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# MADRAS RECORD OFFICE

## Government of Madras

*Public Works* DEPARTMENT

|          |       |     |       |
|----------|-------|-----|-------|
| G.O. No. | 801   | (J) | Press |
| B.P. No. |       |     | Mis.  |
| Dated    | 29.3. |     | 1876. |

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,  
29th March 1876.*

Read the following papers :—

No. 477. Read the following Proceedings of the Madras Government in the Revenue Department, dated 9th December 1875, No. 1,781.

ABSTRACT.—*Kovoor and Manjeru Junction Canal in Godavery District.*—Transferring, for consideration in the Public Works Department, Proceedings, Board of Revenue, on the proposal to spend certain portion of the balance of the Canal and Ferry Fund in the construction of the first section of the —.

No. 17 W.

No. 477-A. *Note by the Chief Engineer for Irrigation.*

GOVERNMENT ORDER of the 14th May 1873, No. 1,338, called for information as to whether further inquiry had confirmed the opinion expressed that the Cocanada and Coringa Junction Canal was superfluous as a means of extending irrigation. A reference was made to the District Engineer, and his reply was decided in G.O., No. 2,558, of the 20th October 1873, to be incomplete. The revision of the project for the canal was necessary, and the definite information required was directed to be submitted with the revised estimate.

2. With a letter No. 3,703 of the 13th March 1874, which letter was revised and resubmitted in the following September, revised estimates were sent to this office, and it was then found that, instead of giving the information required, Lieutenant-Colonel Fischer had written a long letter giving his views on the value of the canal, a matter which was not in dispute. What was wanted was the cost of irrigating the land lying to the eastward of the Junction Canal with and without the Junction Canal. The difference between the two would be the value of the land as an irrigation work, and it was intimated to Colonel Fischer that its value to irrigation as a means of conveying produce might be separately taken into account. In lieu of the information

Paragraph 7. which was wanted, this officer proceeds to show that the canal would yield Rs. 15,000 to Rupees 28,400 from irrigation, or  $12\frac{1}{2}$  to  $23\frac{2}{3}$  per cent. on the amount, Rs. 1,20,000, of his estimate. It is singular that Colonel Fischer should bring forward so fallacious a statement. The water for irrigation has by a separate and large expenditure been already brought to within a short distance of the land, and all that is wanted is an outlay of Rs. 2 to Rs. 3 an acre on distribution works to enable irrigation to be undertaken. The return could not belong to the Junction Canal, but to the Cocanada and Coringa Canals which provide the water.

Colonel Fischer's rough estimate, paragraph 9, is Rupees 12,000.

3. The instructions regarding provision of water-way for cross drainage also had not been properly attended to, and this part of the project needs entire revision. As regards some of the details, arrangements which had been approved in 1870 had been altered, while others, the modification of which was shown to be necessary, had not been altered. The canal, crossing as it does the drainage of about 115 square miles, and having its bed at about ground level, must be designed to suit the circumstances, and the arrangement must be carefully worked out. This had not been done, and the

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29th March 1876.*

first heavy flood would have caused serious damage to the canal as designed, and probably to the Cocanada and Coringa Canals as well.

4. Further instructions could not at the time be prepared, and they have now been sent to Major Beatty, who will ere long be able to submit a project which may reasonably be expected to secure the advantages desired from the construction of a junction canal.

5. Although the undersigned is not desirous of detracting from the value of this canal, it is necessary not to let Colonel Fischer's exaggerated statements pass unchallenged. The lands to be irrigated and the delta generally will benefit by an additional means of water communication, and the salt trade and revenue may also be materially benefited, but no one would suppose from that officer's letter that there are already two canals only 9 miles apart, that the lands to the eastward of the Junction Canal are nowhere 5 miles from the Coringa river, and that there are creeks which bring water communication very near to much of this small area. The project has sufficient merit, it is believed, not to need any exaggerated evidence in its favor, and Colonel Fischer has hitherto done much to interfere with its execution by devoting his time and attention to irrelevant matters, and neglecting to look to its essential requirements.

