

13-1-23 ✓

Public Works (1897) Department.

✓ G.O., No. 5979

DATED 30 June 1897

[Despatch Abstract.]

Imperial Works in the Bombay Presidency: Part
of India Review of the Revenue Report of —
(excluding Sind) for 1895-96, Comd. to the Chief
Engineer for Imp.

BACK PAPERS.

FURTHER PAPERS.

Public Works (1897) Department.

CURRENT No. 6194

Ms. A. 9. 2. 30. 697 From The Government of India P.W. D.

No. 160 I

Dated 31st May 1897

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SUBJECT.

Revenue Report of Irrigation
Works. Review of the —
in the Bombay Presidency
(excluding Sind) for 1875-76

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
CIVIL WORKS.
Irrigation.

Simla, the 31st May 1897.

Review of the Revenue Report of Irrigation Works in the Bombay Presidency
(excluding Sind) for the year 1895-96.

READ—

Letter No. 207 I., dated the 4th March 1897, from the Government of Bombay, forwarding the above report and the Resolution of the Local Government reviewing it.

OBSERVATIONS.—The number of works in operation for which Capital and Revenue Accounts are kept was 36 as in the previous year and the results of the principal operations of the year may be summarized as follows:—

Class of Works.	Capital outlay during year.	Capital outlay to end of the year.	Area irrigated.	Percentage of net revenue on Capital outlay.
	Rs.	Rs.	Acres.	
Protective Irrigation Works ...	82,124	77,23,986	26,934	0·46
Irrigation Works not charged against Revenue.	35,131	1,08,71,4 3	23,055	2·18
Minor Works of which Capital and Revenue Accounts are kept.	25,426	73,71,142	26,140	0·43

2. The Capital outlay incurred on the works for which Capital and Revenue Accounts are kept—during and up to the end of the year was as follows:—

Accounts are kept—during and up to the end of the year		DURING THE YEAR 1895-96.						Total direct and indirect to end of 1895-96.
	Number of works.	Works.	Establishment.	Tools and Plant.	Total direct charges.	Indirect charges.	Total direct and indirect charges.	
1	2	3	4	5	6	7	8	9
MAJOR WORKS.								
Protective Irrigation Works (Account head 35)	2	Rs. 22,847	Rs. 5,022	Rs. 2,269	Rs. 25,600	Rs. 36,524	Rs. 82,124	77,23,986
Irrigation Works not charged against Revenue (Account head 43)	7	28,013	5,785	303	33,489	1,642	35,131	1,08,71,463
MINOR WORKS								
Works of which Capital and Revenue Accounts are kept (Account head 43)	26	8,047	1,601	2,362	7,086	1,633	8,719	61,59,559
Imperial	1	14,033	2,127	249	16,409	268	16,707	12,11,583
Provincial	1	14,033	2,127	249	16,409	268	16,707	12,11,583
TOTAL	36	72,940	14,535	4,891	82,584	60,097	1,42,681	2,59,66,591

3. The greater portion of the Capital expenditure during the year was on the Nira Canal, a Protective Work, and on the Mutha Canals, a Productive Work. The work on the Nira Canal was chiefly in connection with the Bhatghar Reservoir. Three training walls were constructed and all the gates on the South weir were erected and in working order before the monsoon.

The greater portion of the expenditure on the Mutha Canals was incurred on alterations and improvements to the Poona Water-supply Works.

