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MADRAS RECORD OFFICE

GOVERNMENT OF MADRAS

Revenue DEPARTMENT

G.O. No.
B.P. No.

71

Press
Mis.

Dated 17-1-1886 196

Not to be folded or roughly handled

No. 142. Read the following Proceedings of the Board of Revenue, dated 2nd November 1875, No. 3,023:—

Read the following letter from H. NEWMAN, Esq., Acting Collector of the Kistna District, to H. E. STOKES, Esq., Acting Secretary to the Board of Revenue, dated Masulipatam, 28th September 1875, No. 1,258.

I HAVE the honor to reply to Board's Proceedings, No. 3,280, dated 12th November 1874.

2. I am of opinion that the proposal in Colonel Mullins's memorandum to lower the level of the Colair Lake as much as possible is the best that can be made in regard to it.

3. The dalwa cultivation is not* very extensive, and, except since the breach in the bund was filled in, as Colonel Mullins says with some difficulty, there had been no return from it since Fasli 1277, when the breach was cut by Mr. Thornhill, then Collector.

* The average revenue derived from dalwa crop from Fasli 1275 to Fasli 1284 was Rs. 7,266.

4. It was replaced by Mr. Leman merely as a temporary measure and to assist the ryots who had suffered much in that year by the overflow of the lake and the Budamair.

5. Colonel Mullins is quite correct in saying dalwa is not a crop to be encouraged as it is only a second crop; in fact, it is only cultivated because the circumstances of the locality preclude any other cultivation. The land so cultivated is submerged when the lake is full. If the lake does not fill no dalwa cultivation and no ordinary wet cultivation can be made, for the ryot cannot afford the cost of raising the water sufficiently. If the lake fills the waters do not subside sufficiently for cultivation till November or December, and then it is too late for any but this three months' dalwa wet cultivation. If it be drained so that the level of the lake-water is seldom above sea high water-level, then a large tract of land will be made capable of cultivation and will, I have no doubt, be taken for dry crops until the channels designed to irrigate the adjacent lands are complete.

6. The method of dealing with the lake has been advocated by many Engineering and Revenue Officers, whose opinions have been recorded.

7. As the Board observe, there is much cholum land in the Davaracota Zemindari for which irrigation will never be taken, and the extent of land which is fit for no other than wet cultivation has been roughly estimated at 3,000 Acres.

8. To the question whether the wet assessment prevents the occasional cultivation of dry crops in the Divi Pargana I have to reply in the negative, for the present rule is that when water fails the ryots who utilize their wet lands for dry cultivation are to be charged dry assessment only.

9. The chief reasons why the ryots do not avail themselves of this privilege are that the wet fields are of a stiff soil difficult to plough unless the land is soaked with water, and being small it is not convenient to run the long furrow suitable for dry crops, and the ryots have a notion that wet fields used for dry crops will not give a good outturn wet to the cultivation of the succeeding year, and that such soil is not fit for, and will not produce, a good dry crop when the endeavor

is made, and that it has not ever been customary here to raise a dry crop in wet lands.

10. There is another probable reason, which is that they cannot commence the dry cultivation till all chance of the tanks filling is over, i.e., till after September or October: for if water came to the tank after all they would be charged water tax in addition to the land assessment, and therefore there is only time for one late dry crop, and, as they are charged the full dry rate and are afraid of the crop not turning out well, they prefer to make sure of their claim to remission and avoid the chance of loss by a crop that may not pay the assessment.

11. I think it might perhaps be worthwhile to lower the charge and ask only two-thirds the dry rate. This might induce ryots to attempt to cultivate the ayacut with dry crops and for fodder in the event of a failure in the supply of water.

12. It would be a very good thing to encourage, and, as the present usual practice of leaving the whole ayacut waste had doubtless its origin in the charge of wet rates which was formerly made and which rendered the cultivation of fodder impossible, it may be that as soon as it might come to be generally known that two-thirds of the dry rate only was charged in the event of there being no irrigation the old custom of leaving the fields waste might come to be abandoned.

THIS letter contains the replies of the Acting Collector of the Kistna District to the points referred to him for report in Board's Proceedings, dated 12th November 1874, No. 3,260.

