

Good progress was made with the new Jamrao and Dad canals, on the former of which 13 lakhs were spent during the year. When these works are in full operation the Sind canals will yield still higher returns and, regarded from a purely financial point of view, will bear favourable comparison with the best irrigation works in India.

8. The report was not received by the Government of India until the 27th June last though it was due on the 15th November. The great inconvenience caused by this delay has been referred to in the review on the Irrigation Report on the Deccan and Gujarat works and the attention of the Bombay Government is again invited to the subject.

ORDER.—Ordered, that a copy of this Review with the Report and Resolution by the Government of Bombay, be forwarded to the Revenue and Agricultural Department, for information.

Ordered, also that a copy of this Review be forwarded to the Government of Bombay for information, and that copies of the Review with the Report and Local Government's Resolution be forwarded to the Local Governments noted on the margin in the Public Works Department, for information.

Ordered further, that this Review with the Local Government's Resolution be published in Part I of the *Gazette of India*, and that copies of the Review be forwarded to Her Majesty's Secretary of State for India.

J. S. BERESFORD,
Offg. Joint Secy. to the Govt. of India.

Public Works (1898) Department.

G.O., No. 602 I

DATED 9th August 98

65.C
6/8/98

[Despatch Abstract.]
Revenue Report of Irrigation Works in
Sind for 1896-97 : Review of the —, by the
Sd/-g. India, Communicated to the
Chief Engineer for Irrigation.

19/8

G.O.

No.

Department.

Date.

BACK PAPERS.

G.O.

No.

Department.

Date.

Public Works (1898) Department.

CURRENT No. 6442

From The Govt of India
P.W.D.

Order

No 602 L 2798-98.

Communicated to the
Chief Engineer for Irrigation

No. 283. S.

Dated 21st July 1898

Received 29 — 10 —

Registered 4.8.98

Enclosures 1

Spare copies 6.

Issue

SUBJECT.

Review of the Rev. Report
of Irrigation works in
Sindh for 1896-97 -
The Chief Eng for Sindh with
Report forwarded for information
Copy of the —

G.O.

No.

Department.

Date.

FURTHER PAPERS.

G.O.

No.

Department.

Date.

In addition to the above an area of 154,166 acres was irrigated a second time for another crop, so that the total crop area irrigated amounted to 2,651,522 acres.

The kharif area exceeds the average of the previous five years by 316,443 acres or 18 per cent. and is the highest on record, whereas the rabi area fell short of the average by 155,780 acres or 28 per cent. The increase under kharif is said to be due to the favourable inundation while the decrease in rabi is attributed to the early and rapid fall of the river.

The total area of 2,497,356 acres (excluding the double cropped area) exceeds the total of the previous year by 400,579 acres and the average of the five preceding years by 160,662 acres, and approaches very nearly to the record area of 1894-95.

The Government of India concur with the Commissioner in Sind in considering this result very satisfactory in view of the fact that the inundation of the year was barely an average one.

The areas of the principal crops irrigated during the year were:—

	Acres.
Rice	727,502
Jowari	682,035
Bajri	363,662
Wheat	213,014

The areas under Rice and Jowari are the highest on record.

The estimated value of the crops irrigated is nearly 630 lakhs of rupees, the value per acre being Rs. 25. The average rate levied for the use of water was Rs. 2-2-0 or one-twelfth of the value of the crop.

WORKING EXPENSES.

5. The working expenses of the Major and Minor Works for which capital accounts are kept were as follows:—

	Total working expenses.	Rate per acre irrigated.	Average rate per acre for five previous years.
	Rs.	Rs.	Rs.
Major Works	3,28,504	0.52	0.66
Minor Works	6,14,055	0.73	0.77

The low rate per acre of the working expenses on Major Works is very satisfactory. On Minor Works for which capital accounts are kept the working expenses were rather above the normal. They are, however, below the figures of 1894-95, and cannot be considered excessive. The rate per acre is rather less than the average rate of the past five years. Taking both Major and Minor Works together the working expenses amounted to Rs. 9,42,559 or 0.66 per acre, the percentage on gross revenue assessed being 31.80.

These rates compare very favourably with those of previous years. To arrive at the results obtained from the outlay of Government capital on these works the maintenance of old works which have not been affected by it must be deducted from the figures given above. These charges amounted during the year to Rs. 9,013 for Major and Rs. 1,96,242 for Minor Works so that the working expenses on improvements effected by the investment of Government capital amounted to Rs. 3,19,401 for Major Works and Rs. 4,17,813 for Minor Works.

