7 tanks above, 2 of which are Zemindary. Of one of these the Trundalum Tank - an estimate has been received and for the whole group a sketch map should have been forwarded showing the relative positions of the several tanks and their connection with each other. The necessity for raising revenue and attending therefore

first to breached tanks no doubt interferes much with the treatment at one time of entire groups, but at any rate sketch plans should not in future be omitted, together with such information as may be available regarding these members of a group, for which the preparation of estimates may have to be postponed.

The attempt at Katapinjy tank had a masonry Caliniyulah 30 feet long and a dry stone escape of equal length. The former was washed away in 1872-18[illegible] feet of escape altogether are to be provided - Rs[illegible] cft additional bund is 1½ feet above F.T.L, and the difference between the latter and M.W.L will be 2 feet.

752 feet of dry stone es-

2. Ladakarnay Large tank Repairs Rs 915

Dry stone escape = 295

Ayacut area acres 397

" Assessment Rupees 1481

Average revenue " 612

No expenditure except on ordinary works provided for in the estimate has been

incurred in recent years.

The Catchment basin is a part of that of the Kadavantivum tank which is reported to be 2 square miles and this coupled with the average revenue, which indicates that about 160 acres are irrigated, shows that the ayacut needs to be revised and much of the land included therein should be transferred permanently to dry. It is useless to expect that the drainage of 2 square miles will effectively irrigate nearly 400 acres. Surplus has hitherto been discharged by a cut 36 feet wide at the north end of the bund, except that since 1874, further relief has been afforded by cutting down the bund at the South end to F.T.L. It is now intended to construct a dry stone escape 99 feet long at the North end.

The temporary measures proposed pending the completion of the escape viz cutting down the bund and planting tank grass will not afford the requisite

relief, and should be avoided if possible by the early construction of the escape with stone. The surplus runs into the Balasamoodram tank, but in this batch of estimates there is none for that tank, though it is indicated in the report that the latter is not in a fit state to receive the surplus.

3. Eavoor or Sanoor tank. Repairs Rs360
Sluice " 135

Ayacut area acres 87
" Assessment Rupees 325
Average revenue " 93

The catchment basin is said to measure ½ a square mile. This is another case in which the ayacut area is incapable of effective irrigation, and a transference of at least 50 acres to dry will be the proper arrangement. The tank has no surplus work, and it is proposed to cut down 6 3 feet of the bund to F.T.L. and to plant the ground thus lowered with tank grass. It seems to be supposed that this space will have effected

as if left perfectly clear, but really the space so planted must be double the length required to dispose of the surplus were there no grass, and this should be attended to. The bund is 3 feet above F.T.L. and M.W.L 1½ feet above that level. A masonry sluice is to be substituted for a pot sluice.

4. Vadahuttuam Vanjar Tank Repairs Rs655
Sluice " 135

Ayacut area acres 66
" Assessment Rs 281
Average revenue " 329

The repairs have been executed in accordance, except that some of the work included in this estimate has been carried out as an emergency. The catchment basin is about 1½ square miles so that the full ayacut should be capable of irrigation. It has no surplus work, and it is intended to lower the bund for a length of 99 feet to F.T.L. and to plant the lowered ground with tank grass.

The proper benefit under this arrangement will be 186 ff. The soil is said to be very sandy - the grass may prevent its being cut away, but this is considered doubtful, however the experiment may be tried - A masonry sluice is to be built in lieu of an post sluice.

5- Belvoy police Santa Rosario Rupees 545
Dry stone escape " 130
Agricult area Acres 40
" Assessment Rupees 168
Average revenue " 154

Rupees 324 were expended on the tanks in 1872-73.

The tank breached in 1872 and again in 1874. Its catchment basin is $\frac{3}{4}$ of a square mile, and surplus has been discharged over a limited and inadequate length (18 feet) of rocky ground, at the East end, while since 1874 a length of bund at the other end has been cut down to F.T.L. and it is proposed to construct a dry stone escape 62½ feet long, which with 18 inches of water passing over will afford the required relief -

6- Seven mile or Santa Rosario Rupees 715
Dry stone escape " 135
Agricult area acres 101
" Assessment Rs 443
Average revenue " 434

The repairs have been done for many years
The catchment basin is said to be 1½ square miles, and in this area is included the Inoottiarcavay tank which irrigates about 40 acres - Cowegam Ayacut 137 acres and the total irrigation from the drainage of 1½ square miles or over 90 acres - A flood of the basin was to have been under cover of the basin was to be enlarged - The tank bund is triangular in plan 3 feet long in their centre, and this is to be supplemented by a dry stone escape 60 feet in length - The tank suffered in 1872 and 73, and did not breach - The top of the bund is also 33½ feet above F.T.L. and M.W.L is intended to be 3 feet above that level -