2. 1st.—As to the treatment of the Colair Lake—

Paragraphs 36 to 40 of Colonel Mullins's memorandum of 7th May 1874 are devoted to the consideration of this subject, and he points out that it is desirable that it should be determined in what way this great basin should be treated. This question was fully discussed in 1864 and in subsequent years.

There has been a very general consensus of opinion that the first requisite in dealing with this great sheet of water is to reduce the level of the water to the lowest possible point.

3. Colonel Mullins is clearly of the same opinion, and the Acting Collector fully supports it. The only argument against it is that a certain precarious hot-weather cultivation* will be lost thereby.

* Called Dalwa.

4. The Acting Collector shows that the average revenue from this is only 7,000 Rupees, and it is so uncertain and spasmodic in its nature that no one will be seriously injured by its loss. The lands are not held on putta, and no compensation will be due to any one if it is abandoned.

5. The advantages to be gained by draining the lake are that a large area of land now submerged will be made available for cultivation or for pasture, and that the drainage of the surrounding lands will be greatly improved.

6. It is probable that there will not be sufficient water available from the Godavery and Kistna channels for some years to provide irrigation for all the land laid bare, but it is expected that much of it will grow dry crops; at all events, the best mode of disposing of it can be best determined when it is drained. Colonel Mullins proposes two alternative plans for draining—the one is to enlarge the opening and allow the water to run freely to the sea through the Uppute, in doing which it must be remembered that a road will be given for the flow of the tide into the lake, the bed of which is below high water-level.

7. The other plan is to extend the existing calingulah to a length of about 1,000 feet and to provide it with self-acting sluices $4\frac{1}{2}$ or 5 feet below the crown: by this means Colonel Mullins points out that the depth of water would be considerably lowered even during the rains and that after the freshes had subsided it would have the effect of keeping the water at eighteen inches or two feet lower than if the tide were allowed to flow into it.

8. The Board very strongly recommend that the latter alternative be adopted: it will lay bare far more land for eventual cultivation, and, what is of much greater importance, it will have a far greater influence on the drainage of the surrounding tracts which are now often hopelessly flooded.

9. 2nd.—As to irrigation of lands under the bank channel in Zemindaris—

In treating of the extension of the canal along the eastern bank of the Kistna, Colonel Mullins points out that its eventual object will be to supply irrigation to the island of Divi, but that in its course it will pass chiefly through Zemindari lands, and that the demand for water in them is so limited that it will not be worthwhile to make provision for their irrigation.

10. A great deal of the land traversed by the canal is so valuable for the growth of cholum and other dry crops that irrigation will probably never be demanded for it, but much land is suitable for irrigation, and the Acting Collector says that about 3,000 Acres are reported as unfit for anything but wet cultivation. The Board have no doubt that eventually water will be taken for all lands suited for irrigation, but it may be some years before the demand arises. They are of opinion that provision should be made accordingly in planning the main channel, but that no subsidiary works should be undertaken till they are actually called for.

3rd.—As to the cultivation of dry crops in wet lands in Divi—

Colonel Mullins having observed that all the wet lands in Divi on the occasion of his visit were left waste owing to a failure in the supply of water to their tanks, inquired if there was anything in the rules of assessment which deterred ryots from so cultivating them. The Board pointed out that under Standing Order No. 17 of 1873 ryots are only charged dry rates when cultivating dry crops in wet land, so that there was nothing in the rules to prevent them from doing so. The Acting

Paragraphs 9, 10, and 11.

Collector now adds that the wet fields are not generally suitable for any culture; that the preparation for wet crops unfits them for dry grains and vice versa, and moreover that it has never been customary to raise dry crops in wet land: he also says that ryots wait till the last in hopes of getting water for wet crops, and that

*Proceedings of the Madras Government, Revenue Department,
17th January 1876.*

then it is too late to fully utilize the land for dry culture, and he suggests that some good might be done by allowing a still lower rate of assessment for lands cultivated with dry crops. The Board do not consider that any good would be gained by a further reduction of assessment: if people were otherwise disposed to grow dry crops they will not be deterred by the highest dry rate. There is much force in the reason given by the Acting Collector in paragraphs 9 and 10, and the Board would leave the ryots to do as they please in the matter. Mr. Newman has omitted to mention that they always cultivate dry crops in the beds of their tanks, which are very extensive, after the water has been drawn off, and that the fertility of the lands being great they invariably secure good returns.