4. The financial results of the works in operation are shown in the following statement:—

CANAL.	Total direct and indirect capital outlay to end of year.	GROSS REVENUE COLLECTED.			WORKING EXPENSES.			Net revenue.	Percentage of revenue on Capital outlay.
		Direct revenue receipts.	Share of Land Revenue.	Total.	Direct.	Indirect.	Total.		
1	2	3	4	5	6	7	8	9	10
MAJOR WORKS.									
Protective Irrigation Works—	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Nira Canal ...	56,51,480	86,884	...	86,884	47,600	3,378	50,978	35,906	0'64
Mhasvad Tank ...	20,72,506	15,794	...	15,794	15,073	749	15,822	—28	...
Irrigation Works not charged against Revenue—									
Hathmati Canal ...	5,17,838	11,520	...	11,520	5,576	186	5,762	5,758	1'11
Lower Panjhra River Works ...	4,64,469	11,621	6,788	18,409	7,574	424	7,998	10,411	2'24
Kadva River Works ...	7,23,860	9,256	594	9,850	8,891	550	9,441	409	0'06
Pravara River Works—Lakh Canal	3,71,891	2,672	147	2,819	9,369	968	10,337	—7,718	...
Mutha Canals ...	65,88,127	2,76,405	42	2,76,447	73,141	4,448	77,589	1,98,858	3'02
Ekrak Tank ...	13,40,386	26,421	...	26,421	14,764	697	15,461	10,960	0'82
Krishna Canal ...	8,64,892	30,603	...	30,603	11,650	427	12,077	18,516	2'14
TOTAL MAJOR WORKS, 1895-96 ...	1,85,95,449	4,71,176	7,571	4,78,747	1,93,848	11,827	2,05,675	2,73,072	1'46
TOTAL FOR 1894-95 ...	1,84,78,105	4,46,444	7,571	4,54,015	2,17,756	12,935	2,30,691	2,23,324	1'21
Minor Works and Navigation.									
Works of which Capital and Revenue Accounts are kept—									
<i>Imperial.</i>									
Khari Cut ...	1,81,848	11,385	...	11,386	5,117	182	5,299	6,087	3'35
Hartala Tank ...	73,182	1,159	...	1,159	361	33	394	765	1'04
Mhasva Tank ...	1,38,956	707	...	707	1,028	93	1,121	—414	...
Jamda Canals ...	10,40,969	11,625	...	11,625	9,370	712	10,082	1,543	0'15
Parsul Tank ...	2,16,754	1,150	...	1,150	1,903	77	2,080	70	0'03
Pravara River Works—Ojhar Canal	3,30,275	5,377	76	5,453	12,927	1,291	14,218	—8,765	...
Bhatodi Tank ...	3,79,707	4,663	1,351	6,014	8,148	807	8,955	—2,941	...
Matoba „ ...	2,01,422	9,216	...	9,216	2,843	171	3,014	6,202	3'08
Kasurdi „ ...	45,590	46	...	46	3,537	229	3,766	—3,720	...
Shirsuphal „ ...	2,24,568	509	...	509	2,523	169	2,692	—2,183	...
Bhadalvadi „ ...	2,27,422	1,696	...	1,696	1,842	126	1,968	—272	...
Koregaon „ ...	39,189	984	...	984	768	47	815	169	0'43
Ashti „ ...	8,31,103	4,317	...	4,317	3,750	168	3,918	399	0'05
Revári Canal ...	59,811	5,016	...	5,016	3,249	115	3,464	1,552	2'59
Upper Man River Works ...	4,30,451	6,410	...	6,410	5,001	192	5,193	1,217	0'28
Yerla River Irrigation Works ...	6,94,411	12,547	...	12,547	6,167	251	6,418	6,129	0'88
Chikhli Canal ...	57,442	2,353	...	2,353	929	38	967	1,386	2'41
Maini Tank ...	3,00,434	6,396	...	6,396	3,151	169	3,320	3,076	0'79
Muchkundi Tank ...	1,58,707	527	...	527	285	7	292	235	0'15
Nilgund „ ...	9,027	...	...	...	26	1	27	—27	...
Gadikeri „ ...	9,279	...	1,987	1,987	199	...	199	1,788	19'27
Dambal „ ...	63,980	778	981	1,759	990	108	1,098	661	1'03
Medleri „ ...	81,392	570	...	570	845	75	920	—350	...
Madag „ ...	1,67,598	2,147	...	2,147	1,538	122	1,660	487	0'29
Asundi „ ...	74,995	603	632	1,235	890	74	964	271	0'36
Mavinkop „ ...	30,847	6	1,857	1,863	186	...	186	1,677	5'44
<i>Provincial.</i>									
Gokak Canal, first Section and Storage Works ...	12,11,581	23,020	...	23,020	6,253	329	6,582	16,438	1'36
TOTAL MINOR WORKS, 1895-96 ...	73,71,142	1,13,208	6,884	1,20,092	83,026	5,586	88,612	31,480	0'43
TOTAL FOR 1894-95 ...	73,45,716	1,03,427	6,040	1,09,467	1,12,400	7,815	1,20,215	—10,768	...
Minor Works of which only Revenue Accounts are kept, 1895-96...									
...	...	5,365	5,43,365	5,48,730	2,36,878	...	2,36,878	3,11,852	...
Minor Works of which only Revenue Accounts are kept, 1894-95...									
...	...	5,573	5,41,952	5,47,425	2,78,906	...	2,78,906	2,68,519	...

