

No. 282 I.
GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.

CIVIL WORKS.

Irrigation.

Simla, the 20th July 1898.

Review of the Revenue Report of Irrigation Works in the Bombay Presidency (excluding Sind) for 1896-97.

Read—

Letter No. 295-I., dated 10th May 1898, from the Government of Bombay, forwarding the above, and the Resolution of the Local Government reviewing it.

OBSERVATIONS.—The Report is divided into two parts, Part I comprising works for which both Capital and Revenue Accounts are kept, and Part II (a) works for which only Revenue Accounts are kept and (b) Agricultural works.

WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

CAPITAL OUTLAY.

2. The majority of these works are now completed and it has consequently been possible sensibly to reduce the expenditure on them against Capital Account. The amount incurred during the year under review on works in operation was Rs. 85,993 as compared with Rs. 1,42,681 in 1895-96 and Rs. 3,74,533 in 1894-95, these figures including indirect charges.

The greater part of the expenditure of the year, *viz.*, Rs. 48,867, was incurred in practically completing the Gokak canal (1st section) and storage works, a Provincial Minor Work, Rs. 37,203 of this amount being on account of land charges, while most of the Rs. 31,280 expended on Major Works was debited to the Nira and Mutha Canals.

The total capital outlay on all works, both in operation and under construction, to the end of the year amounted to Rs. 2,63,59,870, including indirect charges.

AREA IRRIGATED.

3. There was a very large increase in the area irrigated from these works during the year, due chiefly to deficient rainfall, and there can be no doubt that many of them were indirectly of great use in those districts where the general scarcity amounted to actual famine. The total area was 118,009 acres as compared with 74,923 acres irrigated in 1895-96, and 96,052 acres in 1891-92, the previous highest on record.

The Nira Canal, a protective work, was the largest contributor to this satisfactory increase. Its kharif area was rather less than in the previous year but the rabi area reached the large total of 33,409 acres which is 19,909 acres in excess of the area watered in 1895-96. The report states that "this canal

Public Works (1898) Department.

G.O., No. 618 I

DATED

15 August 1898

[Despatch Abstract.]

Revenue Report of Irrigation Works in the Bombay Presidency (excluding Sind) for 1896-97 : Part of India

Review of the ———, Communicated to the Chief Engineer for Irrigation.

Indexed.

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proved itself a work of very great value in this famine year, showing a vast sea of green crops in the burnt up Deccan plains. The crops were excellent, and owing to the extremely high prices of grain and fodder, not only enriched the cultivators but saved many thousands of people from seeking work on the Government famine relief works."

The Krishna Canal watered 6,564 acres which is more than double the area irrigated from it in 1895-96, and substantial increases were also recorded on the Mhasvad Tank, the Lower Panjhra river works, the Kadva river works and the Jamda Canals.

4. It is observed that while the total area irrigated exceeded that of the previous year by 57½ per cent. the corresponding increase in the assessments of revenue amounted to only 7 per cent.

No explanation of this is given in the report but it would appear to be due to the fact that the increase in the irrigation was mostly on land sown with low-rated crops, while the area under sugarcane, for which a very high rate is levied was actually less than in 1895-96. The loss of assessed revenue, due to the decrease in the area under sugarcane, amounted roughly to Rs. 30,000, which would materially reduce the value of the increased irrigation of other crops.

5. The areas of the principal crops irrigated were as follows:—

	Acres.
Jowari ...	50,139
Wheat ...	12,424
Rice ...	7,310
Bajri ...	5,042
Gram, &c. ...	8,798
Sugarcane ...	8,958
Ground nuts ...	9,882

The Local Government draws attention to the noticeable increase of 31,558 acres under jowari as compared with the previous year.

The estimated value of the crops irrigated exceeds 91½ lakhs of rupees, the value per acre being Rs. 77. The average rate levied for the use of the water was Rs. 4-8 or one-seventeenth of the value of the crop.

WORKING EXPENSES.

6. The total working expenses for the year amounted to Rs. 3,59,944 as compared with Rs. 2,94,287 in the previous year, and Rs. 3,05,260, the average of the last five years. They were distributed as follows:—

	1896-97.	1895-96.	Average, last five years.
	Rs.	Rs.	Rs.
Major Works ...	2,57,916	2,05,675	2,15,417
Minor Works and Navigation ...	94,877	82,030	83,968
Provincial Minor Works ...	7,151	6,582	5,875
	3,59,944	2,94,287	3,05,260

The rate per acre irrigated was Rs. 3'05 against Rs. 3'93 in 1895-96, and Rs. 4'16 in 1894-95.

