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MADRAS RECORD OFFICE

GOVERNMENT OF MADRAS

Revenue DEPARTMENT

G.O. No. 903 Press
~~B.P. No.~~ Mis.

Dated 1.5.1875 ~~196~~ .

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Read the following papers:—

No. 392. From Colonel F. J. MOBE[illegible]Y, R.E., Superintending Engineer, 4th Division, to Colonel G. W[illegible]ER, R.E., Secretary to Government, Public Works Department, [illegible]s, 23rd November 1872, No. 3,759.

I HAVE the honor to bring to [illegible]ernment a claim for compensation for land taken up under the follow[illegible]

2. In 1863 I, then District [illegible]gleput, forwarded an estimate for carrying a branch from the Kamb[illegible]ward, and known as the Neenjal Madugu; it was prepared by Sub-Eng[illegible]end, and amounted to Rupees 9,000.

3. On further investigation, I thou[illegible]hat the supply of water was likely to be very uncertain. I did not think the estim[illegible] was right, or the return stated correct, and I stopped any further proceeding.

4. In 1866 the subject was re-opened; the Superintending Engineer and Revenue Officers were more sanguine, and in G. O., No. 3,811, dated 30th November, the execution of the work was sanctioned, [illegible]d was in progress till 1870, up to which time Rupees 18,457 had been expended. A report and revised estimate were forwarded by Mr. Ottmann on 21st February [illegible]68; the latter amounts to Rupees 38,200, and the compensation now claimed is an i[illegible]in it amounting to Rupees 1,800.

5. For some reason the estimate wa[illegible]etained in this office, and the work abandoned as unlikely to answer. G. O., No. 878, dated 29th March 1870, is the latest document that I can find on the subject.

6. Mr. Ottmann states that the claim for compensation is valid. I trust, therefore, that Government will be pleased to place me in funds to meet it.

No. 392A. From Colonel F. J. MOBERLY, R.E., District Engineer, Chingleput, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, dated Guindy, 19th March 1874, No. 3,436.

I HAVE the honor to enclose a statement showing the particulars of the land taken up for the Neenjal Madugu project as called for in your Memorandum, No. 305, dated 28th December 1872. I also enclose copy of a letter from the Sub-Collector replying to my request to be informed as to the amount that would be required if we gave up the land. I shall be obliged by your instructions on the subject.

1 Copy of Mr. Ottmann's letter, No. 477, dated 14th November 1873.
1 do. Sub-Collector, No. 662, dated 24th December 1873.
2 Statements.

2. As regards paragraph 2 of your letter, the only paper that I can find is contained in G. O., No. 1,080, dated 6th April 1868. Expenditure appears to have been incurred on the strength of Budget grants made to meet the estimate which was never sent in.

3. I found the mass of plans, &c., in my office when I took charge as Superintending Engineer. I have not examined them, as I conclude that experience led my predecessors in the office to condemn a project which I put aside as impracticable in 1863.

4. I enclose copy of letter from Mr. Ottmann who was most concerned in the matter.

From S. OTTMANN, Esq., Sub-Engineer, i
Engineer of Nellore, dated Dec

With reference to your Memorandu
letter, No. 1,968, of the District Engine
I have the honor to state that the
records to give any specific inform

2. The records of the Chingl
all the requisite information, and, i
B. Mooniappa Moodelliar (who was
the papers, he is likely to do so with

3. I would submit that the fa
the authorities concerned, and accepted b
I remember aright, there were Budget allotm
Boileau and Bean.

4. The reason for the revised estimat
unable to say, but it was prepared under the
instructions from the Secretary to Government,
neer for Irrigation (Colonels Orr and Anderson
whole scheme, and had my instructions then
Colonel Bean, subsequently visited the wor
prepared accordingly and forwarded. I ha
Government after it had been previously re
was much correspondence respecting the wor
was prepared hap-hazard without even levels for the channels.

5. I have endeavoured a search among my papers to get at any information respecting the matter under notice, but without avail; consequently lose no further time in replying.

No. 344.

From the Superintending Engineer, Northern Range, to R. SMITH, Esq., District Engineer of Nellore, dated Vellore, 14th November 1873, No. 477.

With reference to your Memorandum No. 1,965, dated 31st ultimo, forwarding copy of a letter, No. 1,968, of the District Engineer, I have the honor to state that the information requested by that officer, is of so old a date, I am unable without records to give any specific information.

2. The records of the Chingleput Range (or Poonamallee Range) cannot but afford all the requisite information, and, if the assistant of the late Poonamallee Range, B. Mooniappa Moodelliar (who was in charge when the work was executed), be directed to trace the papers, he is likely to do so with success.

3. I would submit that the facilities having been admitted from time to time by the authorities concerned, and accepted by Government, shows it to have been fully authorized, if I remember aright, there were Budget allotments for the same. The work was inspected by Colonels Boileau and Bean.