* Refunds deducted from direct revenue receipts.

5. The gross revenue collected from the Major Works was Rs. 24,732 greater than in the previous year while the working expenses showed a satisfactory decrease of Rs. 25,016.

The net revenue derived from the Major Works, was Rs. 2,73,072 as against Rs. 2,23,324 in the previous year and the percentage of net revenue on capital outlay was 1'46 as against 1'21 in 1894-95.

On the Mhasvad Tank and Pravara River Works the gross revenue collected failed to cover the working expenses.

The balance of interest charges on the Major Works amounted to Rs. 4,33,386 during the year under review and to Rs. 1,05,23,586 up to the end of the year.

The net revenue realised from the Minor Works for which Capital and Revenue Accounts are kept amounted to Rs. 31,480 as compared with a deficit of Rs. 10,768 in the previous year. The working expenses of 8 of these Minor Works exceeded the gross revenue collected from them.

Compared with the previous year there was an increase in gross revenue collected of Rs. 10,625 and a decrease in working expenses of Rs. 31,623.

The net revenue derived from Minor Works for which only Revenue Accounts are kept was Rs. 3,11,852 as compared with Rs. 2,68,519 during the previous year.

6. The details of direct Revenue for the Major and Minor Works for which Capital and Revenue Accounts are kept were as follows:—

	Rs.
Water-rates directly paid ...	4,20,737
Plantations ...	5,916
Water-power ...	10,816
Miscellaneous ...	1,41,717
	5,55,186
	802
Deduct,—Refunds from water-rates ...	5,84,384

The indirect receipts on account of share of Land Revenue from the same works amounted to Rs. 14,455.

The miscellaneous receipts include Rs. 1,06,423 derived from water supplied from the Mutha Canals to the City, Cantonment and Civil station of Poona.

7. The following table compares the areas irrigated by Major and Minor Works during 1895-96 and 1894-95 with the assessments for those years:—

Irrigation Works.	AREA IRRIGATED.		ASSESSMENT, 1895-96.			Assessment, 1894-95.	RATE PER ACRE IRRIGATED.	
	1895-96.	1894-95.	Occupier's rates.	Share of land revenue.	Total assessment, excluding miscel- laneous.		1895-96.	1894-95.
MAJOR WORKS.	Acres.	Acres.	Rs.	Rs.	Rs.	Rs.	Rs.	
Nira canal ...	23,453	28,370	86,786	...	84,786	90,864	3 70	
Mhasvad tank ...	3,481	4,226	12,570	...	12,570	13,860	3 61	
Hathmati canal ...	3,430	4,100	9,120	...	9,120	10,537	2 65	
Lower Panjhra river works ...	2,852	2,700	10,763	6,788	17,551	17,130	6 13	
Kadva river works ...	2,430	2,767	9,645	594	10,239	11,699	4 11	
Pravara river works—Lakh canal	334	310	1,120	147	1,267	1,212	3 70	
Mutha canals ...	8,131	10,002	1,77,641	42	1,77,683	1,30,294	21 83	
Ekrak tank ...	2,580	3,202	12,201	...	12,201	13,463	4 74	
Krishna canal ...	3,704	4,671	38,465	...	38,465	44,377	12 00	
Total Major works ...	49,999	60,707	3,58,401	7,571	3,65,972	3,41,945	7 32	
MINOR WORKS.								
Works of which Capital and Revenue Accounts are kept.	24,934	23,530	94,075	6,884	1,00,959	1,01,435	4 05	
Works of which only Revenue Accounts are kept.	143,805	143,907	5,43,365	2,80,344	8,23,709	8,11,587	5 72	
GRAND TOTAL ...	218,778	228,144	9,95,841	2,94,719	12,90,640	12,55,397	5 90	

* Does not include 1,206 acres on which consolidated assessment is levied.

† Does not include 1,157 acres on which consolidated assessment was levied.

8. Including areas on which consolidated assessment is levied, the area irrigated was 9,367 acres less than in the previous year, the decrease occurring almost entirely on the Major Works.

Notwithstanding the decrease in irrigated area the total assessments amounted to Rs. 35,273 more than in the previous year.

The increase in assessments occurs principally on the Mutha Canals and is due chiefly to higher rates having been introduced for perennial crops.