6. The points in connection with this project referred for consideration in G.O., Revenue Department, No. 1,781, of the 9th December last are,—

1st.—The proposal to spend about Rupees 40,000 out of an unappropriated balance of Rupees 62,160 of the Canal and Ferry Fund on the part of the junction canal between the Cocanada Canal and the Penugudur Salt-pans on the Cholangi river.

2ndly.—Whether as the canal will produce an increase of revenue from irrigation of Rupees 15,000, a share of this should not be paid to the Canal and Ferry Fund to recoup it for the cost of the work.

3rdly.—The Board of Revenue recommend a contribution from Imperial Funds on account of the salt-pans and extension of irrigation.

4thly.—A light toll is suggested, although the boats may be licensed to navigate the Delta Canals.

7. The order under which the proposition for applying the surplus Canal and Ferry Fund to this canal has been brought forward, the undersigned has not seen, but it would appear that the orders\* which

contemplate the appropriation of probably as much of this money as can be made available to canal ferries have been lost sight of. Grants have been proposed in the

Budget for ferries, but these have been disallowed† pending a report on the question of the liability of Agricultural

Funds to bear the charge for multiplying communications across the Delta Canals.

Estimates for ferries in the Kistna are awaiting disposal with reference to the

same question of appropriation of Canal and Ferry Fund assets. The undersigned has

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29th March 1876.*

no preference for one object more than another as a recipient of these funds in the Godavery, but they will not suffice for both.

8. It has already been explained that the junction canal, if used as a distributary, can have no claim to the irrigation revenue resulting. The most it would be entitled to would be the saving on distribution works, which would result from its use as a major distributary. This saving would probably not exceed Rupees 12,000, and it may, and very likely would, be much less.

9. The benefit to the salt revenue arising from the junction canal has been hinted at but not estimated. There is nothing in the figures of past salt sales from which any deduction can be made, but

it may perhaps be safely assumed that facilities of conveyance would make it worthwhile for Government to spend half a lakh of Rupees, or with charges three-fourths of a lakh, equivalent to Rupees 3,750 a year, on providing an outlet for salt from which a revenue of about 5 lakhs has been obtained under unfavorable circumstances. A very small increase in salt sales would pay the interest on the investment. The actual outlay on the lock and on the improvement of the Cholangi river, works which

are exclusively for the benefit of the salt

pans, will probably not fall much short of Rupees 45,000, so that Rupees 50,000 for

works would not be a very liberal contribution from Imperial Funds under salt.

10. The undersigned deprecates the levy of a toll however light. Were it at all in proportion to the charges made for navigation of the delta canals generally, it would be so light as to be not worth collecting. The junction canal will be 9 miles long or  $\frac{1}{10}$  of the length of the canals generally. It may well be thrown into the general navigation.

CAMP AT CHEYAU,  
17th March 1876.

(Signed) JOHN MULLINS, Lt.-Col., R.E.,  
Chief Engineer for Irrigation.

No. 478. ORDER THEREON, 29th March 1876, No. 801.

IRRIGATION, No. 47.

It appears from the foregoing remarks that a decision has first to be given as to whether Canal and Ferry Fund surplus moneys are to be made available for the construction of additional ferries on the Delta Canals. If so, it seems to be improbable that there will be any balance left for the junction canal. The papers will accordingly be referred to the Revenue Department for a settlement of this question.

2. In that department also it can be decided what contribution, if any, will be made towards the construction of the canal from Imperial Funds under salt.

3. The contribution from Agricultural Funds is not, it will be seen, likely to exceed Rupees 12,000, and it may be found to be much less, as that sum is a rough estimate of the cost of distribution without a canal, and with the latter there would still be the cost of distribution below or eastward of the canal to be provided for.