4. The reason for the revised estimate having been forwarded to Government, I am unable to say, but it was prepared under the orders of the Superintending Engineer under instructions from the Secretary to Government, Public Works Department, and the Chief Engineer for Irrigation (Colonels Orr and Anderson) I was sent to the Secretariat Office to explain the whole scheme, and had my instructions then its revision. The Superintending Engineer, Colonel Bean, subsequently visited the work and added other instructions. The estimate was prepared accordingly and forwarded. I have idea who proposed the work for submission to Government after it had been previously reported as observed by the District Engineer. There was much correspondence respecting the work. At the very start it was observed that the scheme was prepared hap-hazard without even levels for the channels.

5. I have endeavoured a search among my papers to get at any information respecting the matter under notice, but without avail; consequently lose no further time in replying.

No. 344.

FORWARDED to the District Engineer, Chingleput, with reference to his letter, No. 1,968, of 28th October 1873.

NELLORE,
24th November 1873. (Signed) R. SMITH,
District Engineer.

From C. S. CROLE, Esq., Acting Sub-Collector, to Lieutenant-Colonel F. J. MOBERLY, R.E., District Engineer, Chingleput, dated Chingleput, 24th December 1873, No. 662.

In reply to your letter, dated 29th October last, No. 1,980, I have the honor to forward the two reports, with their enclosures, as per margin, iro. it will be seen that all the ryots of the Chingleput Taluq are willing to receive back the land without any compensation, with the exception of the owners of three huts in Athoor who demand full compensation.

From Chingleput Tahsildar, 7th Dec. 1873, "
" Conjeveram do. 18th " "

2. The Tahsildar of Conjeveram thinks that a reduction of two-thirds of the total amount can be made. If, however, the exact amount of reduction is required by you, I shall direct the Tahsildar to obtain the same, but it will take some time before ascertaining it, as all the owners cannot be got at once for the reasons stated by the Tahsildar.

No. 392-B. From Colonel F. J. MOBERLY, R.E., District Engineer, Chingleput, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, dated Guindy, 30th October 1874, No. 2,646.

In reply to your No. 403, of 11th June, I have the honor to enclose report, in original, by Mr. Ottmann, who, so far as I can discover, suggested the resumption of the work at the Neenjal Madugu, and executed all that has been done.

1 Original report of Mr. Ottmann.
1 Copy of the Collector's letter.

2. I have delayed forwarding this till I could ascertain how the reported return had been obtained. You will see by the Co or's last letter (co closed) that the entries are, as I supposed, erroneous, and t s no revenue derived from the work.

3. The Tennairy tank bank is th valley between well-marked high ground, on the north side quite hill n the drainage of 128 square miles is discharged by calingulahs in long; some at the north, some at the south end—see Mr. Ottmann's er passes principally over the wide sheet of cultivation that fills nea ey below, but lower down and nearer the site of the dam there are t ed channels.

4. In this distance the valley has rec e drainage of 30 square miles, more nearly all on the north side, where two sm reams throw into it any surplus that may remain after supplying the chains of tan which are constructed across them.

5. In years of abundance the Tennairy d every other tank on the high ground discharge furiously into the wide valley which runs full for some days into the Palar; at such times no increase of water is wanted b any body.

6. In years of moderate rain the Tenna tank does not discharge over its calingulahs. I was told that in only four years of t up to 1873 had the water risen to their crest—see paragraph 10, Mr. Ottmann's Repo ut, of course, the Madugu proper would in the most of these years receive the water i ing from the paddy fields, the leakage and sub-soil drainage from the high ground e.

7. Mr. Ottmann in paragraph 6 explains ow this was utilized by villages below. The site of nearly the lowest "corumboo." was chosen as that of an open dam to afford means to the villagers of quickly establishing an obstruction and procuring a supply into their tanks. These were to be little more than aprons with upright stones put across the hollows, with wing walls connecting them with the ground on each side, but flush with it, so as to afford as little hindrance as possible to the larger floods which submerge every thing.

8. Mr. Ottmann clearly did not appreciate the design, as appears from his Report. He proposed to join the dams by a bank to make the existing tank channels regular supply channels, with aqueducts, &c. The bank was constructed, and other work in the bed of the stream executed before he found out what he was dealing with, and hence the excess expenditure already incurred.

9. His estimate for the large pr amounts to Rupees 38,200, and I doubt its sufficiency, but I am quite confident that it would not answer. The catchment area is all around Tennairy. If the rain falls in quantity, enough to fill the large tank, it will fill the smaller ones; if the rain is below the average, it cannot do any good to the Madugu and the work under it.

10. The design is clearly wrong in detail, as Mr. Ottmann, when he has filled the space between dams by an embankment, has only 168 feet of opening to discharge the surplus from 632 feet of Tennairy calingulah and surplus drainage of 30 square miles.