(A true Copy and Extract.)

(Signed) H. E. STOKES,
Acting Secretary.

No. 143. ORDER THEREON, 17th January 1876, No. 71.

Irrigation, No. 3.

COMMUNICATED to the Public Works Department in continuation of Proceedings, dated 30th November 1874, No. 1,464.

2. The Government accept the conclusions and recommendations of the Board, *i.e.*—

(1) That the Colair Lake should be drained to the lowest possible level by the second of the two alternative means suggested by the Chief Engineer for Irrigation, *viz.*, the extension of the existing calingulah;

(2) That in planning the main channel under the bank canal project, Eastern Delta, provision should be made for the irrigation of about 3,000 acres in its course through Zemindari tracts; no subsidiary works, however, being undertaken until they are actually called for; and,

(3) That nothing is needed on the part of the Revenue Department to encourage the ryots to cultivate dry crops in the Divi Parganah when the supply of water to their tanks fails.

3. On the first question, it has been shown, conclusively, that the loss of an average annual revenue of Rs. 7,000, now obtained from the precarious dalwa or hot weather cultivation on the margins and islands of the lake, will be abundantly compensated by a large area now submerged becoming available for cultivation or for pasture. It may be some years before all the land laid bare is placed within the reach of the Godavery and Kistna channels; but dry crops, which will be grown in the mean time, will go far to make up for the present loss, and there will, above all, be the great advantage of ensuring free and unobstructed drainage for large and valuable delta tracts.

4. On the second question, it is to be observed that the chief object of the bank canal, as pointed out by Lieutenant-Colonel Mullins, to benefit the island of Divi, in which it is expected that some 45,000 acres will be irrigated. Under the present uncertainty, therefore, as to what extent irrigation will be sought for the intervening Zemindari lands, the Board's suggestion seems to be the only eligible one.

*Proceedings of the Madras Government, Revenue Department,
17th January 1876.*

5. On the third question referred for consideration in the Revenue Department as pointed out by the Board, the ryots are free to cultivate dry crops, paying only dry assessment. The fact is, the feasibility of a temporary change from wet to dry cultivation depends upon conditions irrespective of the Government demand.

(True Extract.)

(Signed) W. HUDLESTON,
Chief Secretary.

To the Public Works Department
„ the Board of Revenue.

Exd. F. R. Bantleman.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 2nd November 1875.

Read the following letter from H. NEWMAN, Esq., Acting Collector of the Kistna District, to H. E. STOKES, Esq., Acting Secretary to the Board of Revenue, dated Masulipatam, 28th September 1875, No. 1,258 :—

I HAVE the honor to reply to Board's Proceedings, No. 3,260, dated 12th November 1874.

2. I am of opinion that the proposal in Colonel Mullins' memorandum to lower the level of the Colair Lake as much as possible is the best that can be made in regard to it.

3. The dalwa cultivation is not* very extensive, and, except since the breach in the bund was filled in, as Colonel Mullins says with some difficulty, there had been no return from it since Fasli 1277, when the breach was cut by Mr. Thornhill, then Collector.

4. It was replaced by Mr. Leman merely as a temporary measure and to assist the ryots who had suffered much in that year by the overflow of the lake and the Budamair.

5. Colonel Mullins is quite correct in saying dalwa is not a crop to be encouraged as it is only a second crop; in fact, it is only cultivated because the circumstances of the locality preclude any other cultivation. The land so cultivated is submerged when the lake is full. If the lake does not fill no dalwa cultivation and no ordinary wet cultivation can be made, for the ryot cannot afford the cost of raising the water sufficiently. If the lake fills the waters do not subside sufficiently for cultivation till November or December, and then it is too late for any but this three months' dalwa wet cultivation. If it be drained so that the level of the lake water is seldom above sea high water-level, then a large tract of land will be made capable of cultivation and will, I have no doubt, be taken for dry crops until the channels designed to irrigate the adjacent lands are complete.

6. The method of dealing with the lake has been advocated by many Engineering and Revenue Officers, whose opinions have been recorded.

7. As the Board observe, there is much cholum land in the Davaracota Zemindari for which irrigation will never be taken, and the extent of land which is fit for no other than wet cultivation has been roughly estimated at 3,000 Acres.

