

(1) Number of pages 14.
(2) Date of repair 11-6-86
(3) Initials of the Referencer lcw v

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P. W. D.

DEPARTMENT

G.O. No. B.P. No.	1524	Press. Mis.
Dated	26-3-1878	197

ms.

Not to be folded or roughly handled.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

26th March 1878, No. 1,524 W.

General.

Establishment.

Read the following paper :—

No. 365. Proceedings of the Board of Revenue, dated 2nd March 1878, No. 568.

Read the following letter from W. WILSON, Esq., Collector of the Kistna District, to H. E. STOKES, Esq., Secretary to the Board of Revenue, dated Masulipatam, 14th January 1878, No. 88 :—

I HAVE the honor to submit the report on Public Works in the Kistna for 1876-77, noticing them in the following order :—

- (1) Irrigation.
- (2) Roads and Communications.
- (3) Buildings.

2. I. IRRIGATION—(1) *Delta*.—In the Eastern Delta the most noticeable events of the year were the opening of the new head to Ryves' Channel and the commencement of the Eastern Branch Channel; in the Western Delta the Commamur Channel has been extended to meet the East Coast Canal at Firangedibba.

3. The new head to Ryves' Channel added greatly to the facilities for irrigating the Gudivada Taluq, but though the supply was sufficient in the opinion of the Superintending Engineer, it could not have been abundant, for the expedient had to be resorted to in the latter end of the season of sending water by turns down the several channels.

4. To the evil of famine we owe two good things—the commencement of the Eastern Bank Channel and the completion, by the extension of the Commamur Channel, of a line of canal continuously from Cocanada to Madras.

5. Work was executed over about 10 miles in the former; nowhere has the channel been dug to its full width, and for only 2 miles I believe has it been dug to its full depth.

6. Both these works are part of the final Kistna project, but though we here are all thoroughly convinced of the desirability of that project being carried to the end as vigorously and expeditiously as possible, the Government of India have declined to sanction further expenditure upon it until it has accounts showing what it has done in the past, and that it will be profitable financially in the future. But for the very great pressure of work that has been upon me for the last month or two I would have ere this submitted to the Board the financial results of Kistna irrigation from its first commencement in 1856 to the year 1876 inclusive. In the twenty-one years

embraced in that period the Kistna scheme has returned a net revenue in the Revenue Department of Rupees 87,63,328. The total cost up to date does not exceed, I believe, 50 lakhs. The net return does not in my judgment contain a single pie that is not justly and reasonably due to irrigation. That irrigation from the Kistna has been a profitable investment these figures prove, that its extension will be no less profitable I cannot doubt. Much of the expenditure proposed will be devoted to drainage. This will not only save remissions that are now made necessary from flooding, but bring in lands that are now too swampy even for rice.

7. But for the famine nothing could have been done to further the long-proposed scheme of sending down water in a new direction—by the Eastern Bank Canal, the return from which when completed must be large. This new channel will command the whole of the Divy Parganna, one of the richest portions of the district and physically adapted for irrigation in a marked degree. The whole of its tanks which are supplied by direct river channels were dry last year, for there was not a fresh in the Kistna high enough to fill them.

8. (2) *Upland*.—The restored tank of Peda Kancherla in the south of Vinukonda was for the first time used for irrigation during the year. The cost of restoration was Rupees 27,317-11-3, the return Rupees 1,101-8-6, or just over 4 per cent. The lands irrigated were occupied dry; no waste was brought in. The return represents the water-rate only on the extent (acres 272-31) irrigated.

9. Upland irrigation is always precarious, and it is a question whether, except in a few cases, it is worth the while of Government to retain the tanks.

10. Of the whole upland ayacut of wet (acres 18,258) there is in occupation only about half (acres 9,130) assessed at Rupees 50,912.

11. That it was a bad year for wet crops in the uplands is apparent from the fact that Rupees 29,628, that is, more than half the assessment of the wet lands occupied, was remitted.

12. But half the ayacut occupied and more than half of the assessment of the occupation remitted are facts which must compel the consideration whether it is either proper or profitable to retain the great majority of the upland tanks under Government management and control. It would, except in a few cases, be far better to assess the whole ayacut at dry rates and hand over the tanks to those interested in their upkeep. Government would, I am sure, lose nothing, for whether there was water or not it would have the land assessment, which is now lost when water fails; the tanks themselves would in all probability be better conserved, and the Public Works Department would be relieved from the preparation of a host of petty estimates for the repair of a lot of widely-scattered petty works.