11. If the Kambakal could be counted on, we might run channels from Tennairy tank along each side of the valley to fill the various tanks, but that feeder reaches Streepermatur only in good years, and I do not see any chance of its aiding Tennairy.

12. I have been disappointed at every endeavour to inspect these works properly, as the valley has rarely been free from water during the last two years of exceptionally heavy rain; it might answer to revert to the original minor project and get some return for the outlay incurred, and I will take the earliest opportunity of examining it.

REPORT ON THE FINAL RE' ..ON OF THE NEENJAL PROJECT.

I.–

RVATIONS.

1. *The Project.*—The " Nee
of the surplus waters of the large
both banks. The surplus was t
from both northern and southern
The Tennairy tank irrigates
Its bund (2¾ miles length) stretc
has an area of 128 square miles,
breadth. On its northern water sh..
seasons. The tank discharges by five cali

2. *Features of the Madugu.*—The
of the " Tennairy tank " takes from the p
north and south calingulahs in the limits
to its termination in the Palar river at Cl

3. The " southern branch " of the
waters of three of its calingulahs (having
though in the neighbourhood of the anicu
fall is 9·07 feet per mile. The " northe
gulahs of the tank (of 280½ feet total len
up to its junction with " southern branch
and up to the Palar the " Madugu " ha.. a deep scoured bed, and near Chingleput the Conjeveram road is carried over it by a bridge of five arches of 33 feet span. In the latter part of its course near the Palar the Madugu is very deep, and in the driest weather there is always from 5 to 8 feet of water in it. The highest flood line of the Madugu, as it appears on the bridge, is 17 feet above floor, the soffit of arches being 26 feet above floor.

4. The Madugu proper, as I would distinguish the stream below the anicut, receives a large local drainage on both sides, especially from left bank. Above the anicut, the local area that drains into the two branches may be estimated as 30 square miles nearly, considered between the anicut and embankment on east side, the Tennairy tank (which stretches nearly across the whole valley of the Tennairy) on the west, the Palar on the south, and the water-shed between the valleys of the Tennairy and Adyar on the north. Just below the anicut, a large surplus or Madugu joins on right bank by way of Oollavur tank, through which it passes. This is the surplus of some tanks beyond the catchment basin and not included in the area above described.

5. The Tennairy valley above the anicut is very flat; below the anicut, however, the valley slopes are more conspicuous, and favor high level irrigation. The ground is undulating.

6. The spring waters and local drainage, other than during floods of both the branches forming the Madugu, are at present intercepted by corumboos, and the water drained off for irrigation. On the north branch there are six such corumboos, on the south branch only two. Each village in its limits is authorized to erect a corumboo for utilizing the spring water, &c.

7. Below the anicut, where both branches form one stream, there is but one corumboo across the Madugu for diverting spring water and local drainage into the Reddipolliem tank is scarcely maintainable. The idea of the " Neenjal project " first originated from the Reddipolliem villagers having asked for a permanent masonry dam in lieu of the corumboo, when it was considered that such an anicut, placed somewhat more advantageously, might serve other villages also. The first estimate of the project was framed on these considerations.

8. *Tennairy floods' duration, &c.*—The Tennairy tank discharges by five calingulahs, which waters together with the local drainage of 30 square miles above the anicut required to be considered in the Neenjal scheme. This accumulated supply is what will be intercepted by the

..designed with a view to the catching up
..distributing it at high level to tanks on
..below the tank where the escape waters
..formed the Madugu.
..has a capacity of fifteen months' supply.
..y of the Tennairy. Its catchment basin
..n extreme length and 8 miles average
..ely influenced by the " Kambakal " in good
..s, having a total length of 867 feet.
..njal Madugu " is the name which the surplus
..of junction of the two branches of the surplus from
..elachur (where the present anicut is constructed) up
..eput. Its fall is about 3·92 per mile.
..lus from the Tennairy tank, and which receives the
..l length of 618 feet), has somewhat a defined course,
..eads over the lands, the valley being very flat. Its
..anch " which emanates from the two north calin-
..has no defined course, but spreads over the lands
..Its fall is 7·56 feet per mile. Below the junction

Neenjal anicut and embankment, and must be pr.. ..l for. The length of Tennairy calingulahs, relative heights, &c., are as below :—

Calingulahs.			..HTS. Gauge.	Dam Stones.	Actual Waterway.
			Feet.	Feet.	Feet.
No. 1.	North calingulah	..	..6	30¾	11 of ¾ = 22½
„ 2.	do. large do.	..	88·59	249¾	74 of 1 = 175¾
„ 3.	South do. (average)	..	89· 93·21	192	65 of 1 = 127
„ 4.	do. large do. (do.)	..	88· 92·37	294¾	117 of ¾ = 207
„ 5.	do. do. (do.)	..	90·26 93·91	131¼	42 of ¾ = 99¾
				867½	
				Total Waterway ..	632

9. It will be observed that the crests of the c.. ..gulahs are variously placed. Moreover, the crests of calingulahs 2, 3, 4 are not of uniform leve.. separately considered either, for in all three cases, one end is higher than the other. This ..pecially the case with No. 4, the low end of which is 87·58. This is the lowest level calingula.. ..d is the standard by which the tank supplies are considered; storage being limited to top of d.. ..nes as full supply for 15 months.

