M.R.O. 1—77,006—8-6-37.

(1) Number of pages 10

(2) Date of repair 8 / 43

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 359 Press Mis.
754-755

Dated 30—1— 1866.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department, 30th January 1866.

No. 754. Read the following Proceedings of the Governor General of India in Council, Public Works Department, (Civil Works—Agricultural), dated Fort William, 18th December 1865, No. 1,230 C:—

Remunerative Works in the Madrs Presidency.

Read the following letters:—

From Secretary to the Government of Fort Saint George, No. 554, dated 27th February 1865, and enclosure.

From Secretary to the Government of Fort Saint George, No. 1,006, dated 12th April 1865.

Observations.—With the earlier of the two letters above read, the Government of Madras submits a Statement of Remunerative Works in that Presidency for the year 1863-64, and in the latter letter it is explained that, owing to the revenue system which prevails in the Madras Presidency, the difficulty of separating the water-rates from the land rental, and the non-restriction of the quantity of water allowed for irrigation, it is impossible to do more than show the general financial result of the outlay upon each irrigation work, and that this result is exhibited by crediting each work with the gross revenue derived from it, and by debiting it with the entire cost of maintenance and repairs, as well as with interest at the rate of 4 per cent. upon the original capital sunk.

2. By adding up the items in the statement, it appears that the total outlay up to 30th April 1863, on the twenty-two works embraced in it, was Rs. 86,87,462, or £868,746. This, it may be remarked, is a small sum for the entire outlay on such works in the Madras Presidency.

3. The entire net result was as follows up to 30th April 1863 :—

	Rs.	£.
Net profit on 16 of the works... ...	3,13,28,492 or	3,132,849
Loss on 6 of the works	2,81,315 or	28,131
Result on the whole net profit	3,10,47,177 or	3,104,718

being 35⅞ per cent. on the entire outlay.

4. During the year 1863-64, the whole outlay of capital was only Rupees 6,56,691, or £ 65,669, while the amount of net income for the year was—

	Rs.	£.
Net profit on 16 works	28,84,249 or	288,425
Loss on 6 works	81,211 or	8,121
Net profit on the whole	28,03,038 or	280,304

being on the whole outlay previous to the year in question no less than 32¼ per cent. for the year.

5. The great Irrigation works in Madras have unquestionably been very profitable, but the very large profits noted above, make it desirable that an endeavor should be made to obtain such a clear account of the profits of each work as will make intelligible the causes of the results set forth. This wuld enable the Government to judge whether a like result is probable from future outlay of the same kind.

wet and dry cultivation w/o

6. It is believed that some of the works in question are not entirely original works initiated by the British Government, but partial restorations of ancient native projects, which, owing to much of the old work remaining uninjured, or little impaired, could be brought into use with little really new construction. The outlay for restoring them was comparatively small, and the profits accordingly high. But as the expenditure in the case of these and other works is set down as outlay on "original works and re-construction," it is likely to mislead unless the fact of their being merely restorations of former works, of which much or certain portions of the ancient work remained, is clearly noticed in the Returns. That is to say, instead of making use of the expression "original works and re-construction" in such cases, they should be set down simply as "restorations and improvements," or as the case may be; using the terms specially applicable, and not employing a general phrase for all cases.

7. For instance, the works on the Lower Coleroon in South Arcot, and on the Upper Coleroon in Tanjore, are, to a considerable extent, ancient, works,* and of these the expenditure and income are given below :—

	Capital outlay.	Total net receipts to 30th April 1863.	Net receipts for 1863-64.
	Rs.	Rs.	Rs.
South Arcot	1,29,050	64,46,771	4,01,012
Tanjore	2,39,865	1,16,81,809	5,25,536
Total	3,63,915	1,81,28,580	9,26,548
Let these sums be taken from the entire aggregate of the return before given ...	86,87,462	3,10,47,177	28,03,038
And the result is...	83,18,547	1,29,18,597	18,76,490
Per cent. on first Column ...		155¾	22½

Here the result of all these works excluding these two is still a very large profit but no longer so astonishing as when the fact of these two sets of works being in some degree works of restoration is not taken into account.

