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MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No. 1490	Press Mis.
401-02	
Dated 17. 5	1867.

Not to be folded or roughly handled

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 your 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 deforestation 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 Gudiatum 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 Niringjeepet 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 Oosoor, 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 calingulals 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 Malleapadi.”

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 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

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.

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 Neerinjepett 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 Neerinjepett 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.

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 made for the improvement of its irrigational works. The 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 Oosoor 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.

No. 63.

OFFICE OF SANITARY COMMISSIONER,
MADRAS, 27th April 1867.

From,

THE HONORABLE R. S. ELLIS, C.B.,
Sanitary Commissioner for Madras.

To

COLONEL CHARLES A. ORR, R.E.,
*Secretary to Government,
Public Works Department.
Fort Saint George.*

1. SIR,—I have the honor 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 very 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. 1058, 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 your 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 taluq, formerly one of the most prosperous taluqs 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 Jayadi Hills and to the deforestation during the last ten years of these Hills for railway purposes. This taluq was one that suffered most severely last year from the failure of the periodical rains.

11. Among the irrigation works of importance in this taluq, 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 D. P. W., and was forwarded to Madras, but nothing more has been heard of it. Mr. Robinson adds:—"Had this work been carried out, the taluq 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 taluk, 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 taluq, 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 taluq 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 Taluq 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."

Plans

"There is also the Pennar River which rises north-east of Bangalore, and runs through Oosoor, Kistnagherry, Dhurampury and Utangherri Taluqs. 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."

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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 taluq, having for their object the diversion of the waters of the Sanaith Kumairanathi river. "The effect of this project would be to fertilize the Dhurampuri taluq 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."

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The 4th Project mentioned by Mr. Thomas is the utilization of another natural basin in the Dhurampury taluq.

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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 by the local authorities, plans would seem to have been prepared in former years for the anicut across the Cavary 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 subdivision 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 taluq, 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.

I have the honor to be,

Sir,

Your most obedient servant,

N. S. S. S.
Sanitary Commissioner for Madras.

Public Works Dept.

No 1490

Proceedings of the Madras Government
Under date the 17th May 1867

Read the following

From the Honible R. S. Ellis, C.B. } N.R. No 63 dated
Sanitary Commissioner } 27th April 1867
Madras }

In this letter the
Sanitary Commissioner
replies to the orders of Go-
vernment requesting him
to communicate the in-
formation 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

Received
17th May 1867

From

THE HON^{BLE} R. S. ELLIS, C.B.,

Sanitary Commissioner,

Madras

To

THE SECRETARY TO GOVERNMENT,

Public Works Department,

Fort Saint George

Dated 27th

April 1867.

Received

No. 63.

Gives the sources of information upon which
the statements made in the Report on the
Salem and North Arcot Districts, dated
13th September 1866, were founded.

No 1490-17th May 1867

Gantz Brothers - Adolphus Press

- Cn 27th May 1867

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.

Mr. Ellis, being anxious to convey to Govt 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 ~~he~~ freely stating ^{his} ~~that~~ opinion, adding the remarks regarding plans and estimates which gave rise to the reference to him by Govt.

Acknowledging the general nature of the information on which his specific statements were based, Mr. Ellis, in his communication before Govt, adheres to the opinions previously expressed

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.

Of the three projects
referred to by Mr Ellis two
were probably never sub-
mitted to the Board of
Revenue or to Govt, though
they have engaged the at-
tention of the local Engi-
neer Officers. The third
alluded to, that is the
restoration of the Merin-
jeepett Ancient, is a scheme
which was prepared by
Lieut now Lieut Col.

Wilkinson

6 10—
Wilkinson, and which was
submitted to Govt. 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 ap-
peared sufficient to Govt,
though it has not been
relinquished. With the
increased resources
which will now, it is
hoped, be placed at the
disposal of this Govt.,
the Merinjeepett Ancient
is one of the works which
will have an early claim
on their attention.