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Col. of 1876
REVENUE.

THE PUBLIC WORKS DEPARTMENT.

cc. cc. cc.

Dated January, 17th.

Col. of 1876, January 18/6, No. 11.

JANUARY.

No. 142,143.

Col. of 1876, January 18/6, No. 11. Communicating to the Public Works Department Proceedings of the Board of Revenue relating to the proposal for lowering the level of the Colair Lake and recommending the execution of the works on the points specified.

such soil is not fit for, and will not produce, a good dry crop when the endeavor is made, and that it has not ever been customary here to raise a dry crop in wet lands.

10. There is another probable reason, which is that they cannot commence the dry cultivation till all chance of the tanks filling is over, i.e., till after September or October; for if water came to the tank after all they would be charged water-tax in addition to the land assessment, and therefore there is only time for one late dry crop, and, as they are charged the full dry rate and are afraid of the crop not turning out well, they prefer to make sure of their claim to remission and avoid the chance of loss by a crop that may not pay the assessment.

11. I think it might perhaps be worthwhile to lower the charge and ask only two-thirds the dry rate. This might induce ryots to attempt to cultivate the ayacut with dry crops and for fodder in the event of a failure in the supply of water.

12. It would be a very good thing to encourage, and, as the present usual practice of leaving the whole ayacut waste had doubtless its origin in the charge of wet rates which was formerly made and which rendered the cultivation of fodder impossible, it may be that as soon as it might come to be generally known that two-thirds of the dry rate only was charged in the event of there being no irrigation the old custom of leaving the fields waste might come to be abandoned.

This letter contains the replies of the Acting Collector of the Kistna District to the points referred to him for report in Board's Proceedings, dated 12th November 1874, No. 3,260.

2. *Let. As to the...*

Paragraphs 36 to 40 of Colonel Mullins' memorandum of 7th May 1874 are

Proceedings of Government, dated 29th September 1874, No. 2,732, Public Works Department.

Board's Proceedings, No. 4,081, dated 2nd July 1864.

devoted to the consideration of this subject, and it points out that it is desirable that it should be determined in what way this great basin should be treated. This question was fully discussed in 1864 and in subsequent years.

There has been a very general consensus of opinion that the first requisite in dealing with this great sheet of water is to reduce the level of the water to the lowest possible point.

3. Colonel Mullins is clearly of the same opinion, and the Acting Collector fully supports it. The only argument against it is that a certain precarious hot-weather cultivation* will be lost thereby.

* Called Dalwa.

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6. It is probable that there will not be sufficient water available from the Godavery and Kistna channels for some years to provide irrigation for all the land laid bare, but it is expected that much of it will grow dry crops; at all events, the best mode of disposing of it can be best determined when it is drained. Colonel Mullins proposes two alternative plans for draining—the one is to enlarge the opening and allow the water to run freely to the sea through the Upputer, in doing which it must be remembered that a road will be given for the flow of the tide into the lake, the bed of which is below high water-level.

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8. The Board very strongly recommend that the latter alternative be adopted: it will lay bare far more land for eventual cultivation, and, what is of much greater importance, it will have a far greater influence on the drainage of the surrounding tracts which are now often hopelessly flooded.

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Proc., dated 12th November 1874, No. 3,260. out that under Standing Order No. 17 of 1873 ryots are only charged dry rates when cultivating dry crops in wet land, so that there was nothing in the rules to prevent them from doing so. The Acting

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then it is too late to fully utilize the land for dry culture, and he suggests that some good might be done by allowing a still lower rate of assessment for land cultivated with dry crops. The Board do not consider that any good would be gained by a further reduction of assessment: if people were otherwise disposed to grow dry crops they will not be deterred by the highest dry rate. There is much force in the reason given by the Acting Collector in paragraphs 9 and 10, and the Board would leave the ryots to do as they please in the matter. Mr. Newman has omitted to mention that they always cultivate dry crops in the beds of their tanks which are very extensive, after the water has been drawn off, and that the fertility of the lands being great they invariably secure good returns.

(A true Copy and Extract.)

Acting Secretary.

To the Acting Secretary to Government, Revenue Department,
with copy of Board's Proceedings, dated 2nd July 1864, No. 4,081.