13. II. *ROADS AND COMMUNICATIONS*.—Our communications are of two kinds—roads and canals.

14. There are in the two deltas 217 miles of canal reported to be open to traffic, but the chief waterways for goods and passenger traffic at present are the Bander and Eliore Canals, the total length of which is 88 miles.

15. The fall of the Commamur Channel is too rapid for traffic, and locks must be provided before it can be much used.

16. The extension of this canal to the East Coast Canal will probably create a new trade route. The cotton from the steam-presses of Guntour will seek Madras by this canal, which is only 9 miles off, rather than go 20 miles by road to Bezwada on its way to Cocanada.

17. In the Eastern Delta there has never been any passenger traffic in any of the canals but those named; in the Western Delta passenger traffic does not exist; it was tried, but was given up long ago as a bad job.

18. Of our roads I can only speak with hope that they may be better and be more and more widely extended. The area of the district is nearly 8,000 square

miles; the mileage of roads, either existing or proposed, is 732½, of which 227½ only are metalled or proposed to be metalled.

19. In parts of the uplands metalled roads may, from the nature of the soil, be unnecessary, but in the deltas every road should be metalled. Nothing could be worse than the approaches to Masulipatam, the head-quarters of the district, and once the capital of the Northern Circars. From the north there is no road at all. The road for Bezwada is from Anderson's Bridge to within 6 or 8 miles of Bezwada, a mud embankment—to be avoided in dry weather, utterly impassable in wet. The canal, to be sure, supplies in great measure the want of a good road from Bezwada to Bander, but the canal is closed for three months of the year, and during those three months we want a road, not a dust track.

20. A new road southwards is under construction. I have always thought that there should be roads coinciding with the canals, which for the greater part of the year bear the burden of the country traffic.

21. It is my opinion, therefore, that the embankment of every canal open to traffic should be converted into a good road. Once traffic gets a set it is apt to keep it.

22. Since the opening of through water communication to Madras my opinion has been strengthened that the bunds of canals should be utilised as roads. The Superintending Engineer, to whom I broached the subject of converting the bank of the Commamur Channel from Chebrole Bridge down to Firangedibba into a road, said that it would cost an enormous amount of money in consequence of the heavy bridging that would be required. It seems to me clear, however, that what is required to secure the stability of the canal would go far to secure the stability of the road, for what has to be secured in both cases is one—the canal bund, and the works which may be necessary to pass the drainage which endangers the canal would at the same time secure the safety of the road. The Superintending Engineer was further of opinion that the necessity for such a road did not exist, as the new north road would, when completed, sufficiently provide for traffic. I am not convinced.

23. Though our wants are great in the matter of roads, the Local Fund Boards are doing their best to meet them. Their means for doing so would be greater but for the amount of the land-cess devoted to education. To the ryot it is more essential that there should be a road to cart his produce than a school for the education of somebody else's children. The ryot contributes the greater part of the Education Fund, but how many children of ryots are to be found in the schools which their contributions support?

24. Foremost among the roads that are wanted here is a railroad from Hyderabad to Bezwada. It is more than ten years since I first wrote of this. That the line from Bombay to Hyderabad will be completed by extension to the head of either the Kistna or Godavery system of canals may be assumed as certain.

There is, I believe, a difference of opinion as to the best route to take.

Kistna men, of course, say that the line should follow the present trade route through Jaggayyapetta to Bezwada; the line would be less than 200 miles long; the distance by road is 168 miles. There are but three rivers of any importance to bridge—the Moosee, the Palair, and the Moonyair—and the whole line presents no engineering difficulties whatever. On the other hand it is urged that the line should run from Hyderabad in a continuation nearly due east from Goolburgah and Hyderabad through Commamett to Vijhesvaram opposite Dowlaishweram. By taking this line the coal-fields of Singareny near Commamett would be tapped, but they might be equally tapped by a coal line running from a convenient point on the Kistna line. The great objection to the Godavery line is that it runs through a country poor and destitute of traffic, and follows a track by which trade does not at present go. There might be engineering difficulties, too, in turning or tunnelling the Eastern Ghats, while the line could go no further than the right bank of the Godavery; it cannot reach a port except by crossing the Godavery, and the cost of that would be so enormous as to make the undertaking financially impossible.