Mr Ellis would be
mistaken in supposing
that exception is taken to
the general purport of
his

his report. It is not dis-
puted 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. ~~as~~
It may ^{nevertheless} ~~however~~ be
questioned whether, even
if many works of the
nature contemplated by
Mr. Ellis had been ex-
ecuted or maintained,
the effect would have
been as favorable as
he has been induced
to believe. Some ad-
vantage might no
doubt have been de-
rived, but the serious
failure of rain last
year would still, in
in

consequence of the na-
ture of the country and
the source of the water
supply, have caused
an almost entire loss
of crop.

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 lo-
cal 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 re-
servoirs capable of con-
taining two or more years
supply of water can
alone

alone provide the means of irrigation in similar seasons of drought. Such reservoirs have still to be constructed, and the Govt. 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 Govt. 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 Govt. land, is likely, the Govt. think, to offer those facilities of construction, combined with a good water supply, which are necessary for the formation of a capacious reservoir.

Ordinary irrigation works, dependent upon an annual supply of water or on local rain-fed streams, tho' they may be highly beneficial and often greatly remunerative,

Can

can never be made to support cultivation when those rains fail-
ing, the tanks and streams are dry. Thus the Anicut across the Cheyaur river some distance below Mam-
bakkum did nothing for cultivation last year till the 7th August when the river first came down. In the same way, the chan-
nels under the ^{Ponney and} Palar anicuts were dry till the rains of August ^{began} to ^{those} fill that river. ^{from} these facts, the Govt are satisfied that, if measures are to be taken for pro-
viding water for

the crops had been totally lost -
* The Ponney on 21st Augt
The Palar on 26th Augt

9 55
irrigation in North Arcot and Salem du-
ring seasons of drought, those measures must be directed to the dis-
covery of sites on which can be constructed large storage reser-
voirs. The Revenue and Public Works Officers should en-
deavour to find a few such sites in order that they may be carefully examined and reported on.

The attention of the Superintending En-
gineer of the 4th Division will be directed to the statement that of the 172 tanks in the Palar Taluq, 166 are
in

in need of repair. The
Polur Talug, being situ-
ated 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 Govt have reason
to believe that during
the last two years
something has been
done by the Public
Works Department
in that Talug, and
~~that~~ special efforts
are now being made
for the improvement
of its irrigational works.

The reconstruction of
the dam for the sup-
ply of the Alleahad
tank is ~~under consideration~~

10 21-
~~to be~~ in progress. The
preparation of a project
for a weir across the
Cheyaur river at Mam-
bakkam, as proposed by
the late Mr. Dick, and
referred to ^{by} Mr. Ellis, is
in hand, a survey il-
lustrative of it having
been discovered in the
Office of the Supy. En-
gineer. Col. Boileau
will call upon the Range
Officer to report on the
two tanks at Turinj-
kuppam and Kalasa-
mudram.

The Supy. Engineer
of the 5th Division will
furnish any informa-
tion in his possession

re-

regarding the restora-
tion of the bank at
Gumbar, in the Ahtoor
Talug, spoken of by
Mr. Arbutthnott, and
he will hasten the in-
vestigation by the
Sub. Engineer of the
Ossoor Range of the
project for restoring
the Malleapadi bank,
and for the construction

of a reservoir at
Kistnagherry.

9	To the Supg. Engr.	4 " D ^u ✓
6	Do.	5 " D ^u ✓
8	"	Rev. Dept. ✓
8	"	B ^d of Revenue ✓
3	"	Sanitary Comm ^{ee} ✓

Decr. 18/67

44

6

Proceedings of the Madras Government
Under date the May 1867

From The Honble. J. S. Ellis, C. B.
Sanitary Commissioner

Madras.
(H.E. of 27th April 1867 No 63)

In this letter the
Sanitary Commissioner
replies to the orders of
Government ~~requiring~~
him to ~~state~~ the in-
formation on which
he ~~reverted~~ in his
Report of the 13th Sep-
tember 1866, when speak-
ing of the portions of
the Salem and North
Arcot District which
he had visited, that
there were on the re-
cords of the Board
of Revenue and of
the Public Works De-
partment plans of

requesting?

communicate?

stated of

The tone of this draft
seemed to me to be rather too
entirely for a Govt. order
tho' it might be natural
in a reply by Mr. Ellis. I have softened some
expressions and suggested
the elimination of one or two
paragraphs. I think it
might stand in its
present shape. It contains
an explanation of the
peculiar nature of the district
country with a rather supply
of details which should be submitted.