Copy to the Acting Collector of the Kistna District.

Exd. A. S. Rodgers.

No. 4,081.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 2nd July 1864.

Read the following letter from the Collector of the Kistna District, dated Masulipatam, 2nd June 1864, No. 112:—

I have the honor, with reference to my letter dated 8th April last, No. 44½, requesting permission to drain the Colair Lake, to submit a further Memorandum on the same subject.

ENCLOSURE No. 1.

Memorandum on the Colair Lake.

1. In my letter to the Board, No. 44½, dated 8th April last, I asked permission to drain off the water from the Colair lake for a season, to allow of the burning of the weeds and the destruction of the animalculæ, which are so destructive to the lives of the cattle employed in the cultivation of the islands and shores of the lake, and to remove the water which has now stagnated for many years and become so brackish as to be unfit even for the irrigation of paddy.

2. I pointed out in that letter that the temporary draining of the lake was absolutely necessary to prevent the entire abandonment of the cultivation, and that, even as a temporary measure, it would be attended with ~~great~~ ^{radical} change in the treatment of this vast depression in the country is most desirable.

3. The lake occupies an area of about twenty miles long by ten inches wide in the country lying between the deltas of the Godavery and the Kistna. About one-third of this area is occupied by islands, the rest by water.

4. It receives the drainage of a large tract of country to the westward, and a quantity of the surplus water of both the Godavery and Kistna rivers.

5. Its natural outlet to the sea is on the south-east through a tidal creek called the Upputeru.

6. Across this outlet, in the year 1854, a calingula was built with the double object of excluding the tidal water, and of holding up the water in the lake at a sufficient height to enable it to be raised by Pacottas for the irrigation of the margins of the lake and islands in the hot weather; the navigation of the lake was also secured by the same means.

7. At that time, I believe, the question of embanking the deeper parts of the lake and irrigating portions of it from the Godavery ancient channels was contemplated; and I was informed by the Ryots of the neighbourhood

that a project for carrying a channel from the high level canal near Ambarpett, through the entire length of the islands in a south-westerly direction from Mulkimohomedpuram on the north-east to Comatla lunka opposite Kykalur on the south-west, was then entertained.

BOARD OF REVENUE,
MADRAS.

PROCEEDINGS, 2ND NOVEMBER 1876, No. 3,023.

Encl.

NOVEMBER,
No. 3,023.

Kistna Delta.—Submitting to Government, with Board's views, letter from Acting Collector of the Kistna District on subject of treatment of the Colair Lake, irrigation of lands under the bank channel in Zemindaris, and cultivation of dry crops in wet lands in Divi.

8. I am not aware on what grounds the plan was abandoned, as the correspondence is not in this office, but the ancient works on both rivers were then in their infancy, and there were many lands whose claim to be irrigated came before those now under review.

9. My object in now bringing the subject forward is that a full examination of the case may be entered into with a view to ascertain if it would not only be beneficial to the country, but highly profitable to Government in the place of holding up the water by an artificial work for the purpose of raising an indifferent crop in the hot weather to drain the lake as far as possible, and embank the lower parts to form channels for drainage and navigation, the water for the irrigation of the parts drained being supplied from the Godavery and Kistna channels which command it on every side.

10. The average depth of the lake in hot weather, when held up at the highest by shutters on the calingula, is not, I believe, more than four or five feet, except in one or two channels where the drainage waters from the Boodamair, the Tummalair, and the Vyair pass in their course towards the calingula over which they escape through the Upputuru to the sea.

11. My impression is that these channels could be embanked so as to render them more useful for navigation than at present, leaving the bed of the lake on either side available for cultivation.

12. It is stated that the bed of the lake has silted up to the depth of half a yard since the construction of the calingula, and one-half of this deposit took place in one year, when the Kistna floods were unusually heavy, and when silt-laden water to a large amount found its way into the lake.

13. In ordinary years the Godavery and Kistna has deposited most of its silt on the way before it reaches the lake; but it would not be impossible, I should imagine, if it were found desirable to direct into the lake a larger flow of silt-laden water than usually finds its way there, nor would there be, I suppose, any insuperable difficulty in directing this flow of silt-laden water to any point of the lake, which would most benefit by it, subjecting it in fact to the process known in England as *warping*.

