M.R.O. 14–5,45. –22–10–25.

MADRAS RECORD OFFICE.

Government of Madras.

Revenue **DEPARTMENT.**

G.O. No. 1144 Press ~~Mis.~~

326-327

Dated 21-5- 1867.

Not to be folded or roughly handled

Proceedings of the Madras Government, Revenue Department,
21st May 1867.

No. 326. Read the following Proceedings of the Madras Government in the Public Works Department:—

Passing orders on Mr. Ellis' Report on the irrigation works of the districts of North Arcot and Salem. } (Here enter 17th May 1867, No. 1,490.)

No. 327. ORDER THEREON, 21st May 1867, No. 1,144.

Miscellaneous.

Ordered to be recorded.

(True Extract.)

(Signed) J. GROSE,
Under Secretary to Government.

Exd. S. T. Augustin.

Proceedings of the Madras Government, Public Works Department,
17th May 1867.

No. 401. Read the following letter from the Sanitary Commissioner for Madras to the Secretary to Government, Public Works Department, dated Madras, 27th April 1867, No. 63 :—

1. I have the honour to acknowledge the Proceedings of Government, Public Works Department, dated 4th April 1867, in which I am called upon to explain upon what information I made a statement, contained in a Report submitted by me to Government on the 13th September 1866, on the condition of parts of the Salem and North Arcot Districts, where distress, caused by the failure of the ordinary rains, had been most severely felt.

2. This statement was to the effect that advantage should be taken of the regular intervals accorded between seasons of scarcity in India, for the careful examination and execution of projects having for their object the storage of water, and the general improvement of the irrigation in districts most exposed to periodical drought.

I further mentioned that in both the districts then recently visited, Salem and North Arcot, much remained to be done in this respect, and that there are in the Records of the Board of Revenue, and of the Public Works Department, plans of irrigation works which, if they had been executed, would not only have been highly remunerative, but would have this year made the serious failure of rain result in only a partial instead of an entire loss of crops.

3.—This statement would appear, from the correspondence which forms part of these Proceedings of Government, to have caused considerable surprise both to the Board of Revenue and to the Public Works Department. These departments deny the existence of any such plans. It is not stated, although this is the matter really in question and of importance, whether works such as are described in this part of my Report, to which exception is taken, are required in those districts, and whether from the nature of the country they are feasible.

4. I beg to point out that the remarks contained in my report on the North Arcot and Salem Districts were necessarily of a general nature; my visit to these districts was limited in duration to about three weeks, and my time was wholly occupied in visiting the parts of the districts which were suffering most severely from the distress caused by the drought, and in organizing, under the instructions of the Government and in communication with the district officers, the measures of relief which seemed most urgently necessary.

5. Under these circumstances I could only hope to give to Government, as I stated in my report, a faithful impression of the condition of these districts, such as could be received during a rapid tour. Nothing however, I still affirm, was more deeply impressed upon my mind, both by the aspect of the country and by the conversation of the local officers, than that much of the misery, resulting from the periodical failure of the seasons, would be greatly mitigated by the execution of certain works of irrigation. These works were spoken of not as recent discoveries, but as being well known. The obstacle to their execution had, I understood, been the impossibility, during late years, of obtaining funds, not only for the execution of these new works, but even for the perfect maintenance of existing works.

6. I was led to believe that these works had received both from the Board of Revenue and from the Department of Public Works, the consideration which the importance of their objects deserved, and that records of them were in existence in both these departments.

7. From the letters recorded in the Proceedings of Government (now under reply) from the Superintending Engineers of the 4th and 5th Divisions, and from the Order of Government itself, 4th April 1867, No. 1,058, Department Public Works, I see with regret, that I was mistaken in supposing that there are recorded any plans of projects in the Salem and North Arcot Districts, of the kind indicated in general terms in the concluding paragraphs of my report.

8. I trust, however, that I shall be able to show that I was justified in conveying to Government the general impression I received while in those districts, as to the natural resources afforded by portions of the Salem and North Arcot Districts for irrigation works of the nature described, and as to the urgent necessity of giving to these projects serious consideration. To leave no room for doubt as to the correctness of my statement, as founded on information received while in those districts, I have referred to Messrs. Robinson and D. Arbuthnott, who, at the time of my visit, were Collectors of the North Arcot and Salem Districts, and to Mr. H. S. Thomas, the Sub-Collector of Salem.

9. I forwarded to these officers the paragraphs of my report, to which the Proceedings of Government, now under reply, have reference, and begged them to afford me such detailed information as was necessary to enable me to substantiate my general statement.