7- Inoottiarcavay Santa Rosario Rs 505
Agricult area acres 45
" Assessment Rs 181
Average revenue " 154

Surface 31 ac is intended impounding
The area of the catchment basin is about
1 square mile. It has an uneven surface,
but is not 15 feet under in the land which
is to be leveled and surplus is to be removed
& be discharged by cutting the land
down to F.T.L. for a length of 950 feet but-
as the ground is thin the proper
length will be 150 feet. The land is like
3½ feet above F.T.L, which will allow
a margin of 2 feet above M.W.L.

6. Karao reservoir Ranchi Rs 30
Agricultural area " acres 30
" Assessment " Rupees 73
Average revenue " 73

No outlay has been incurred on mainte-
nance except in connection with the
this estimate.

The catchment basin is 640 acres or 1
square mile which is not at all small
for the effective irrigation of about 63
acres. The surplus has been directed
cut 9 feet wide, and 36 feet of earth was
to be removed to F.T.L. and the ground
planted. The length over which earth has
to be discharged is 1 lane & double

Kal Pukhri
7. Kia Pukhri Ranchi Rs 295
Irrigable area acres
Agricultural " "
" Assessment Rupees
Average revenue " to pay

There has been no recent expenditure
tank.
The main bund of the catchment basin is
entered on 1 of a square mile, which
after the cut is for the natural
catchment of 18 or 19 acres. The surplus
has gone over the ground at one end
to the bund and its length of 99 feet which
should be increased to 150 feet, will then
should be increased & planted with grass
10. Ranu Pukhri Ranchi Rs 295
Agricultural area acres 30
" Assessment Rupees 73
Average revenue " 70

There has been no recent expenditure ex-
-cept on emergent work included in the
present estimate.
The tank was thrown up in 1874, the catch-
-ment basin is ¾ of a square mile - Sur-
-plus has gone over the ground at one end
of the bund and this is like breached - the

length at F.T.L. with Cauvi grass planting should be 150 instead of 75 feet - The bund is 3 feet above F.T.L. and M.W.L will not exceed 1½ feet above that level.

11. Thiruvudaiyar small Tank - Repairs Rs 515

Ayacut area acres 39
do assessment Rupees 157
Average revenue " 162

Rupees 92 were expended in 1873-74 - Prior to 1873 no outlay had been incurred for many years - The tank breached in 1872 and again in 1874 - The catchment basin is 1 square mile - There is no surplus work, and surplus was discharged at a small cut - The ground is also levelled to F.T.L. and the length should be 180 feet instead of 90 feet, as it is to be protected from erosion by Cauvi grass planting - M.W.L will be 15 inches and the top of bund 3 feet above F.T.L.

12. Anbur large tank - Repairs Rs 775

Dry stone escape " 180

Ayacut area acres 133
" Assessment Rs 500
Average revenue do 385

There has been no outlay in recent years.

The drainage basin is 1 square mile and is cultivable, principally dry wet lands under the Velimanagar tank - It seems that sufficient waste it would not be better to bring the Anbur tank bed and ayacut under the Velimanagar tank to which it is now subsidy, and this point should be considered by the Superintending Engineer and if there are, strong facie grounds for such an arrangement the Collector should be consulted - The tank has no surplus work, water has been discharged at a cut 30 feet wide - It is intended to provide a dry stone escape 63½ feet long and to mark M.W.L. 2 feet, and the top of the bund 4 feet, above F.T.L.

13. Nedumanur Tank Repairs Rs 1755.

(Revenue) Dry stone escape " 245

Ayacut area acres 383
" assessment Rs 1111
" Average revenue " 1019

No expenditure has been incurred in recent years except upon encroachment work included in this estimate.

The tank was damaged in 1872 and breached in 1874 - The catchment basin is 6 square

miles and it has a calingalah 45 feet long which is to have the dam stones removed and it is intended to supplement this by a dry stone escape 3 feet long. This may do as a temporary arrangement but it is thought that for a tank of this size it will be better to build a body wall in rubble masonry, so that water may be conveniently retained to the proper F.T.L. There are 5 tanks above, 3 of which are in private hands and all are reported to be in need of repair, and it is said that they will shortly be attended to. It seems to be doubtful whether the area of the catchment having has not been underestimated for without any tanks above to abstract a part of the drainage 3/4 acres nearly per square mile would be a high proportion of cultivation to catchment having. M.W.L is intended to be 2 1/4 and the top of bund 5 feet above F.T.L.