25. There are difficulties, I know, financial and political, in the way of the realization of this so-much-to-be-desired railway extension, but the matter is one so important to the welfare of this and neighbouring districts and to the public revenue* that I have thought it but proper to advert to it in speaking of our road wants.

26. If the difficulties were financial only, I should not hesitate to advocate the construction of the line by private enterprise.

27. III. BUILDINGS.—Of public buildings I have little to write.

The state of the Collector's Cutcherry has been repeatedly brought to notice during the last ten years. Estimates have been made and sanctioned, and allotments made for its repair, but it gets daily more and more dilapidated, for the allotments when made have been afterwards struck out and withdrawn.

ENCLOSURES Nos. 1 and 2.—Statements.

THE annual report on Public Works in the Kistna District will be submitted for the orders of Government.

2. The proportion of expenditure to allotment under the various heads was as under:—

	Allotment.	Expenditure.	Percentage.
Imperial	RS. 2,42,101	RS. 2,05,762	84.9
Provincial	13,822	13,915	100
Local Funds	2,07,890	1,87,803	90.3

3. The short expenditure under Imperial was chiefly in connection with Tools and Plant, and is doubtless capable of satisfactory explanation.

4. The bulk of the expenditure was carried out by the Public Works Department, and the percentage of outlay to allotment under the more important heads was—

Irrigation	{ New Works	85.0
	{ Repairs	98.4
Provincial Buildings	{ New Works	92.2
	{ Repairs	93.3
Local Fund Communications..	{ New Works	105.2
	{ Repairs	99.5

5. These results the Board consider satisfactory on the assumption that arrangements have been made to meet the excess expenditure on New Works, Communications.

6. Irrigation works in the Kistna District have been singularly successful, and the Board earnestly trust that funds may be provided to press them on steadily. From paragraph 6 of the Collector's report the Board gather that satisfactory evidence will shortly be produced in regard to the remunerative nature of the projected extensions.

7. The Board are not prepared to endorse the views expressed by the Collector in paragraphs 8 to 11 with reference to the tanks in the upland tracts. Occasionally the abandonment of unimportant tanks may not be objectionable, but their maintenance by Government is and must be a heavy burden for many seasons.

8. As regards Communications, the opening of the East Coast Canal is likely to give a great stimulus to trade. Roads are difficult and expensive to make, and, as is natural in a district in which irrigation succeeds so well, they have hardly received their fair share of attention. Matters have improved, however, since the institution of the Local Fund Boards, and the work of the Professional Department in the year under review leaves nothing to be desired so far as the utilization of funds placed at their disposal is concerned. With reference to Mr. Wilson's remark in paragraph 23 of his letter, to the effect that it would be better to devote more money to roads and less to education, the Board observe that the Road Fund of the Masulipatam Circle usually closes with a balance to credit, and that on due cause being shown the Government in G.O., dated 2nd February 1878, No. 193, have sanctioned an appropriation of Rs. 36,931 from the General to the Road Fund of the Guntur Circle.

9. Explanation should have been submitted regarding the short expenditure by the Revenue Department under Communications, and Sanitary and Miscellaneous Repairs, and by the Public Works Department under Sanitary and Miscellaneous New Works.

(A true Copy and Extract.)

(Signed) J. STURROCK,
Acting Sub-Secretary.

No. 306.

ORDER THEREON, 26th March 1878, No. 1,524 W.

ORDERED to be recorded.

(True Extract.)

Colonel, R.E.,
Secretary to Government, P.W.D.,

To the District Engineer, Kistna.
" Chief Engineer for Irrigation.

Encl E. C. Shunker.
Spare Copies

CENTRAL
ESTABLISHMENT

Govt. of (1878) Madras.

PUBLIC WORKS.

THE DISTRICT ENGINEER,

KISTNA.

cc. cc. cc.

For 1878-79.

1878

1878

G. O., 22nd March 1878, No. 1,234 W.

CHARGE

No. 225-230.