14. These however are all matters which must be determined by examination. I would only point to the present state of cultivation in the lake as compared with the area.

15. I annex a statement showing the entire extent of cultivation and revenue from the lands and banks of the Colair for ten years:—

Faslis.	Land cultivated.	Sist.
	Acres.	Rupees.
1263	12,313	44,190
1264	4,854	13,498
1265	5,090	14,119
1266	856	2,492
1267	5,964	16,589
1268	2,693	7,593
1269	2,745	6,820
1270	5,561	14,238
1271	6,571	18,266
1272	13,504	36,612

16. I also annex a statement received from the Survey office showing the actual extent of the lake, both in land and water:—

	Acres.	Commuted to square miles.
Area of water	1,01,160	22 158 0 6
Area of Islands	35,210	20 55 0 0
Total area	1,36,400	42 213 0 12

17. It will be seen that the highest revenue ever derived from the lake was Rupees 44,000 in Fasli 1263, but the average has been very much below that, viz. Rupees 17,491.

18. The total area of land given by Major Crewe is 35,210 acres, and water 1,01,160 acres. Supposing one-half only of the latter to be laid bare by drainage, and made available for cultivation, the revenue from water rate alone would amount to one and a half lacs of Rupees. This is of course only a rough estimate; the actual increase will probably be very much greater.

19. In connection with the drainage of the lake should be considered the best means of improving the navigation, and connecting it with existing canals. I venture to point out a few lines which seem to me worthy of attention.

20. The Boodamair, which falls into the lake on the west, is chiefly a drainage channel, but it is connected with the high level canal from Bezoara to Ellore by a lock near Casarapally, and was navigated before the high level canal was constructed. It may be rendered navigable without interfering with its more legitimate functions, it may be found profitable to do so, but it is not a line of any great importance.

21. Boats ply to the shore of the lake near Ellore, for the traffic of that town. It is in that neighbourhood that the surplus waters of the Tummalair fall into the lake, and the water is deep from that point; it will certainly be necessary to keep open a drainage channel. A short canal of four or five miles would connect the navigation with that of the high level canal at Ellore, the fall would probably be great, and the lockage heavy, but the distance is trifling; and it would open a direct communication between Ellore and Narsapore, and probably with the salt pans at Bantamilly.

22. From the two points above indicated, viz., the mouth of the Boodamair, and the nearest point of the lake to Ellore, there are now channels of greater depth than the surrounding parts of the lake, running towards the calingula, where the surplus falls into the Upputair. They are indicated in the rough sketch which accompanies this Memorandum. The two channels meet as will be seen, at a distance of five or six miles, and from that point run in one to the escape.

23. The calingula, as before shown, shuts out the tide water of the Upputuru from the lake. A lock would connect the navigation of the canals now proposed to be formed in the bed of the lake with that of the Upputuru, which is a deep tidal creek communicating with the sea at Chionna Gollapolem.

24. It approaches within a very short distance of the Godavery channel at Mogulloor which has water communication with Narsapoor, and I conclude it would be possible to connect the two.

25. The Vyair, a navigable channel from the Godavery, joins the lake a little to the north of the calingula, and there is deep water between them. A lock is even now under construction to connect the Vyair with the lake, and so with all the channels in communication with the lake.

26. Many of the works here indicated belong to the Godavery District rather than this, but as they all belong to the one scheme, I have ventured to name them.

27. In addition to the above, I would point out that in former years, small boats used to ply from the Buntoomilly salt pans of this District by certain salt creeks to the Upputeru, and thence to the entrance to the Colair lake, where either the cargoes were transhipped, or both boat and cargo carried over the bund, which existed before the construction of the calingula, and again launched in the lake.

28. This trade has of late years ceased, but it is probable that the channel which then served as a canal, might be cleared out and enlarged, and the navigation restored, and joined to the channel of irrigation and partial navigation from the Bezoarah and Masulipatam canal at Pomurru to Buntoomilly, which is now nearly complete, thus connecting Masulipatam and Nursapoor.

29. The most important communications thrown open, if these plans be found feasible, would be,

1st.—A direct line from Ellore to Nursapoor;

2nd.—A line nearly direct from Masulipatam to Nursapoor; and

3rd.—An outlet from the Buntoomilly Salt Cotaur into the Godavery District.