6.25.1537

Charles James

6/5/67

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.

hominies The investigator of several hominies projects for ancient and tasks what if all the efficiency supported by Mr Ellis in years of drought would still be very beneficial to the Country.
I concur in most of Mr Ellis's alterations & commissions suggested by H.E.R. Pres-

~~(It appears that)~~ being anxious to convey to Government a faithful impression of the condition of the District as they were seen by him during ^{a rapid} ~~a hasty~~ his tour, and, intending his remarks to be of a very general nature ^{submitted from what} ~~(as it is not possible to believe by what he~~

Mr. Ellis
a rapid - that is in my own 24 hours on 21/2

general nature

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 he freely stated that opinion, adding ~~(from his own observation at his residence)~~ the remarks regarding plans and estimates which gave rise to the reference to him by Govt. Acknowledging the ~~importance~~ of the information on which his specific statements were based

based, & Mr. Ellis, ^{in his communication before Govt. JP} ad
 here to the ~~General~~ ^{Minions person / as per JP} ~~of this person~~ ^{JP}
 and adduces in ^{JP} ~~JP~~ of them ^{JP}
 the names of three
 works which, on in-
 formation since ob-
 tained from the
 Collectors of North
 Arcot and Salem, ^{from the Sub. Coll. of Salem} and
 he mentions as having
 been projected, and the
 plans sent to Alwar,
 and there lost sight
 of. ^{omit JP} ~~Of these, there~~
 is nothing to show ^{JP} ~~JP~~
 that they were ever
 submitted either to the
 Board of Revenue or
 to Govt. and the
 third, being the restoration
 of the Perinjetta
 ancient

^{It is understood to have been under consideration by the local Engineer back in 1855, but}
 The Perinjetta
 ancient is a scheme
 which was prepared by
 Lt. and Colonel
 Witherson and which
 was submitted to Govt.
 in 1856. It has been
 held in abeyance up to
 the present time for reasons
 which have appeared
 sufficient to Govt. but
 it has not been
 relinquished. With the
 increased resources which
 with now it is hoped to
 place at the disposal
 of the Govt. The Perinjetta
 ancient is one of the
 works which will have an
 early claim on Govt. attention.
 JP

35
 further
 Ancient, in the corner
 of the Salem District, is
 a project which, pro-
 posed by Lieutenant
 (now Lieutenant Col.)
 Witherson, was submitted
 to Govt. in 1856, and
 has never been lost
 sight of, but has been
 held in abeyance for
 good and sufficient
 reasons.
 [The Govt. regret that
 nothing more than this
 is the result of their
 reference to Mr. Ellis -
 They were led to hope that
 Mr. Ellis had obtained
 reliable information of
 the existence of many
 plans of useful works
 of irrigation of the nature
 of those which the Govt.
 are anxiously looking
 for, now that funds
 are likely to be available
 for their construction.]

and it is very cheap
pointing to find that
no information exists
which might assist
the Officers of the Q. M. D.
in designing irrigation
improvements or in pro-
secuting the search on
which they are now
engaged for suitable sites
on which to form great
storage reservoirs.

Mr. Ellis is mis-
taken in supposing
that exception is taken
to ~~any part~~ of his
report. It is not dis-
puted that his statement
of much remaining to
be done in the two
Districts which he
visited, for the im-
provement of old and
the construction of new
works of irrigation, is
substantially correct.

11

Omit and
substitute as
follows

It may however be
questioned whether
even if many works
of the nature contemplated
by Mr. Ellis had been
executed or maintained
the ~~result~~ ^{effect} would have
been as favorable as
he has been induced
to believe. Some
advantage perhaps
might 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.