14- Pelloor Tank (Repairs Rupees 310
(Revenue) Dry stone escape " 30
Ayacut area acres 96
" Assessment Rupees 373
Average revenue do 314

- Rupees 350 were expended in 1872-73. The catchment having is 1/4 of a square mile, and is situated at the top of that of the Kunnicoopum tank. It has no masonry surplus weir 30 feet in length and that it breached must have been due to the bund being out of repair, for though a larger weir would be desirable all superflow could have been discharged with less than 3 feet going over. 30 feet dry stone escapes are also given in the detail. This would seem to have been in which complete repairs in 1872-73 would have saved a good deal of damage

M.W.L is to be 1 1/2 feet and top of bund 4 feet above F.T.L.

15- Kadapoor Tank. Repairs (Rupees 885
dry stone escape " 130
Ayacut area acres 33
" Assessment (Rupees 345
Average Revenue do 273

Rupees 93 were spent in 1873-74. In 1872 there were 3 breaches and in 1874 the tank breached again, but not so badly as in the former year. The catchment having is 2 square miles

and the tank has a masonry surplus weir 36½ feet long - a dry stone escape 62½ feet long is intended to be added. M.W.L is to be 2 feet and the top of bund 4 feet above F.T.L. It is reported that for about 20 years prior to 1873 there had been no expenditure on repairs at this tank - In that year the sluice was built at a cost of Rupees 315.

16. The plan of disposing of surplus from petty tanks by simply levelling a considerable length of ground at the protecting this ground by planting tank grass is one which is well worthy of a trial, and if the obstructions caused by the grass be allowed for; and the space for discharge be made adequate, the reductions of velocity occasioned by the grass will no doubt save the ground from erosion and prevent the formations of channels which would lead to waste of water. On the other hand it will have to be remembered that the tendency of the grass wherever it may grow luxuriantly and thickly will

2BN

will be to cause deposit of silt and therefore gradually to raise the F.T.L. It will also be well therefore in all cases in which this method of getting rid of surplus may be introduced to fix a bench mark stone with the proper level of the tank water to be full noted thereon, so that disputes may be avoided, and the actual level of the water regulated from time to time as may be necessary.

I have &c.
(Signed) Lieut. Col. R.E.
Chief Engineer for Irrigation

Vacamund
October 1875

To
The Secretary to Government
P.W.D.

G. W. 1895 Sept.

No: 6511

From

The Chief Engr.
for Irrigation.

Dated 5th Oct. 1895.
Recd 13th " 1895.

G.26. No. 1157

Note on certain Irrigation Wks. (On the north of the Lakes) of the Chief Engr. Irrigation Dept. Distt.

G.O. 11 Retd 7/5 to 2903

G 12/157

No 2903 8/11/6. 1895

Rec'd 5th Oct. 1895 under cover of No 6511 dated the 4th Oct 1895 from the Chief Engineer for Irrigation, Madras.

Re-submitting estimates recommended.

Executive Engineer, Irrigation Division.

			Capital.	Revenue.
1.	Kallikulam Tank	Rs.	2,585.	435
2.	Kadalkudi Tank	"	595.	915
3.	Kavar or Kanavai	"	155.	360
4.	Kadaikulam Tank	"	155.	455
5.	Kalugumalai	"	150.	370
6.	Kalugumalai	"	150.	915
7.	Kalugumalai	"		505
8.	Kalugumalai	"		350
9.	Kalugumalai	"		295
10.	Kalugumalai	"		290
11.	Kalugumalai	"		545
12.	Kalugumalai	"		995
13.	Kallur Tank	"	100	2,030
14.	Kallur	"		890
15.	Kallur	"		565
	Kallur	"	130	1,161

2. The sanction of the est-
-mates for the Mallow-
large tank will be con-
-sidered to be conditional
on its being ascertained
that the maintenance
of this tank will be pre-
-ferable to bringing its
ayacut under the Ootra-
-mallur tank.

3. The attention of the
Supt. Engineer will be
drawn to the remarks
in the foregoing reviews
of the estimates, and es-
-pecially to the concluding
paragraphs of the letter.

Mg. 7/10

* With orgl papers

15 Rolls

14/157/8

G.O. of {1875} Madras.

PUBLIC WORKS.

To

Supt. Engr. Chingleput

Dated

By

Recd.

Encl.

G. O. 11th Feb. 1876, No. 763

Nos. 157-158

Repair of certain Tanks in the Chingleput Dt. The Estimates amounting to Rs 26445 for the — sanctioned with remarks.