9. The balance of unrealised demands rose from Rs. 40,417 at the beginning to Rs. 81,016 at the close of the year. It is stated that the greater portion of these outstandings has since been realized.

10. The areas of the principal crops irrigated from the Major Works and the Minor Works for which Capital and Revenue Accounts are kept were as follows:—

	...	...	...	...	...	Acres.
Jowar	...	...	...	...	...	18,581
Ground-nut	...	...	...	...	...	7,874
Wheat	...	...	...	...	...	8,315
Sugarcane	...	...	...	...	...	11,897
Bajri	...	...	...	...	...	6,869

The total estimated value of the crops irrigated from these works amounted to 49½ lakhs of rupees.

11. The working expenses of the Canals in operation are shown in the following table:—

IRRIGATION WORKS.	1895-96.					1894-95.
	Works.	Establishment.	Tools and Plant.	Indirect charges.	TOTAL	TOTAL.
	2	3	4	5	6	7
MAJOR WORKS.						
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Protective Irrigation Works—						
Nira Canal ...	18,661	28,401	538	3,378	50,978	53,588
Mhasvad Tank ...	8,966	6,019	88	749	15,822	28,460
Irrigation Works not charged against Revenue—						
Hathmati Canal ...	3,666	1,841	67	186	5,762	6,087
Lower Panjhra River Works ...	2,914	4,560	100	424	7,998	6,686
Kadva River Works ...	4,359	4,383	149	550	9,441	16,526
Pravara River Works—Lakh Canal ..	2,490	6,985	94	968	10,537	13,319
Mutha Canals ...	29,210	39,606	4,325	4,448	77,589	79,709
Ekrak Tank ...	9,034	5,633	97	697	15,461	12,050
Krishna Canal ...	7,016	4,556	68	427	12,067	11,266
TOTAL MAJOR WORKS ...	86,110	1,01,986	5,526	11,227	2,05,859	2,30,691
Per acre irrigated ...	...	...	...	...	4.11	3.80
MINOR WORKS.						
Works of which Capital and Revenue Accounts are kept—						
Imperial ...	33,700	41,020	1,144	5,257	82,030	1,14,573
Provincial ...	2,466	3,488	209	329	6,492	5,662
TOTAL MINOR WORKS ...	36,166	45,417	1,443	5,586	88,522	1,20,235
Per acre irrigated ...	...	...	...	...	3.45	5.11
TOTAL MAJOR AND MINOR WORKS ...	1,22,502	1,47,403	6,969	17,413	2,94,387	3,50,926
Per acre irrigated ...	...	...	...	...	3.93	4.16
Minor Works of which only Revenue accounts are kept ...	1,01,568	1,77,821	5,489	...	2,16,878	2,78,006
Per acre irrigated ...	...	...	...	...	1.64	1.94

The total working expenses of the Major and Minor Works for which Capital and Revenue Accounts are kept was Rs. 56,639 less than during the previous year and the rate per acre irrigated from these works was Rs. 3.93 against 4.16 in 1894-95.

12. Details of the establishment charges on works for which Capital and Revenue Accounts are kept are given in the following table:—

	Revenue management.	Maintenance.	Total.
	Rs.	Rs.	Rs.
Direction ...	7,098	2,977	10,075
Executive ...	85,466	27,300	1,13,766
Civil Officers ...	23,295	...	23,295
Medical ...	...	267	267
TOTAL ...	1,16,859	30,544	1,47,403

The charges for Revenue management amount to 19.5 per cent of the gross revenue realized. The rate for Revenue management per acre irrigated was Rs. 1.53 as against Rs. 1.59 in the previous year.

13. Under Works for which only Revenue Accounts are kept there was a slight improvement in revenue and a decrease in expenditure. The expenditure on extensions and improvements and maintenance and repairs indicates in a measure the attention paid to the efficient maintenance and improvement of these old works so that a decrease in expenditure is not necessarily a satisfactory feature.

14. The results of the year as a whole show a considerable improvement. Increased assessments and decreased working expenses contribute to a satisfactory increase in the net earnings.

15. The report was received by the Government of India on the 8th March 1897. It has been correctly prepared and is accompanied by the usual series of maps.

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

Im Binit

Colonel, R.E.,

Secy. to the Govt. of India, P. W. D.

To the Secy to the Govt. of Madras.
P. W. D. Secy.