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29th March 1876.*

4. The project not having been properly prepared by Lieutenant-Colonel Fischer in 1874 has to be revised. That officer's estimate for the 9 miles of canal and for the lock into the Cholangi river with the improvement of the latter down to the Penugudur Salt-pans was Rupees 1,20,000. Additional water-way is believed to be required for cross drainage, and the total of the estimate will probably be considerably increased. Of the above amount Rupees 40,740 are exclusively for works for the benefit of the salt-pans. Establishment and other charges will add about 50 per cent. to the works estimate, and it may be assumed for present purposes that—

The junction canal proper will cost 1 lakh +  $\frac{1}{2}$  lakh =  $1\frac{1}{2}$  lakhs.

The lock and Cholangi river will cost  $\frac{1}{2}$  „ +  $\frac{1}{4}$  „ =  $\frac{3}{4}$  „  
 $2\frac{1}{4}$  „

And possibly on this information it can be settled whether funds for the commencement of the work will be forthcoming when the revision of the project has been completed.

(True Extract.)

Major-General, R.E.,  
Secretary to Government.

To the District Engineer, Godavery.  
„ Chief Engineer for Irrigation.  
„ Revenue Department.

Exd. E. C. Shunkar.  
Spare Copies

*N<sup>o</sup> 17 W.*  
*Note by the Chief Engineer for Irrigation*

*Government Order of the 14<sup>th</sup> May 1873*

*N<sup>o</sup> 1338 called for information as to whether further inquiry had confirmed the opinion expressed that the Cocanada and Loringa junction Canal was superfluous as a means of extending irrigation. A reference was made to the District Engineer, and his reply was decided in G.O. N<sup>o</sup> 2558 of the 20<sup>th</sup> October 1873 to be incomplete. The revision of the project for the canal was necessary, and the definite information required, was directed to be submitted with the revised estimate.*

*2 With a letter N<sup>o</sup> 3708 of the 13<sup>th</sup> March 1874, which letter was revised and resubmitted in the following September, revised estimates were sent to this office, and it was then found that, instead*

*Note para: 4  
Pros: Madras Govt.  
N<sup>o</sup> 1215-9<sup>th</sup> May  
1870.*

instead of giving the information required, Lieut. Colonel Fischer had written a long letter giving his views on the value of the canal, a matter which was not in dispute. What was wanted was the cost of irrigating the land lying to the Eastward of the junction canal with and without the junction canal. The difference between the two would be the value of the land as an irrigation work, and it was intimated to Colonel Fischer that its value to irrigation as a means of conveying produce might be separately taken into account. In lieu of the information which was wanted, this officer proceeds to show that the canal would yield 15,000 to 28,400 Rupees from irrigation, <sup>or</sup> ~~and yield~~  $12\frac{1}{2}$  to  $23\frac{2}{3}$  per cent on the amount Rupees 120,000 of his estimate. It is singular that Colonel Fischer should bring forward so fallacious a statement. The water for irrigation has by a separate and large expenditure been

Para: 7.

Colonel Fischer's rough estimate, para: 9, is Rupees 12,000.

3  
been already brought to within a short distance of the land, and all that is wanted is an outlay of 2 to 3 Rupees an acre on distribution works to enable irrigation to be undertaken. The return could not belong to the junction canal, but to the Cocanada and Boringa Canals which provide the water.

3 The instructions regarding provision of water-way for crops drainage also had not been properly attended to, and this part of the project needs entire revision. As regards some of the details, arrangements which had been approved in 1870 had been altered, while others, the modification of which was shown to be necessary, had not been altered. The Canal, crossing as it does the drainage of about 115 square miles, and having its bed at about ground level, must be designed to suit the circumstances, and the arrangement must be carefully worked out. This had not

not been done, and the first heavy flood would have caused serious damage to the canal as designed, and probably to the Cocanada and Goringa Canals as well.

4 Further instructions could not at the time be prepared, and they have now been sent to Major Beatty, who will ere long be able to submit a project which may reasonably be expected to secure the advantages desired from the construction of a junction canal.