On the Nira Canal the rate per acre irrigated was Rs. 1'48, and on the Mhasvad Tank Rs. 1'94. On the Lakh Canal the rate was Rs. 8'9 per acre while on the Mutha Canals the incidence was Rs. 14'72 per acre. But on the last-named canals nearly half the total working expenses were incurred in maintaining the Poona Water-supply.

The working expenses on the Major and Minor Works amounted to Rs. 64'4 per cent. of the gross revenue of Rs. 5,58,395 realised during the year.

FINANCIAL RESULTS.

7. The financial results of the works in operation during the year may be summarised as follows:—

	Net revenue.	Percentage on Capital outlay.	Interest charges.
	Rs.		Rs.
Major Works—			
Protective ...	14,952	0'19	2,92,759
Productive ...	1,57,786	1'45	4,15,480
Minor Works—			
Imperial ...	10,423	0'17	...
Provincial ...	15,290	1'21	...

The net revenue derived from Major Works amounted to Rs. 1,72,738 as compared with Rs. 2,73,072 in the previous year, showing a falling off of more than a lakh of rupees. This is due primarily to the increased expenditure incurred in maintaining the canals. But it is also greatly due to the large balance, Rs. 1,12,870, of the assessed revenue unrealised at the close of the year. The gross assessments amounted to Rs. 5,39,743 exceeding those of the previous year by more than Rs. 30,000, but the revenue actually collected, Rs. 4,30,654, fell short of that realised in 1895-96 by Rs. 48,093.

The uncollected balance at the close of the year amounted to 24 per cent. of the total demand. This appears to the Government of India to be higher than it should be, and will, doubtless, receive the attention of the Local Government.

Taken all together the works in operation for which Capital and Revenue Accounts are kept paid a return of Rs. 0'76 on the Capital invested in them.

The Interest Charges for the year exceeded the net revenue derived from Major Works in operation by Rs. 5,35,501 the total balance of Interest Charges up to the end of the year being Rs. 1,10,59,087.

WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.

8. These works irrigated 144,826 acres as compared with 143,805 acres in 1895-96. The gross revenue receipts amounted to Rs. 5,60,998 and the working expenses to Rs. 2,56,815, the resulting net revenue being Rs. 3,04,183 as compared with Rs. 3,11,852 in 1895-96. The decrease was due to the increase in the working expenses being larger than the expansion of revenue.

GENERAL.

9. It is claimed for the Deccan and Gujarat Irrigation Works that they are of great use in protecting the people from famine in years of deficient rainfall and general scarcity, and in the year under review this appears undoubtedly to have been the case. It is also claimed for them that they encourage a higher class of cultivation than previously existed, and in this way are of great indirect value to the country they serve. Financially they are not a success, the works classed as productive returning only 1'45 per cent. on their Capital outlay while two of them, the Kadva River Works and the Lakh Canal, failed to cover their working expenses, the deficit on the former being Rs. 7,867 and on the latter Rs. 12,809. Although some slight improvement may be anticipated in future it is unlikely that these irrigation works will ever give a return sufficient to cover the annual interest charges, and they are still less likely ever to extinguish their accumulated debt.

10. The report was not received by the Government of India until the 13th May 1898, the date on which it was due being the 15th November 1897. The

late receipt of the Report greatly delays the preparation of the Government of India's general review of Irrigation operations in India the publication of which so long after the close of the year with which it deals seriously detracts from its general interest. The Governor General in Council therefore hopes that the Bombay Government will take such measures as will ensure the punctual submission of the Report in future.

ORDER.—Ordered, that copies of this Review and of the Report be forwarded to the Revenue and Agricultural Department for information.

Ordered also, that copies of the Review be forwarded to the Government of Bombay, and to the Local Governments and Administrations in the Public Works Department noted on the margin, for information.

The Governments of Madras, Bengal, the North Western Provinces and Oudh, the Punjab, and Burma.
The Chief Commissioners of the Central Provinces and Coorg.
The Agents to the Governor-General in Central India, Rajputana and Baluchistan.

Ordered further, that the Review be published in the *Gazette of India*, and that copies of the Review be forwarded to Her Majesty's Secretary of State for India.

J. J. Bineford
Offg. Joint Secretary to the Govt. of India.

G. C. Press, Simla.—No. 635 P. W. D.—21-7-98.—230.

To. The Secretary to the Govt of Madras.
Public Works Department.
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