10. Mr. Robinson, who has been for some years Collector of North Arcot, writes: "You have said nothing more in you report than facts fully justify." Mr. Robinson then proceeds to point out the lamentable change which has during the last twenty years come over the Polur talook, formerly one of the most prosperous talooks of the district. Mr. Robinson attributes the alteration in the condition of this part of his district, to the neglect to turn to account the magnificent watershed from the Javadi hills and to the deforestment during the last ten years of these hills for Railway purposes. This talook was one that suffered most severely last year from the failure of the periodical rains.

11. Among the irrigation works of importance in this talook, are the Alleabad tank and two dams across the Ramandala river which were visited by me during my tour.

This important reservoir depends for its supply on the condition of these dams; an attempt to re-construct these was made by the Department of Public Works about a year previous to my visit, at a cost of about 7,000 Rupees. The foundations were insufficient and the works were swept away by the first flood.

12. Mr. Robinson also mentions a project, which was matured some years ago, for constructing a weir across the Cheyar river at Mambakum. This project was prepared by Mr. Dick of the Department Public Works, and was forwarded to Madras, but nothing more has been heard of it. Mr. Robinson adds:—"Had this work been carried out, the talook of Polur would have been spared years of intermediate scarcity and suffering. It is traversed in every direction by a splendid

watershed from its western frontier, and yet there has been for years a scarcity of water even for drinking purposes—and these river channels and tanks were (at the time of Mr. Robinson's visit last year) in a miserably neglected and inefficient state."

13. There are, Mr. Robinson continues, "in the same talook, the two fine old high level reservoirs, the Turinjikuppam and Kalasamudram tanks at the foot of the Karnatighur, which have been in ruin for years, and which, had they been restored, would have greatly extended the cultivable area below them, besides feeding springs and wells which have been dry for years."

14. For these, plans and estimates are at length under preparation. "You saw," Mr. Robinson adds, "the Yerrantungal tank in the Gudiattum talook, and may remember that we settled on the spot, that the restoration of the old channel was to be made as a famine work. This has since been completed."

"In like manner another fine work near the Agraharum tank has been re-connected with the river after long years of severance, and will henceforward do its work."

"In the talook of Chendragiri, which strongly resembles Polur in its natural features and capabilities, there are numerous fine old works situated at high levels which, if restored, would not only be remunerative as agricultural projects, but would secure to the country a provision of drinking water which, under present conditions, is always failing."

Among these, Mr. Robinson names the Nagaputla project, "which was partly carried out when Mr. Bourdillon was Collector, but on which no work has since that time been done."

15. In answer to my letter to Mr. Arbuthnott, asking him if the remarks in my report were justifiable as regards his district (Salem), he writes:—

"You are quite right. There are several works in the Salem District that "have been *only talked of*, for the last twenty years. There is the old Nirinjeepet "anicut across the Cauvery, about twenty miles above Bowany. Estimates were "framed for a new anicut many years ago by Captain Smyth and other Engineer "Officers, but nothing was ever done. There are several large tanks in the Ahtoor "talook lying in ruins. One at Cumboor, I think, about eight miles from Cusbah "Ahtoor, was applied for by Mr. Fischer (a Mutahdar of the Salem District) who "wished to repair it at his own expense, but it was refused on the ground that "Government intended to repair it. More than twenty years have elapsed, but "nothing has been done up to this day. There is also the Pennar river, which "rises north-east of Bangalore, and runs through Oossoor, Kistnagherry, Dhuram-"pury, and Utangherri talooks. It drains an enormous area (several thousands of "square miles) before it leaves the Salem District, but not a drop of this water has "been utilized in Salem. It feeds irrigation works in South Arcot, but a great "portion of the water in freshes must run uselessly to the sea."

"The construction of the Salem tanks is very faulty, the calingulahs being generally too small. The result is that when heavy rains *do* fall a large number of our tanks burst, and besides the loss of revenue, Government is put to the expense of repairs. This was the case with many tanks in the district last September."

16. Mr. Thomas, who was lately Sub-Collector of the Salem District, and who has devoted much special attention to the improvement of the sub-division by irrigation works, furnishes some interesting information.

As regards my statement, Mr. Thomas writes :—

" Your statement was perfectly correct, the Salem District is in sore need of irrigational improvements, and has been shown to be so."

17. Mr. Thomas, writing of his own charge, the sub-division, describes four important irrigation projects, namely,—

" 1st. The utilization of two great natural basins, for the storage of the water of the Pennar river, at Kistnagherry."

This project, which is the same as that mentioned by Mr. Arbuthnott above, is for the storing of from eighty to one hundred square miles of water-spread, in a reservoir which would be one of the largest in India, not excepting the Cumbum tank and the Maori project.

It seems that this project has been partially examined and estimated by the Assistant Engineer, Mr. Paynter, who thinks the cost will not be under 15 lakhs. Mr. Paynter is represented as being of opinion that the capabilities of the site have not been over-estimated.