5. Although the undersigned is not desirous of detracting from the value of this canal, it is necessary not to let Colonel Fischer's exaggerated statements pass unchallenged. The lands to be irrigated and the Delta generally will benefit by an additional means of water communication, and the salt trade and Revenue may also be materially benefitted, but no one would suppose from that Officer's letter that there are already two canals only 9 miles

Memorandum No. 14 G  
dated 17<sup>th</sup> March  
1876.

4  
miles apart; that the lands to the eastward of the junction canal are no where 5 miles from the Goringa river; and that there are creeks which bring water communication very near to much of this small area. The project has sufficient merit, it is believed, not to need any exaggerated evidence in its favour, and Colonel Fischer has hitherto done much to interfere with its execution by devoting his time and attention to irrelevant matters, and neglecting to look to its essential requirements.

5 The points in connection with this project referred for consideration in G. O. Revenue Department No. 1781 of the 9<sup>th</sup> December last are,

1<sup>st</sup> the proposal to spend about 40,000 Rupees out of an unappropriated balance of 62,160 Rupees of the Canal and Ferry fund on the part of the junction canal between the Cocanada Canal and the Penuguduru salt pans on the Cholangi river

river.

2<sup>d</sup> Whether as the Canal will produce an increase of revenue from irrigation of Rupees 15,000 or share of this should not be paid to the Canal and Ferry Fund to re-comp it for the cost of the work.

3<sup>d</sup> the Board of Revenue recommend a contribution from Imperial Funds on account of the salt pans and extension of irrigation.

4<sup>th</sup> a light toll is suggested although the boats may be licensed to navigate the Delta Canals.

6<sup>th</sup> The order under which the proposition for applying the surplus Canal and Ferry fund to this Canal, has been brought forward, the undersigned has not seen, but it would appear that the orders, which contemplate the appropriation, of probably as much of this money, as can be made available, to Canal Ferries, have been lost

G. O. No 12<sup>th</sup>  
February 1875  
No 308

\* G. O. 15<sup>th</sup> Aug.  
1874. No 2264  
do. 9<sup>th</sup> October  
1874. No 2892

\* para 3 of orders  
on the Budget  
in Pres. Madras  
Govt. - 1<sup>st</sup> May  
1875. No. 1227.

G. O. No 95  
Dated 17<sup>th</sup> Janu.  
ary 1876.

lost sight of. Grants have been proposed in the Budget for ferries, but these have been disallowed pending a report on the question of the liability of agricultural funds to bear the charge for multiplying communications across the Delta Canals. Estimates for ferries in the Krishna are awaiting disposal with reference to the same question of appropriation of Canal and Ferry fund assets. The undersigned has no preference for one object more than another as a recipient of these funds in the Godavery, but they will not suffice for both.

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probably not exceed 12,000 Rupees and it may and very likely would be much less.

8 The benefit to the salt revenue arising from the junction canal has been hinted at but not estimated.

There is nothing in the figures of past salt sales from which any deduction can be made, but it may perhaps be safely assumed that facilities of conveyance would make it worth while for Government to spend half a lakh of Rupees or with charges  $\frac{3}{4}$  of a lakh, equivalent to Rupees 3750 a year, on providing an outlet for salt from which a revenue of about 5 lakhs has been obtained under unfavourable circumstances. A very small increase in salt sales would pay the interest on the investment. The actual outlay on the lock and on the improvement of the Cholangi river, works which are exclusively for the benefit of the salt

Pros. Macdonald  
Govt. - 20<sup>th</sup> October  
1873 - No. 2588.

Lieut. Col. Fischer's salt pans, will probably not fall much short of 45,000 Rupees, so that 50,000 Rupees for works would not be a very liberal contribution from Imperial funds under salt.

Lock —  $\frac{22,000}{40,745}$  Rupees.

signed liberal contribution from Imperial funds under salt.