W. H. C.

(A reference was made
to Mr. Ellis simply
for information on
two matter of fact
statements which were
made in his report;
and having his reply
to that reference before
them, the Govt. are
constrained to say
that, had he even
been able to show
that many projects
had been planned
but neglected, the hard
still no sufficient grounds
for adding that their
execution would have
made the serious
failure of rain last
year result in only
a partial instead of
an entire loss of crops.)

North

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 seasons of drought. Such reservoirs have still to be constructed, and the Govt. would gladly learn where good natural sites

It is understood to have been known to former collectors of this district and to have been under consideration as a much desired improvement. It was

by a late collector

by a late collector

those

sites for them can be found. For no proposals for farming ^{in North Arcot} any have as yet been made, nor do the Govt. know that any suitable sites have been discovered. The one in Salem near Krishna Chery, referred to by Mr. Ellis, ~~has been~~ ^{by a late Sub-Collector} brought to notice, but not in a form to give any reliable assurance of its fitness. Early measures will be taken to have it professionally examined, as ^{if you doubt} the situation is likely, the Govt. think, to ^{those} offer ~~(all the)~~ facilities of construction, combined with a good water supply which are necessary for the formation of a capacious reservoir.

Edmund

Ordinary irrigation
works, dependent upon
an annual supply
of water or on local
rain fed streams, tho
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
ancient across the
Cheyam river (~~which~~
~~is described as a~~ ^{supply from} ~~may~~
~~sufficient water shed~~)
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
Palan

Palan ancient were dry
till the rains of August
filled that river. From
these facts, the Govt
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 con-
structed large storage
reservoirs. The Revenue
and P. W. Officers
should endeavour to
find a few such sites
in order that they may
be carefully examined
and reported on.

The

The attention of the
Superintending Engineer
of the 4th Div. will be
directed to the statement
that of the 172 tanks
in the Polur Taluq,
166 are in need of
repair. The Polur Taluq,
being situated in ~~one~~ ^{an} out. of the way
corner of the North
West Dist., has per-
haps not had the
attention given to it
which it deserved, but
the Govt. have reason
to believe that during
the last two years
much has been done
by the P.W.D. in that
Taluq, and (that) special
efforts are now being made
for the improvement
of its irrigation works.

The

something

and other
of the
in the
of the

referred to by Mr. Ellis, who
has been despatched
to the office of
the P.W.D.
It is under
consideration.

The reconstruction of
the dam for the supply
of the Alleabadi tank
is (understood to be)
in progress, and the
preparation of a project
for a weir across the
Cheyaur river at
Mambakum, as pro-
posed by the late
Mr. Dick ^{to the tank,} ~~is well ad-
vanced~~. The Super-
intending Engineer of
the 4th Div. will call
upon the Range Officer
to report on the two
tanks at Turinjikun-
nam and Kelasa-
mudham.

The Superintending
Engineer of the 5th Div.
will furnish any in-
formation in his pos-
session regarding the
restoration of the tank
at

at Quamboor, in the
Chittoor Taluq, spoken
of by Mr. Arbuthnot, and
he will hasten the in-
vestigation by the Asst
Engineer of the Cozsoor
Range of the project
for restoring the Mal-
hapadi tank, and for
the construction of a
reservoir at Kistnachang.

W.H.

To

The Secy to Govt
" do - 5/10/11
" Secy to Govt
Bd of Revenue
Sanitary Commⁿ

101
102
Pub. Works Dept.

Pro. of Govt. of Madras

No. 401

Pro. of the Madras Govt.

4th 17th May 1867

Passing orders on a letter from the Secretary Commissioners, relative to the remarks in his Report of the 13th September last, that there were on the records of the Board of Revenue and of the P.W. Department plans of Irrigation Projects in the North Arcot and Salem Districts, that if carried out would be highly remunerative, &c.

No. 401-402

End 7th May 1867