" 2nd. A chain of works in the Dhurampury talook, having for their object the diversion of the waters of the Sanaith Kumairanathi river. The effect of this project would be to fertilize the Dhurampury talook, which was one of those which suffered much in the late famine." " If I remember rightly," Mr. Thomas adds, " it would make one extensive tank, if not two; would fill four or five more, and give about thirty miles of irrigating canal."

" 3rd. The restoration of the old ruined tank of Mulleapadi."

Mr. Thomas in respect of this work, says " I am glad to be able to fortify you with one not insignificant project, which was thoroughly surveyed and estimated for by a very competent Engineer (Captain Gahagan), who year after year pressed in vain for funds and sanction to undertake it."

In a former report to the Collector, Mr. Thomas says that the plan and estimate for this work cannot be found, and that he, Mr. Thomas, has " again and again urged the framing of a fresh estimate, but the Assistant Engineer, Mr. Paynter, says that it is impossible for him to spare the necessary time."

The fourth project mentioned by Mr. Thomas is the utilization of another natural basin in the Dhurampury talook.

18. With reference to these remarks of Mr. Thomas, it would seem, from paragraph 2 of the letter from the Superintending Engineer, 5th Division, which is entered in the Proceedings of Government, Public Works Department, dated 4th April 1867, written some months after my report, and since Mr. Thomas left the Salem District, that the Assistant Engineer is now occupied in examining three irrigation projects, one of which is the Mulleapadi tank, described by Mr. Thomas, and recommended by Captain Gahagan.

19. Without wishing to enter into any controversy with the Department of Public Works, I may be allowed to notice that from the information now furnished

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by the local authorities, plans would seem to have been prepared in former years for the anicut across the Cauvery by Captain Smyth, of the Engineers—for the restoration of the Malleapadi tank by Captain Gahagan, of the Engineers (both in the Salem District,) and for the weir across the Cheyar at Mambakum, North Arcot District, by Mr. Dick of the Department of Public Works. These plans have, I imagine, either been mislaid or have escaped attention, as they are not noticed by the Superintending Engineers of the 4th and 5th Divisions, in their letters printed with the Government Proceedings of the 4th April.

20. As regards tanks allowed to fall into disrepair and remain in ruin, Mr. Thomas states that in the sub-division alone of the Salem District, 487 tanks were in this condition, while Mr. Robinson states that in his district, North Arcot, there were 857 tanks requiring repair. In the Polur talook, North Arcot District, which I visited, and which, as described above has retrograded in prosperity in a marked manner during the last twenty years, out of 172 tanks, 166 required repair.

21. I do not pretend in this letter any more than I did in my Report, to lay before the Government complete information as to the wants of the Salem and North Arcot Districts in respect of public works of irrigation; nor do I presume to offer any opinion as to whether the projects brought to notice by the local Revenue Officers, are in themselves the best that can be devised for the general improvement of these districts, and for mitigating the effect of the periodically recurring droughts. I have no special experience of these districts, nor have I the necessary professional knowledge to make my opinion as to any particular work of weight. But I beg respectfully to adhere to the opinion I before expressed that much remains to be done in both districts, both in the construction of new, and in the proper maintenance of existing irrigation works. I trust that the Government will consider that the remarks made on this subject in my report were substantially correct, and that they are justified by the further information which I have now laid before them.

17

No. 402. ORDER THEREON, 17th May 1867, No. 1,490.

IRRIGATION, No. 25.

1. In this letter the Sanitary Commissioner replies to the orders of Government requesting him to communicate the information on which he stated in his Report of the 13th September 1866, when speaking of the portions of the Salem and North Arcot Districts which he had visited, that there were on the records of the Board of Revenue and of the Public Works Department plans of irrigation works which, if they had been carried out, would not only have been highly remunerative, but would have made the serious failure of rain that had occurred that year result in only a partial, instead of a total loss of crops.

2. Mr. Ellis, being anxious to convey to Government a faithful impression of the condition of the districts as they were seen by him during a rapid tour, and, intending his remarks to be " of a very general nature," submitted, from what he noticed of the aspect of the country, as well as from what he gathered from the conversation of the local Officers, that much of the distress which existed might have been averted had certain extensive works of irrigation been carried out; and,

freely stating this opinion, added the remarks regarding plans and estimates which gave rise to the reference to him by Government.

3. Acknowledging the general nature of the information on which his specific statements were based, Mr. Ellis, in his communication before Government, adheres to the opinions previously expressed, and adduces in confirmation of them the names of three works which, on information since obtained by himself from the Collectors of North Arcot and Salem and from the Sub-Collector of the latter district, he mentions as having been projected, and the plans sent to Madras.