9 The undersigned deprecates the levy of a toll however light. Were it at all in proportion to the charges made for navigation of the Delta Canals generally it would be so light as to be not worth collecting. The junction canal will be 9 miles long or  $\frac{1}{50}$  of the length of the canals generally. It may well be thrown into the general navigation.

Camp at Cheygar Ancient.

17<sup>th</sup> March 1876

John Lubbock Lieut. Col. R.E.  
Chief Engineer for Irrigation

To,  
The Secretary to Government  
P. W. D.

PN 1876 Departs  
No 2095

From  
The Chief Engineer  
for Irrigation

Dated 17<sup>th</sup> } March 1876  
Revd 21 }

No 1724

Note on Profs  
Revenue Department  
relative to the Godavari  
and Borimpa Junction  
Canal in Godavery  
Dist.

By 29 March 76 PN 477A  
23-3-76

List of papers put up  
with Chrs 794.2 of 1875 & 2095  
of 1876

Ed 3<sup>d</sup> Augt/69 No 2521.  
" 9<sup>d</sup> May/70 " 1215  
Act No 1 of 1870.  
Ed 14<sup>d</sup> May/73 No 1338  
" 8<sup>d</sup> Augt " " 1972  
" 20<sup>th</sup> Octr " " 2558.  
" 15<sup>th</sup> Augt/74 - 2264  
" 9<sup>d</sup> Octr " " 2892

No 801 Public Works Dept  
Proceedings of the Madras Government  
Under date the 29<sup>th</sup> March 1876

Read the following  
Abstract  
Pro: Revenue Dept - (H.E. No 1781 of 9<sup>th</sup> Dec 1875)  
Chief Eng: for Irrigation - (1<sup>st</sup> 17<sup>th</sup> of 17<sup>th</sup> March 1876)

It appears from the foregoing remarks that a decision has first to be given as to whether Canal and Ferry fund surplus moneys are to be made available for the construction of additional ferries on the Delta canals. If so it seems to be impro-  
bable that there will be any balance left for the Junction Canal. The papers will accordingly be referred to the Revenue Dept.

Department for a settlement of this question.

2 In that Department also it can be decided what contribution, if any, will be made towards the construction of the Canal from Imperial Funds under Salt.

3 The contribution from Agricultural Funds is not, it will be seen, likely to exceed Rupees 12,000, and it may be found to be much less, as that sum is a rough estimate of the cost of distribution without a canal, and with the latter there would still be the cost of distribution below or Eastward of the canal to be provided for.

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That Officer's estimate for the 9 miles of canal and for the lock into the Cholangi river with the improvement of the latter down to the Penugudurum Salt pans was Rupees 120,000. Additional water-way is believed to be required for cross drainage and the total of the estimate will probably be considerably increased. Of the above amount Rupees 40,740 are exclusively for works for the benefit of the salt pans. Establishment and other charges will add about 50 per cent to the works estimate, and it may be assumed

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proves that,

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" - lock and Cholangi river "  $\frac{1}{2}$  " +  $\frac{1}{4}$  " =  $\frac{3}{4}$  "  
 $2\frac{1}{4}$  do.

and possibly on this information it can be settled whether funds for the commencement of the work will be forth-coming when the revision of the project has been completed.

4. 1893

*[Signature]*

To The Dist. Engineer  
Godavery

" Chief Eng. for Irrigation

" Rev. Department 21

~~Rev. Board.~~ 17

~~Collector of Godavery~~

Dsd 11 April 90

477/8

7942  
20981  
Govt. of 1876 Madras.

## PUBLIC WORKS.

To

The H. B. Sp. Lavery

30/3

Dated

Issued

Recd.

Encl.

G. O. 27<sup>th</sup> March 1876, No.

801

Nos.

477/8

Proclamation & Commission  
 In relation Canal, Godavery  
 Brit — Calling orders  
 on Note by the Chief Eng. for  
 Irrigation on Proceedings  
 of the Revenue Dept. Madras  
 to the —

Recd. in P.  
 7-4-76