10. The last occasion that these calingulahs ..nscharged *over their crests* was in 1865-66, the *last highest flood known* was in 1842-43, when No. 4 calingulah discharged *over its dam stones*, and very extensive breaches occurred, which resulted in the sinking of one end of this calingulah. This highest flood passed for between four and five days. From 1842 to 1865, the calingulah above referred to discharged variously from level of dam stones to crest level. But since 1865, the tank water has not reached even the calingulah crest. According to usage in good seasons the calingulahs are allowed to discharge four or five days before they are shut, the period of discharge depending entirely on the season and prospects of duration of floods. The capacity of tank has been stated as containing 15 months' supply, but the villagers state that, for some 20 years, the supply at the full has not sufficed for 12 months, the tank having silted considerably. Since 1865 the tank has never received more than four months' supply in any year.

11. From inquiry among the villagers on both banks of the Madugu, it is understood that in proper seasons the duration of the floods is from 6 to 10 days at the site of anicut, when the valley is one sheet of water and quite im..ble; that after that period there is a subsidence, and the valley may be got across; but that lower down the Madugu, where it has a deep section, it is not fordable at all for from 20 to 40 days.

12. *Present cultivated area of the Tennairy valley below the tank.*—The Tennairy valley above the anicut is entirely cultivated over. So long as the floods do not extend beyond a week, no harm is done to the cultivation, but beyond that the plants are destroyed from the too lengthened submersion. This is a point for consideration in the new scheme. Below the anicut on both slopes of the valley, especially the right, there are very large tracts of waste land suited to wet cultivation which might be turned to account if irrigation is provided. The waste may be computed at 2,000 acres, more not less, and certainly 1,500 thereof are available for immediate cultivation.

II.—The Original Scheme.

13. *Intentions of the scheme.*—The original scheme prepared and submitted in 1862 was intended to provide better supply to the villages of Yelachur, Poondy, Vadakapet, Kurcevambadoo, and Vembakkam on left bank, and Poloor, Reddipolliem, hamlet of Poloor, Villiambakkam, Athoor, and Dimmapuram (hamlet of Athoor), on right bank of Madugu, by damming the stream in Yelachur limits and delivering the supply by high level channels one on each bank to the tanks. The method of distribution was not at all gone into in the report accompanying the scheme.

14. *Provisions of the original schem* the above scheme, the following wor wall of 3 feet (depth of stream) an shutters. An open sluice (of calir floors of sluices being on level w 12 feet, the southern of 18 feet,

The north channel had nc channels, roads, &c. The south the Oollavur surplus joins for the 6 feet for Reddipolliem branch ch similar style for the crossings of the Vi crossing of Conjeveram road, and an a channel of Athoor. No provision either works of distribution.

The estimate of this scheme amounted

15. *Defectiveness and omissions of t* and 14, was to afford better supply to ten not effect the tanks of five of the ten v Dimmapuram; these villages, therefore, c either had been made for their supply.

16. As the channels are run on the of all the villages named in paragrap channels, &c. This had been entirely o (the most essential only after omitting minor road crossings, three large culverts had been l ewise overlooked.

17. Compensation for land taken up by the scheme was omitted.

18. Embankment on line of anicut and sluices had been quite forgotten; without this the anicut or sluices could not be brought into action.

19. A surplus calingulah in north channel bank to relieve the channel in floods from the large local drainage and surplus of Yelachur tank and adjacent lands, a very necessary work, was also left out.

20. Irrigation sluices (4) in anicut embankment for the most important of the irrigation channel crossings omitted.

21. *Faultness of design.*—It has been already shown in paragraph 15 that five of the ten villages proposed to be brought u the s ot be effected at all by it.

Of these five villages, three appertain to north channel, *viz.*, Yelachur, Poondy, Vadakapet.

22. There then remain two villages only, Gooreevambadoo and Vembakkam, under nort channel, which can be benefited. But as ascertained from the Revenue returns, these two villages jointly would yield but 600 Rupees extra revenue, withal the improvement of supply.

The above circumstances rendered the utility of north channel questionable.

23. As regards the south channel, five villages were to be improved by it, two of which, Poloor and Dimmapuram, do not benefit.