4. Of the three projects referred to by Mr. Ellis two were probably never submitted to the Board of Revenue or to Government, though they have engaged the attention of the local Engineer Officers. The third alluded to, that is the restoration of the Neerinjeepett anicut, is a scheme which was prepared by Lieutenant, now Lieutenant-Colonel Wilkieson, and which was submitted to Government in 1856. It is understood to have been under investigation by the local Engineer Officers so far back as 1805, but has been held in abeyance up to the present time for reasons which have appeared sufficient to Government, though it has not been relinquished. With the increased resources which will now, it is hoped, be placed at the disposal of this Government, the Neerinjeepett anicut is one of the works which will have an early claim on their attention.

5. Mr. Ellis would be mistaken in supposing that exception is taken to the general purport of his report. It is not disputed that his statement of much remaining to be done, in the two districts which he visited, for the improvement of old and the construction of new works of irrigation is substantially correct. It may nevertheless be questioned whether, even, if many works of the nature contemplated by Mr. Ellis had been executed or maintained, the effect would have been as favourable as he has been induced to believe. Some advantage might no doubt have been derived, but the serious failure of rain last year would still, in consequence of the nature of the country and the source of the water supply, have caused an almost entire loss of crop.

6. North Arcot, as well as Salem, is dependent on local rain. With the exception of the Cauvery, which skirts the western boundary of Salem, all the streams traversing the two districts are local rain-fed, and no irrigation from them, or from the tanks they fill, is possible in exceptional years, like the last, when those rains fail. Large reservoirs capable of containing *two or more years' supply of water* can alone provide the means of irrigation in similar seasons of drought. Such reservoirs have still to be constructed, and the Government would gladly learn where good natural sites for them can be found, for no proposals for forming any in North Arcot have as yet been made, nor do the Government know that any suitable sites have been discovered. The one in Salem near Kistnagherry, referred to by Mr. Ellis, is understood to have been known to former Collectors of the district, and to have been under their consideration as a much desired improvement. It was brought to notice by a late Sub-Collector, but not in a form to give any reliable assurance of its fitness. Early measures will be taken to have it professionally examined, as the situation, if on Government land, is likely, the Government think, to offer those facilities of construction, combined with a good water supply, which are necessary for the formation of a capacious reservoir.

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17th May 1867.

7. Ordinary irrigation works dependent upon an annual supply of water or on local rain-fed streams, though they may be highly beneficial and often greatly remunerative, can never be made to support cultivation, when those rains failing, the tanks and streams are dry. Thus the anicut across the Cheyaur river some distance below Mambakum did nothing for cultivation last year till the 7th August when the river first came down. In the same way, the channels under the Poiney and Palar anicuts were dry till the rains of August began to fill* those rivers long after the crops had been totally lost.

* The Poiney on 21st August.
The Palar on 26th ,,

From these facts, the Government are satisfied that, if measures are to be taken for providing water for irrigation in North Arcot and Salem during seasons of drought, those measures must be directed to the discovery of sites on which can be constructed large storage reservoirs. The Revenue and Public Works Officers should endeavour to find a few such sites in order that they may be carefully examined and reported on.

8. The attention of the Superintending Engineer of the 4th Division will be directed to the statement that of the 172 tanks in the Polur talook, 166 are in need of repair. The Polur talook, being situated in an out-of-the-way corner of the North Arcot District, has perhaps not had the attention given to it which it deserved, but the Government have reason to believe that during the last two years something has been done by the Public Works Department in that talook, and special efforts are now being re-construction of the dam for the supply of the Alleabad tank is in progress. The preparation of a project for a weir across the Cheyaur river at Mambakam, as proposed by the late Mr. Dick, and referred to by Mr. Ellis, is in hand, a survey illustrative of it having been discovered in the Office of the Superintending Engineer. Colonel Bean will call upon the Range Officer to report on the two tanks at Turinjikuppam and Kalasamudram.

9. The Superintending Engineer of the 5th Division will furnish any information in his possession regarding the restoration of the tank at Cumboor, in the Ahtoor talook, spoken of by Mr. Arbuthnott, and he will hasten the investigation by the Assistant Engineer of the Oossoor Range of the project for restoring the Malleapadi tank, and for the construction of a reservoir at Kistnagherry.

(True Extract.)

Colonel, R. E.,
Secretary to Government.

To the Superintending Engineer, 4th Division.
,, Do. do. 5th ,,
,, Revenue Department.
,, Board of Revenue.
,, Sanitary Commissioner.

Exd. S. T. Augustin.

Privy Council Office
Court Lordship
No. 1286
Proceedings and
Report thereon

Received 17th May 1867
Received 18th May 1867
No. 1190.

Passing orders on Mr Ellis's report on the irrigation rights of the Districts of North Arcot & Salem.

RECORDED.
No. 1190 of Register

With the Order

No. 226327

No. 1286

No. 1190