1878-79. 1878-79. 1878-79.
1878-79. 1878-79. 1878-79.
1878-79. 1878-79. 1878-79.

No. 568.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 2nd March 1878.

Read the following letter from W. WILSON, Esq., Collector of the Kistna District, to H. E. STOKES, Esq., Secretary to the Board of Revenue, dated Masulipatam, 14th January 1878, No. 88:—

I HAVE the honor to submit the report on Public Works in the Kistna for 1876-77, noticing them in the following order:—

- (1.) Irrigation.
- (2.) Roads and Communications.
- (3.) Buildings.

2. I. IRRIGATION—(1.) *Delta*.—In the Eastern Delta the most noticeable events of the year were the opening of the new head to Ryves' Channel and the commencement of the Eastern Branch Channel; in the Western Delta the Commamur Channel has been extended to meet the East Coast Canal at Firangedibba.

3. The new head to Ryves' Channel added greatly to the facilities for irrigating the Gudivada Taluq, but though the supply was sufficient in the opinion of the Superintending Engineer, it could not have been abundant, for the expedient had to be resorted to in the latter end of the season of sending water by turns down the several channels.

4. To the evil of famine we owe two good things—the commencement of the Eastern Bank Channel and the completion, by the extension of the Commamur Channel, of a line of canal continuously from Cocanada to Madras.

5. Work was executed over about 10 miles in the former; nowhere has the channel been dug to its full width, and for only 2 miles I believe has it been dug to its full depth.

6. Both these works are part of the final Kistna project, but though we here are all thoroughly convinced of the desirability of that project being carried to the end as vigorously and expeditiously as possible, the Government of India have declined to sanction further expenditure upon it until it has accounts showing what it has done in the past, and that it will be profitable financially in the future. But for the very great pressure of work that has been upon me for the last month or two I would have ere this submitted to the Board the financial results of Kistna irrigation from its first commencement in 1856 to the year 1876 inclusive. In the twenty-one years embraced in that period the Kistna scheme has returned a net revenue in the Revenue Department of Rupees 87,63,328. The total cost up to date does not exceed, I believe, 50 lakhs. The net return does not in my judgment contain a single pie that is not justly and reasonably due to irrigation. That irrigation from the Kistna has been a profitable investment these figures prove, that its extension will be no less profitable I cannot doubt. Much of the expenditure proposed will be devoted to drainage. This will not only save remissions that are now made necessary from flooding, but bring in lands that are now too swampy even for rice.

7. But for the famine nothing could have been done to further the long-proposed scheme of sending down water in a new direction—by the Eastern Bank Canal, the return from which when completed must be large. This new channel will command the whole of the Divy Parganna, one of the richest portions of the district and physically adapted for irrigation in a marked degree. The whole of its tanks which are supplied by direct river channels were dry last year, for there was not a fresh in the Kistna high enough to fill them.

8. (2.) *Upland*.—The restored tank of Peda Kancherla in the south of Vinukonda was for the first time used for irrigation during the year. The cost of restoration was Rupees 27,317-11-3, the return Rupees 1,101-8-6, or just over 4 per cent. The lands irrigated were occupied dry; no waste was brought in. The return represents the water-rate only on the extent (acres 272-31) irrigated.

9. Upland irrigation is always precarious, and it is a question whether, except in a few cases, it is worth the while of Government to retain the tanks.

10. Of the whole upland ayacut of wet (acres 18,258) there is in occupation only about half (acres 9,130) assessed at Rupees 50,912.

11. That it was a bad year for wet crops in the uplands is apparent from the fact that Rupees 29,628, that is, more than half the assessment of the wet lands occupied, was remitted.

12. But half the ayacut occupied and more than half of the assessment of the occupation remitted are facts which must compel the consideration whether it is either proper or profitable to retain the great majority of the upland tanks under Government management and control. It would, except in a few cases, be far better to assess the whole ayacut at dry rates and hand over the tanks to those interested in their upkeep. Government would, I am sure, lose nothing, for whether there was water or not it would have the land assessment, which is now lost when water fails; the tanks themselves would in all probability be better conserved, and the Public Works Department would be relieved from the preparation of a host of petty estimates for the repair of a lot of widely-scattered petty works.