In the case of the benefiting villages, Reddipolliem, Villiambakkam, and Athoor, it will be observed on reference to original section of south channel that Villiambakkam was placed beyond reach of supply from its high level. Athoor tank barely benefits; while as regards Reddipolliem tank it has to be stated that the tank has been superseded by the upper tank of Poloor; that its bed, except for about 50 or 60 yards width (the deep bed only along margin of bund) has been taken up by cultivation, and that only a very small quantity of water (3 feet) in a narrow belt as it were, can be put into tank, so that the present cultivation shall in no wise be effected.

From what has above been written it will be observed that in the case of the south channel also as designed the prospects were not great.

egulating works, &c.—For the carrying out of l :—An anicut, 90 feet length, with body of 3 feet fitted with horizontal planking h side at the heads of the channels, the northern sluice was to be an opening of ones and planking.

istribution, crossings of irrigation tank of 30 feet in its bank, at the point where s channel of it. A head (open) sluice of channel not made), two other sluices of m and Athoor spring channels, a culvert for the for running the channel over another spring s case had been made for crossings and subsidiary

)00 Rupees.

eme.—The scheme, as referred to in paragraphs 13 es. The channels as designed, it was found would es, *viz.*, Yelachur, Poondy, Vadakapet, Poloor, and be benefited by the scheme. No other provision

the valley and across the lines of tank irrigation was essential to provide for all the crossings of ked. No less than 31 aqueducts and under sluices crossings) are needed for both channels, and for the

n the scheme it was designed, moreov r mile in 1¼ yard cutting for its l le in from 1 to 1¼ yard cuttir of 5·25 per mile, running m width of 4 yards; the so on, and 2 yards in 3rd sectic n laying out the channels, ned. In the north channel ly the fall was altered to 1½ f ge, as will be seen from the section, yard cutting not having been obtai nsatisfactory as compared with desig niles; 2·00 feet per mile for a furtl s kept nearly at surface level in embe distance about 1½ mile. As regard d ranged from 1 to 4 yards. But t great advantage on the 1st section, and n the Athoor tank also having material n all the designs for anicut, calingu l of dam stones, an unsafe arrang e raising of these wings was essentia The anicut provided for but 90 feet into consideration, as also the local dr nage, it seemed advisable to extend the anicut rease the flood-way.

The open style of sluices was seriously o tionable also.

The aqueducts of the Athoor southern el proved short in height.

The arrangement of the masonry regu at the crossings of the Athoor and Villiam- annels for shutting off the floods from e tanks was not advisable, as those channels, g channels, are constantly flowing throughout the year, and they could not be obstructed , not even for a very short period. It is essential in both these cases that the channels k independently of the anicut channels for many very obvious reasons.

n referring to the plans of the "original scheme," it will be observed that the scheme d in a very general manner, and without any data of prospective advantages. No taken for the channels; these were merely assumed by daubs on the plan, and calculated

t the "north channel" should have a fall of miles, and "south channel" 0·75 to 1·22 iles, the rest of channel, about 1½ mile, nkments. The north channel was to 3 yards width in 1st section, 4 yards embankments.

ither the cuttings or falls prescribed would have given little or no cutting. placing the Gooreevambadoo tank at nnal much embanking had to be provided t all. In the south channel the result was only 0·50 feet a mile could be obtained for length of about 2 miles, and beyond this the ent principally at 5·84 feet per mile, for the e cuttings, these were heavy compared with alterations of fall that were made placed the ught the Villiambakkam tank under supply, improved.

, and sluices, the wing walls thereof were left nt, permitting of corrosion of banks about the

way; taking the waterway of the Tennairy nage, it seemed advisable to extend the anicut

III.—The ... of Revised Estimate.

Necessity of first revision, and provision thereof.—The first revised estimate amounted to pees, and was sent in February 1868. The work was in progress from June 1867; execution it was observed that the rates were very low, that several important omissions il required to be immediately provided for, and certain faults of design remedied to tances. These omissions and faults are described fully in paragraphs 15 to 30.

evised estimate was purely intended to provide for all the above discrepancies, as repre- e paragraphs afore referred to.

s at this time, the remunerative statements had not come to hand, the pecuniary of the scheme could not be realized, though there was room for some doubt; the pro- umed on its premises. And it was considered that by the re-arrangements (as were he revision) of the channel system, by which two more of the tanks (of Villiambakkam) would be placed under supply, and the provision for omissions and faults, the scheme laced on as desirable a basis as was practicable, further improvements and alterations or subsequent consideration—see paragraph 10 of Report, No. 527, of 21st February. e subject of the first revised estimate. It was represented in this report "that the project e of much pecuniary advantage to Government without further alterations, &c."

IV.—THE REVISIO

34. * *Revision now proposed.*—It wi
sidered, and even as regards the first
supply was available and that the
On the submission, however, of
for Irrigation to the scheme (under
absence therefrom of reliable data,
ordered to be gone into again.