8. Again, if the Godavery works are similarly struck out, and separately considered, the result will be as follows :—

	Rs.	Rs.	
Brought forward...	83,18,547	1,29,18,597	18,76,490
Godavery	36,67,742	97,88,636	14,06,518
Balance...	46,50,805	31,29,961	4,69,972
Per cent. on first column ...		$69\frac{2}{10}$	$10\frac{1}{10}$

* That is to say new anicuts were constructed across the rivers, and certain new channels constructed by which to utilize more completely the existing net work of channels.

9. Thus, if the ancient works which have been restored, and the Godavery works are omitted, the average of the annual profit on the remaining works is reduced to 10 per cent. after payment of 4 per cent. interest, or really to 14 per cent.

10. It seems, then, that the key to understanding the profits of the Madras Irrigation works would be to obtain a clear analysis of the profits of the Godavery works. All that there is on record by way of analysis is, that the mode of reckoning the profit is to take the average annual land revenue of the Districts for the five years before the works came into use, and to deduct that from the present annual land revenue, the difference being taken as the profit on the works. In this manner it is said the works gain whatever there is in the way of increased production irrespective of the effects of irrigation, while they lose credit for other items of revenue, not included in the *land* revenue, which may, perhaps, be due to the works.

11. Thus for the Godavery we have—

	Rs.
Gross proceeds of all sorts for 1863-64	17,23,150
Maintenance and repairs	1,69,923
Net profit, *not* deducting interest	15,53,227

But to be satisfied about this, it is necessary to know how the sum of Rs. 17,23,150 is calculated. Is it all difference in land revenue, or are there other items of receipts directly obtained from the use of the Canals? Of the difference of land revenue, is it difference of gross or net revenue; and if the latter, what charges does it bear? Is a share of the entire cost of the Civil establishment of the Districts deducted, or if not, why should it not be?

12. Then, again, what are the charges included in the Rupees 1,69,923? Does this sum contain, in addition to the entire charges for repairs, the whole of the Engineer and Conservancy Establishment of the works, with all establishments for collecting any petty revenue, exclusive of the land revenue? Does it include a fair share of the cost of the superior establishments for controlling the officers in direct charge of the works, and for the elaboration of the accounts?

13. Further, in order to test the amount of increase of land revenue that is due to the works of irrigation, it is necessary that there should be a comparison instituted between the growth of the revenue of the Districts affected by the Godavery Works, and that in Districts as nearly as possible similarly circumstanced in which no such works have been established, such as Vizagapatam immediately north of the Godavery District, and Nellore south of the Kistna District.

14. Again, it would be desirable to know whether the average revenue before the irrigation began was normal or not, and whether the revenue within any moderate anterior period has been sensibly larger than the average taken as the standard of comparison in the Return. Next, what was the actual area of wet and dry cultivation on which revenue was paid, and what the rates before the Canal period, and what the corresponding figures for the last few years? It will probably be found that a very large proportion of the profits arises from an actual increase of total area under cultivation.

and dry cultivation w/

15. It is no doubt the case that much, if not all, the information mentioned as necessary is on record somewhere; but the object is to obtain it in a succinct form with the returns, and put in a shape to bring out the reasons from the results which the returns give. If this be once done the succeeding year's return need not repeat the whole information but only so much as is necessary to produce a connected series of reports following out the history of the works.

16. Leaving the Godavery, which may be regarded as the key and type for general enquiries to elucidate the whole subject, and turning to the remaining works, it is to be noticed that, though the *average* is a moderate profit of 14 per cent. before any payment of interest is deducted, the individual works differ very largely in their results. One realizes 118 per cent. per annum of profit, while others result in absolute loss. It would be very desirable to place on record in connexion with these reports the causes why one work is successful, and another a failure; and why one is astonishingly profitable, while others are only moderately so. Also something should be told of the measures of administration in progress, or in contemplation, and of the ultimate prospects of the works.