13. II. ROADS AND COMMUNICATIONS.—Our communications are of two kinds—roads and canals.

14. There are in the two deltas 217 miles of canal reported to be open to traffic, but the chief waterways for goods and passenger traffic at present are the Bander and Ellere Canals, the total length of which is 88 miles.

15. The fall of the Commamur Channel is too rapid for traffic, and locks must be provided before it can be much used.

16. The extension of this canal to the East Coast Canal will probably create a new trade route. The cotton from the steam-presses of Guntur will seek Madras by this canal, which is only 9 miles off, rather than go 20 miles by road to Bezwada on its way to Cocanada.

17. In the Eastern Delta there has never been any passenger traffic in any of the canals but those named; in the Western Delta passenger traffic does not exist; it was tried, but was given up long ago as a bad job.

18. Of our roads I can only speak with hope that they may be better and be more and more widely extended. The area of the district is nearly 8,000 square miles; the mileage of roads, either existing or proposed, is 732½, of which 227½ only are metalled or proposed to be metalled.

19. In parts of the uplands metalled roads may, from the nature of the soil, be unnecessary, but in the deltas every road should be metalled. Nothing could be worse than the approaches to Masulipatam, the head-quarters of the district, and once the capital of the Northern Circars. From the north there is no road at all. The road for Bezwada is from Anderson's Bridge to within 6 or 8 miles of Bezwada, a mud embankment—to be avoided in dry weather, utterly impassable in wet. The canal, to be sure, supplies in great measure the want of a good road from Bezwada to Bander, but the canal is closed for three months of the year, and during those three months we want a road, not a dust track.

20. A new road southwards is under construction. I have always thought that there should be roads coinciding with the canals, which for the greater part of the year bear the burden of the country traffic.

21. It is my opinion, therefore, that the embankment of every canal open to traffic should be converted into a good road. Once traffic gets a set it is apt to keep it.

22. Since the opening of through water communication to Madras my opinion has been strengthened that the bunds of canals should be utilised as roads. The Superintending Engineer, to whom I broached the subject of converting the bank of the Commamur Channel from Chebrole Bridge down to Firangedibba into a road, said that it would cost an enormous amount of money in consequence of the heavy bridging

that would be required. It seems to me clear, however, that what is required to secure the stability of the canal would go far to secure the stability of the road, for what has to be secured in both cases is one—the canal bund, and the works which may be necessary to pass the drainage which endangers the canal would at the same time secure the safety of the road. The Superintending Engineer was further of opinion that the necessity for such a road did not exist, as the new north road would, when completed, sufficiently provide for traffic. I am not convinced.

23. Though our wants are great in the matter of roads, the Local Fund Boards are doing their best to meet them. Their means for doing so would be greater but for the amount of the land-cess devoted to education. To the ryot, it is more essential that there should be a road to cart his produce than a school for the education of somebody else's children. The ryot contributes the greater part of the Education Fund, but how many children of ryots are to be found in the schools which their contributions support?

24. Foremost among the roads that are wanted here is a railroad from Hyderabad to Bezwada. It is more than ten years since I first wrote of this. That the line from Bombay to Hyderabad will be completed by extension to the head of either the Kistna or Godavery system of canals may be assumed as certain.

There is, I believe, a difference of opinion as to the best route to take. Kistna men, of course, say that the line should follow the present trade route through Jaggaipetta to Bezwada; the line would be less than 200 miles long; the distance by road is 168 miles. There are but three rivers of any importance to bridge—the Moosae, the Palair, and the Moonyair—and the whole line presents no engineering difficulties whatever. On the other hand it is urged that the line should run from Hyderabad in a continuation nearly due east from Goolburgah and Hyderabad through Commammett to Vijhesvaram opposite Dowkishweram. By taking this line the coal-fields of Singareny near Commammett would be tapped, but they might be equally tapped by a coal line running from a convenient point on the Kistna line. The great objection to the Godavery line is that it runs through a country poor and destitute of traffic, and follows a track by which trade does not at present go. There might be engineering difficulties, too, in turning or tunnelling the Eastern Ghats, while the line could go no further than the right bank of the Godavery; it cannot reach a port except by crossing the Godavery, and the cost of that would be so enormous as to make the undertaking financially impossible.