The further surveys necessary
returns were prepared. From these
mation gathered from the subsequent surve
concerned, it became apparent that the pro
the supply of the several tanks, and that,
which the Government might be benefit
it was necessary to revise the scheme as
described, so as to produce the above effect.

In another point of view also, the gre
offer to the floods became a matter for som

35. *Prospects of the scheme as propo*
obtained for the villages that will be ef
Rupees 7,629 of extra revenue is obtainabl
provided that the channels supplied the
producing but a small portion of that extra

The particulars are as below :—

Villages.		Land.	Extra Revenue.
		CAWNIES.	RS.
Poloor (Reddipolliem)	ACS. 396	297	1,285
Villiembakkam	„ 117	88	661
Kureevambadoo	„ 41	31	421
Vembakkam	„ 45	34	180
Athoor (and Dimmapuram)	„ 834	626	4,276
Yelachur	„ 158	119	745
Vadakapet	„ 45	34	81
		Total ..	7,629

The above outturn of revenue includes second crop to some extent.

36. *Arrangements for distribution necessary to effect the extra revenue.*—It has been already shown that of the villages of (1) Yelachur, (2) Poondy, (3) Vadakapet, (4) Kureevambadoo, (5) Vembakkam, (6) Poloor, (7) Reddipolliem, (8) Villiambakkam, (9) Athoor, (10) Dimmapuram, the channels will only effect the tanks of Nos. 4, 5 (both under one tank), 7, 8, and 9.

It has been likewise shown that the Reddipolliem tank, as it now stands, is but a belt of water about 50 yards wide, at most with but a depth of a yard at the utmost; that this tank cannot be improved, it having been superseded by a higher tank, and its bed, moreover, placed under cultivation. Further, it must be borne in mind that Reddipolliem and Poloor are one village actually, the former being merely a hamlet of the latter so much as regards Reddipolliem tank.

The Kureevambadoo tank which supplies Vembakkam also cannot be improved without damaging the Vadakapet lands, which it already floods. Its supply can only be rendered more certain.

...EME NOW PROPOSED.

... so far as the original scheme was con-
...emises were assured that the water-
...e.
...ion was taken by the Chief Engineer
...ing submission of projects) from the
...ply and revenue, and the matter was

...reupon undertaken, and the revenue
... the Revenue Department, from infor-
...rom the inquiries that were made in the villages
...t stood, would barely pay by improving merely
...here existed room for much improvement by
... extent of some thousands of rupees annually,
...ystem of distribution entirely as hereinafter

...ruction that the anicut and embankment would
...leration.

... *altered.*—From the revenue returns that were
... the scheme, it was found that as much as
... several villages referred to in the old scheme,
...irectly, the augmenting of the tank supplies

The Villiembakkam and Athoor tanks are re
water for about 60 yards width is somewhat dee
time the irrigation of the river spring channel
of; while therefore more certain supplies
not permit of much being received.

All the above tanks, however, will
supplies more than once, from the early

As regards Dimmapuram, it must be
supply, and the bulk of the land that wil

37. The only arrangement, therefore,
ductive, is by making both channels serve the lan
Poondy (Enam) Vadakapet, Poloor, and Dimma
supplies to the tanks of the other villages. The
arrangement, which seems to be not only very desi
two years on the south channel (from which I hav
channel to irrigate by cuts in the bank) establishes

38. In short, the flood waters will be deliver
bulk of the irrigation will be carried out by the sp
the anicut, as also the local drainage caught up by t
slopes on the upper sides of each from channels d

39. An attempt was made in last year to ga
and thus obtain specific data, but unfortunate
arrangement. From the observations, however, tha
year) spring water it was found passed over the
January, and February, averaging from 1 to 5 inc
passing all the year round the villagers affirm.

40. *Details of the revised scheme.*—The basis
represented in preceding paragraphs, and for effe
utilizing all the work already performed (see Surv ...heet 6) :—

(*a.*) The anicut to be extended each side so as to give 176 feet additional waterway and provided with dam stones and shutters as in present anicut.

(*b.*) The anicut embankment to be raised and strengthened, and four irrigation sluices with shutters provided therein to permit of the crossings of present irrigation channels of supply.

(*c.*) The north channel head sluice to be abandoned and a new covered sluice to be built more north. The sluice to be of two vents of 3 by 3 feet each. The channel left as designed, but finished off, it being in an incomplete state. Its embankments strengthened.

(*d.*) A calingulah of 20 yards to be cut in the right bank on plan of calingulah built for Oollavur to relieve Yelachur tank, &c., surplus.

(*e*). Four head sluices to be placed in the embankment for *direct irrigation* to Yelachur (1), Poondy (1), and Vadakapet (2) lands. The heads of these sluices will be after the pattern of tank sluices, and have plug holes, so as to regulate the discharge. The channels from these sluices to be excavated by the ryots.