17. In fact of each of these 22 works there should be a succinct history showing the stages it has gone through, and its present state and prospects, with the opinion of the Madras Government on the merits, or otherwise, of the administration. There doubtless is a system and science of management for Irrigation Works in Madras with special applications to each case. But it will be much more satisfactory, if, while the working of this in each case is watched, as doubtless it is by the Madras authorities, there is also placed on record a detailed annual review of the proceedings during each year, and their results.

ORDER.—Ordered, that a copy of the above Resolution be forwarded to the Government of Madras, with the remark that the Government of India will be glad to receive a full report on the several points noticed with the Return of Remunerative Works for 1864-65 now due.

Ordered also, that a copy of the above Resolution, and the letters from the Government of Madras reviewed in it, be forwarded to the Secretary of State.

(Signed) C. H. DICKENS, Lieut-Colonel, R. E.,
Secy. to the Govt. of India,

No. 755. ORDER THEREON, 30th January 1866, No. 359.

CIVIL WORKS, No. 116.

1. In order to furnish the Government of India with as full a report as is possible upon the points specified in the foregoing Proceedings, the Board of Revenue will be requested to submit a Statement showing, under the several heads, the amount of the annual revenue collected, since the year 1820, in the three Districts of Vizagapatam, Godavery, and Nellore; and also, for the same period, the actual area of wet and dry cultivation upon which revenue was paid in those Districts.

2. The Controller of Public Works Accounts will be requested to furnish the information required in paragraph 12 of the Proceedings of the Government of India.

3. The attention of the Superintending Engineers will be drawn to paragraph 16 of the Proceedings of the Government of India; and in future, in submitting their annual Statements of remunerative works, they will annex a brief sketch of the past history and of the future prospects of each such work; explaining the causes, which, in their opinion, have tended to produce the present financial results in each case. The special attention of the Superintending Engineer of the 7th Division, will be called to the works * noted in the margin, the present financial condition of which appears to be unsatisfactory.

*Thadapully Channel.
Calingaroyen do.
Caniempolliem do.
Arkencotta do.
Yennamakul Dam.

(True Extract.)

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

To the Superintending Engineers.
„ Board of Revenue.
„ Revenue Department.
„ Controller of Public Works Accounts.

Exd. S. T. Augustin.

Circular

Civil Works

No. 359 Public Works Department

Proceedings of the Madras Government

Under date the 30th January 1866.

Read the following

From

Secretary to Govt. of India
in the Pub: Works Dept.

Reviews Revenue Report
of Irrigation Canals in the
Punjab from 1860/61 to 1863/64.

(Here enter 18th Dec. 1865 No. 1230C)

In order to furnish
the Government of India
with as full a report as is
possible upon the points
specified in the foregoing
Proceedings, the Board of
Revenue will be requested
to submit a Statement show-
ing, under the several heads,
the amount of the Annual
revenue collected, since
the year 1820, in the three
Districts of Vizagapatam,
Godavery and Nellore; and
also, for the same period,
the actual area of wet
and dry cultivation upon

X Why Rajamundry
There are two
Canals there
S

which revenue was paid in those Districts.

2. The Controller of Public Works Accounts will be requested to furnish the information required in para 12 of the Proceedings of the Government of India.

3. The attention of the Superintending Engineers will be drawn to para 16 of the Proceedings of the Government of India; and in future, in submitting their annual Statements of Remunerative works, they will annex a brief sketch of the past history and of the future prospects of each such work; explaining the causes which, in their opinion, have tended to produce the present financial results in each case.

4. The special attention of the Superintending Engineer of the 7th Division will be called to the works noted in the margin, the present financial condition of which appears to be unsatisfactory.

Thondapilli channel
Palmyaroyen channel
Pamenpollium channel
Pitchencotta channel
Pennamanaud dam.

[illegible]
in

To
The Supg Engrs.
The Board of Revenue
The Rev: Departt
The Controller

Dept. 31st Jan.

1837

15

qo P V 1866 Depos
qo Lo: of Govt for Lany

Ex Re 309
qo Lo: of the Mr Govt
D qo Lany 166

Ans 754. 755

Lo. 18 Lany 1866. Ans. 22nd