25. There are difficulties, I know, financial and political, in the way of the realization of this so-much-to-be-desired railway extension, but the matter is one so important to the welfare of this and neighbouring districts and to the public revenue* that I have thought it but proper to advert to it in speaking of our road wants.

26. If the difficulties were financial only, I should not hesitate to advocate the construction of the line by private enterprise.

27. III. BUILDINGS.—Of public buildings I have little to write. The state of the Collector's Catcherry has been repeatedly brought to notice during the last ten years. Estimates have been made and sanctioned, and allotments made for its repair, but it gets daily more and more dilapidated, for the allotments when made have been afterwards struck out and withdrawn.

ENCLOSURES Nos. 1 and 2.—Statements.

The annual report on Public Works in the Kistna District will be submitted for the orders of Government.

2. The proportion of expenditure to allotment under the various heads was as under:—

	Allotment.	Expenditure.	Percentage.
	RS.	RS.	
Imperial	2,42,101	2,05,762	84.9
Provincial	13,822	13,915	100
Local Funds	2,07,890	1,87,803	90.3

3. The short expenditure under Imperial was chiefly in connection with Tools and Plant, and is doubtless capable of satisfactory explanation.

4. The bulk of the expenditure was carried out by the Public Works Department, and the percentage of outlay to allotment under the more important heads was—

Irrigation	New Works	85.0
	Repairs	98.4
Provincial Buildings	New Works	98.2
	Repairs	93.3
Local Fund Communications ..	New Works	105.2
	Repairs	99.5

5. These results the Board consider satisfactory on the assumption that arrangements have been made to meet the excess expenditure on New Works, Communications.

6. Irrigation works in the Kistna District have been singularly successful, and the Board earnestly trust that funds may be provided to press them on steadily. From paragraph 6 of the Collector's report the Board gather that satisfactory evidence will shortly be produced in regard to the remunerative nature of the projected extensions.

7. The Board are not prepared to endorse the views expressed by the Collector in paragraphs 8 to 11 with reference to the tanks in the upland tracts. Occasionally the abandonment of unimportant tanks may not be objectionable, but their maintenance generally by Government is and must be for long imperative for many reasons.

8. As regards Communications, the opening of the East Coast Canal is likely to give a great stimulus to trade. Roads are difficult and expensive to make, and, as is natural in a district in which irrigation succeeds so well, they have hardly received their fair share of attention. Matters have improved, however, since the institution of the Local Fund Boards, and the work of the Professional Department in the year under review leaves nothing to be desired so far as the utilization of funds placed at their disposal is concerned. With reference to Mr. Wilson's remark in paragraph 23 of his letter, to the effect that it would be better to devote more money to roads and less to education, the Board observe that the Road Fund of the Masulipatam Circle usually closes with a balance to credit, and that on due cause being shown the Government in G.O., dated 2nd February 1878, No. 193, have sanctioned an appropriation of Rs. 56,931 from the General to the Road Fund of the Guntur Circle.

9. Explanation should have been submitted regarding the short expenditure by the Revenue Department under Communications, and Sanitary and Miscellaneous Repairs, and by the Public Works Department under Sanitary and Miscellaneous New Works.

(A true Copy and Extract.)

Thurth

Acting Sub-Secretary.

To the Secretary to Government, Public Works Department.

Collector of the Kistna District. with two original statements to be returned.

Copy to Secretary to Government, Revenue Department.

Ed. A. F. Goodall.

1878.

Board of Revenue,
MADRAS.

PROCEEDINGS, 2ND MARCH 1878, No. 568.

Copy 1513175

End.

Received

MARCO
No. 568.

Public Works in Madras District. — Submitting
to Government Collector's report on — for
1876-77.

*Recd
1513175*

** Returned to Road.
No 1524 W & 26 Dec 78*

Recorded

21/3

*D. M. Keelua
C. E. Eng.*

Chief Secy

Chas. J. [unclear]

OFFICE OF (1878) *WINDY*
PUBLIC WORKS.

Dated

H. E. Lusk *11-25-82*

Received

Recd.

Arch.

9. 26th Mar 1878. No. 1524

Recd.

*Public Works in [unclear]
to [unclear] and [unclear] but
including collection [unclear]
on [unclear] for 1877. recorded*

Antonio [unclear]