(*f.*) The channel in the low grounds to be embanked on left side also, so as to prevent swamping of cultivation as already experienced; and the drainage that these banks will intercept will be discharged by sluices in the bank for utilizat... by the channel, or relieved altogether by under sluices.

(*g.*) All the important tank irrigation channel crossings (10 in number) to be provided with the necessary under sluices and aqueducts as designed in first revision.

(*h.*) The present village road crossings to be deferred for consideration to some future time (these were provided for in first revision).

(*k.*) The south channel head sluice to be abandoned and a new covered sluice to be provided and placed more south. Its embankments in the low ground to be strengthened. The channel as excavated will be allowed to remain for the present, except that it will be finished off. Future alterations being considered as occasion arises.

...flat, except along the margin where the
...e tanks merely supplement at the present
...ges, and which are the mainstay there-
...to both tanks, their capacities will

..., of being enabled to supplement
...is materially assist irrigation.
...let of Athoor. It has no separate
...ns to this village.
...which the work can be rendered pro-
...ly, and which will thus bring Yelachur,
..., under supply also, besides furnishing
...ts of all the villages concerned press this
...e, but feasible, and the experience of the past
...owed the villagers on the first portion of the
...idea.
...to the tanks whenever practicable, but the
...water and local drainage, intercepted at
...channels (which are catch drains) from the

..., floods that should pass through the anicut,
...failure of the monsoons quite upset the
...e made at the anicut (in the last and this
...ut in all October, November, December,
... depth over crest, and that such continues

...heme now contemplated is on the principal
... the following arrangements are proposed

(*l.*) The right bank through low provided with drainage sluices.

(*m.*) Eight head sluices to be Oollavur (1), Poloor and Reddipo head sluices and road culvert channels from all these head slu

(*n.*) Head sluice for Redd

(*o.*) Covered head sluices spring channels. Open sluices of the spring water.

(*p.*) Under sluices for the

(*q.*) A culvert of three vents fo

(*r.*) Alteration of the aqueduct in height.

(*s.*) Village road crossings to be in first revised estimate.

(*t.*) Alteration of present road provided for before.

(*u.*) The Reddipolliem branch c sluices should be provided in that tan which the tank bed is subsequently t

(*v.*) The irrigation to Athoor situated in the second section of the

(*w.*) Road culvert at extreme en

(*x.*) All the important tank irri and under sluices according to circum

41. The project admits of exten to Chingleput; supplying intermediate to join the "anicut channel" of Kalat it can confidently be affirmed will yield b observed that the Kureevambadoo tank is greatly favored by the north channel; from it very large supplies may be taken off for Chingleput and Kalatur. The Chingleput tank needs filling on sanitary grounds alone, as the bed in dry weather emits fœted gases, which are any thing but desirable to the inmates of the large jail in Fort and the several courts and cutcherries located therein. Otherwise the tank is already well supplied to serve the lands thereinunder.

42. The plans bearing c proje

"Original Series."

1. *eet.*—Survey of ect.
2. *Do.* Section of south channel.
3. *Do.* Section of north channel.
4. *Do.* Plan of anicut.
5. *Do.* Plan of subsidiary works.

"Revised Series."

6. *Sheet.*—Surve project.
6A. *Do.* Survey at extreme up to Tennairy tank.
7. *Do.* Sections of Tennairy bund.
8. *Do.* Section of north branch of Madugu.
9. *Do.* Sections of south branch of do.
10. *Do.* Sections of northern and southern channels of the project.
11. *Do.* Working section, south channel.
12. *Do.* Working section, north channel.

CHINGLEPUT,
22nd June 1870.

(Signed) S. OTTMANN,
Sub-Engineer, D.P.W., No. 3 Range, Madras.

constructed as in north channel, and similarly

ank for direct irrigation from channel, viz.,
mmapuram (2); these two latter will be
must cross the Scorarpen road. The
ryots.
provided, covered.
loor with small branch channels into
d no provision made for the obstruction

n the anicut channel water independently.
oad at the crossing.
hoor channel originally estimated, it being short

at any subsequent period. These were entered

ead sluice for regulating supply to Athoor, not

sluice N to be excavated by ryots, and eventually
ntervals for direct irrigation from the channel,

ram will depend largely on the sluices O and T

el for its crossing as provided in original scheme.
nnel crossings; (20) to be provided with aqueducts

th side, by leading from Kureevambadoo tank
continuing the channel on left bank of Madugu
very large tank indeed, and which by the supply
4 and 5,000 Rupees extra revenue. It will be

From H. E. STOKES, Esq., Acting Colle
MOBERLY, R.E., District Engi
No. 407.