30. This would open out a network of communications throughout the country adjoining the Colair lake, the more wanted as the construction of roads is difficult and expensive, if not impossible.

31. It is probable that many, if not all, the items of this project have before suggested themselves to others, and the Superintending Engineers of the 1st and 2nd Divisions are probably in possession of information and data which will enable them to pronounce a general opinion on them without much trouble.

32. There may be difficulties attending either the entire scheme, or different points of it with which I am unacquainted; but I think it seems to offer so many advantages that I should not be justified in delaying to submit it for the consideration of the Board and the Government.

MASULIPATAM, 2nd June 1864.

(Signed) G. THORNHILL, Collector.

The Board resolve to request the opinions of the Superintending Engineers of the 1st and 2nd Divisions on Mr. Thornhill's proposals.

(True Copies and Extract.)

(Signed) W. HUDLESTON,
Secretary.

To the Superintending Engineer, 1st Division.

„ Do. do. 2nd Division.

Copy to G. Thornhill, Esq., Collector of the Kistna District.

Exd. J. Wright.

4081
2 — 46 — 64

No 71

Revenue Dept.

Proceedings of the Madras Government

Under date the 17th of August 1876
Read the following Pro. of the
Board of Revenue

Submitting letter from Col. of
Hist. & Co. on subject of treat-
ment of the Colair Lake, irri-
gation & lands under the bank
channel in Zennindanis, &
cultivation of dry crops in wet
lands in Divi.

U. L. 2nd Nov. 1875. No 3023

Communicated to

the Public Works Dept.
in continuation of Proceeding
dated 30th Nov. 1874, No 1464.

2. The Govt. accept the
conclusions and recom-
mendations of the Board,
i.e. —

(1) That the Colair
Lake should be drained
to the lowest possible
level

PROCEEDINGS OF THE BOARD OF REVENUE,

No.

1863.

Department

Dated 2nd July 1864.

No. 4,081.

Rev 4431/75

Requesting the opinions of the Superintending
Engineers of the 1st and 2nd Divisions on Mr.
Thornhill's proposals to drain the Colair Lake.

level by the second of
the two alternative
means suggested by
the Chief Engineer for
irrigation, viz: the ex-
tension of the existing
Calingulah.

(2) That in planning
the main channel under
the Bank Canal project,
Eastern Delta, provision
should be made for
the irrigation of about
3000 acres in its course
through Zemindari
tracts; no subsidiary
works, however, being
undertaken

undertaken until they
are actually called for,
and

(3) That nothing is
needed on the part
of the Revenue Dept.
to encourage the ryots
to cultivate dry crops
in the Divi Parganah,
when the supply of
water to their tanks
fails.

3. On the first question,
it has been shown con-
clusively, that the loss
of an average annual
revenue of Rs. 4,000, now
obtained

obtained from the precarious dalwa or hot weather cultivation on the margins and islands of the lake, will be abundantly compensated by a large area now submerged becoming available for cultivation or for pasture. It may be some years before all the land laid bare is placed within the reach of the Godaverī and Krishna channels; but dry crops which will be grown in the meantime will go far to make up for the present loss, & there will, above all, be the great advantage of ensuring free and unobstructed drainage for large and valuable delta tracts of the delta.

On

4. On the second question, it is to be observed, that the chief object of the Bank Canal is, as pointed out by Col^l Mullins, to benefit the island of Dini, in which it is expected that some 45,000 acres will be irrigated. Under the present uncertainty ^{understanding}, therefore, as to what extent irrigation will be sought for the intervening Zemindari Lands, the Board's suggestion seems to be the only eligible one.

5. On the third question referred for consideration in the Revenue Sep^r, as pointed out by the Board,

the

the ryots are free to ~~sell~~
cultivate dry crops,
paying only dry assessment.

The fact is, the feasibility of
a temporary change from
wet to dry cultivation de-
pends upon conditions
irrespective of Govt.
demand -

21 To the Public Works Dept. 1980
14 the Board of Revenue ✓

For the Govt.
Sd/-

60
4

H. B. B.

G.O.

Regarding the Co-
Law Lake, viola-
tion of lands under
the South Channel
in Spindam, Lee-
Pietra Drift.

Wm. H. Ellis.

Es