On Minor Works for which only Revenue Accounts are kept the working expenses were Rs. 9,62,450 as compared with Rs. 12,93,800 in the previous year. These amounts include the expenditure on works of improvement which is only shewn under working expenses because no capital accounts are kept of these works.

The expenditure on Agricultural Works was considerably in excess of that of the previous year.

FINANCIAL RESULTS.

6. The financial results of the Sind Canals in operation during the year were as follows:—

Works for which Capital and Revenue accounts are kept.	Capital outlay to end of year.	Gross Revenue due to improvements.	Working expenses on improvements.	Net revenue due to improvements.	Return on capital outlay.
	Rs.	Rs.	Rs.	Rs.	Per cent.
Major Works	98,12,849	11,09,840	3,19,401	7,90,439	8.05
Minor Works	37,25,271	11,93,618	4,17,813	7,75,805	20.83

The figures given above represent the results due to the outlay of Government Capital on Irrigation Works in Sind, and do not include the receipts from, and maintenance charges of, the old Irrigation Works. Including this old irrigation the gross receipts amounted to Rs. 11,46,897 for Major Works and Rs. 17,81,112 for Minor Works, the net revenue from both Major and Minor Works including old irrigation being Rs. 19,85,450.

All the Major Works gave higher returns than in the preceding year except the Desert canal. A breach in the canal bank necessitated the closure of the Head Works of this canal and by the time the repairs were finished the river had fallen. Large remissions were consequently necessary and while the gross receipts were less than in 1895-96 the working expenses were much heavier and the canal returned only 2.91 per cent. on its capital outlay as compared with 5.35 in the previous year. But this deficiency was more than made good by the excellent results obtained on the Unharwah, Begari, and Eastern Nara works. The first of these canals returned the large profit of 17.14 per cent. as compared with 9.83 in the previous year while the returns yielded by the Begari and Eastern Nara were 15.4 and 6.21 per cent. respectively, against 13.13 per cent. and 4.28 per cent. in 1895-96.

The improvement on the Minor Works for which both Capital and Revenue Accounts are kept was even more striking, these canals returning 20.83 per cent. on their capital outlay against 10.04 per cent. in the previous year.

Taken together the Major and Minor Works in operation during the year returned a dividend of 11.56 per cent. on the capital invested in them.

The accumulated interest charges on the four Major Works in operation amounted to Rs. 78,80,216 up to the end of the year and the accumulated net revenue to Rs. 1,12,06,489. The surplus of Rs. 33,26,273 represents the contribution made by these works to the revenues of the country.

The Minor Works for which only Revenue Accounts are kept gave very satisfactory results during the year. The gross revenue yielded by them amounted to Rs. 23,80,186 and the expenditure of the year being only Rs. 9,62,490, the net revenue obtained amounted to the large sum of Rs. 14,17,696.

On Agricultural Works the expenditure, incurred chiefly on embankments of which there are 713 miles, exceeded the revenue collected by Rs. 5,16,125.

GENERAL REMARKS.

7. The results obtained during the year are, in the opinion of the Government of India, very satisfactory and reflect credit on the officers concerned with the administration of the canals. Notwithstanding the fact that the floods were only moderate the area irrigated was considerably above the normal and was exceeded only once previously in a year of abnormally high floods. On the works of which capital accounts are kept the net revenue (exclusive of that due to the old irrigation works) was the highest on record and yielded the high return of 11½ per cent. on the capital invested.

Good progress was made with the new Jamrao and Dad canals, on the former of which 13 lakhs were spent during the year. When these works are in full operation the Sind canals will yield still higher returns and, regarded from a purely financial point of view, will bear favourable comparison with the best irrigation works in India.

8. The report was not received by the Government of India until the 27th June last though it was due on the 15th November. The great inconvenience caused by this delay has been referred to in the review on the Irrigation Report on the Deccan and Gujarat works and the attention of the Bombay Government is again invited to the subject.

ORDER.—Ordered, that a copy of this Review with the Report and Resolution by the Government of Bombay, be forwarded to the Revenue and Agricultural Department, for information.

Ordered, also that a copy of this Review be forwarded to the Government of Bombay for information, and that copies of the Review with the Report and Local Government's Resolution be forwarded to the Local Governments noted on the margin in the Public Works Department, for information.

Ordered further, that this Review with the Local Government's Resolution be published in Part I of the *Gazette of India*, and that copies of the Review be forwarded to Her Majesty's Secretary of State for India.

J. J. Bedford

Offg. Joint Secy. to the Govt. of India.

To. The Secretary to the Govt. of Madras.
Public Works Deptt.
6. Sec. of Review