REFERRING to your No. 1,840, da
Barlow, not satisfied with the repor
Collector for his opinion, and I now be
will see that, as surmised by you, n
Madugu Project. I regret that, in a
egregious mistake, but have requeste
stupidity:

No. 2

No. 392C. *Note by the Ch*

IN G. O., No. 3,811, of the 30th N
Rupees 9,000, was sanctioned for the Nee
being the construction of a dam or anicu
channel from the Tennairy tank and falls
right bank (north and south) channels for t
to carry out the works, it was found that
and a revised scheme was prepared, bu

Proceedings, Madras Government, 29th March 1870, 5th page, 1st item of statement of O. C.

items included in the statement, and the
did not attract attention, though in the
Engineer's attention was drawn to the f
been sanctioned.

2. In November 1872 an application
neer, 4th Division, for the sanction of a sum of
for land taken up for the projec, and then th
inquired into.

3. It now appears that the

* 1870-71, Rupees 873.
Later " 1,344.
Acting Sub-Collector's letter, No. 407, *16* October 1874.

scheme was prepared upon inadequate a

Vide Report.

answer, and that Colonel Moberly was
outlay already incurred could be turned to
been received, and it appears to be desira
this project at present stands, that erroneous
and that those whose lands have been taken

† Acting Sub-Collector's No. 662, 24th December 1873.

he Chingleput District, to Colonel F. J.
eput, dated Sydapet, 16th October 1874.

t, I have the honor to state that Mr.
erred the matter to the Acting Sub-
r, dated 5th instant, from which you
as been derived from the Neenjal
he Tahsildar should have made such
nand him for his carelessness and

B.
Engineer for Irrigation.
ber 1866, an estimate, amounting to
Madugu Project, the work to be done
ss the Madugu, which is the surplus
Palar near Chingleput and of left and
pply of certain tanks. On proceeding
re revision of the scheme was necessary,
r submitted for sanction, although in
ss of the original estimate of Rs. 9,000,
e than as much again had been spent.
he order just quoted, the Controller
authorized to pass the objectionable
expenditure on this project thereafter
against the item the Superintending
hat the supplemental estimate had not

as made by the Superintending Engi-
Rupees 1,800 on account of compensation
e facts connected with the scheme were

e incurred has produced no results in
sion of irrigation and increase of
ue, and that the entries* of returns
ded in the statements of remunera-
works are erroneous; that the original
correct data; that it is very doubtful
her the much larger project investi-
by Mr. Sub-Engineer Ottmann would
ctober last, able to state whether the
unt. Since then no further report has
e that Government should know how
entries in the accounts should be corrected,
up should be either paid for them, or, as
it appears,† the owners are, with the
exception of the proprietors of three huts,
willing to receive back their lands, have
the lands returned to them.

4. It will be seen that C
mising, and a perusal of Mr. Ot
therefore, that the Superintend
retransfer of the land, and to su
will still need to be paid.

CAMP AT BOOCHIREDDYPOLIEM,
3rd March 1875.

No. 393. ORDER THEREON.

IRRIGATION, No. 43.

Rupees 9,000 was sanctioned in 1866
of 18,000 Rupees had been expend
sanctioned, or submitted for sanctio
there is but very little probability of
for the outlay that would be requir
appears to be little or none availabl
is required; the country also is li
which would involve numerous m
they carry.

2. Under these circumstances
altogether, to retransfer to their ow
pay to them such compensation as r
latter should be prepared and submitt

3. In thus deciding upon the
Governor in Council cannot but notic
by the officers both of t Revenue a
mendations the scheme in the fir
Banbury, the Acting Colle or of Ma
and Colonel Boileau, the Su

rs the project altogether unpro
s this view. It is recommended,
be instructed to arrange for the
ll for settling what compensation

N MULLINS, Lieut.-Col., R.E.,
Chief Engineer for Irrigation.

5, No. 1,048.

THE Government are of opinion that
e foregoing papers show that the Neenjal
adugu Project, for which an estimate of
which up to November 1869 upwards
out any revised estimate having been
very imperfectly investigated, and that
lification of it securing adequate results
water-supply is unreliable, and there
seasons of heavy rainfall when none
idation, and is traversed by channels
s for the passage of the water which

be advisable to abandon the scheme
ands taken up for the project, and to
own to be reasonable. A bill for the
n as possible.

ment of this project, His Excellency the
dissatisfaction the want of care exhibited
blic Works Departments, on whose recom-
mended. These officers were Mr.
M. Cockerell, Collector in 1866,
Division, since deceased.

Colonel, R.E.,
Secretary to Government,

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

Exd. A. Grubert.

20 Spare Copies

To

THE SUPERINTENDENT [illegible]

[illegible]

Dated April 15th.

Issued

Recd. 30 [illegible]

Recd. Encl.

G. O., 15th April 1875, No. 1,048.

APRIL.

Nos. 392-393

Neenjal Madugu Project, Chingleput District.—Passing orders on Note by the Chief Engineer for Irrigation respecting the —.

No. 903

Comm.d to the Board of Revenue

1: May/75