



Government of Bombay  
Public Works Department

# Irrigation Administration Report

## Province of Bombay

### Part II

**Administrative Accounts  
and  
Statistical Statements**

*For the Year 1937-38*

BOMBAY

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# Irrigation Administration Report of the Province of Bombay.

## Part II—Administrative Accounts and Statistical Statements, 1937-38.

### GENERAL.

#### A.—DETAILS OF DIRECT EXPENDITURE.

1. In the year 1937-38 the direct expenditure (excluding collection charges) on all Irrigation Works amounted to Rs. 22 lakhs compared with Rs. 24 lakhs in the previous year, and Rs. 25 lakhs, the average.\* The total is classified as follows:—

	Amount. Rs.
Works .. .. .	1,79,263
Extensions and Improvements .. .. .	1,77,383
Repairs .. .. .	8,18,019
Establishment (including pensionary charges) .. .. .	10,22,985
Tools and Plant .. .. .	13,362
Other Charges .. .. .	241
Gratuitous Relief .. .. .	2,750
Suspense Account .. .. .	....
<i>Deduct—</i>	
Receipts and recoveries on Capital Account .. .. .	61,798
Interest .. .. .	....
<b>Total ..</b>	<b>21,52,205</b>

\* In this Report wherever the " average " is referred to, it is the average of the last three years.

2. The distribution of the above expenditure under several irrigation heads is given below:—

Heads.	Amount. Rs.
<b>Capital Account—</b>	
Productive works .. .. .	....
Unproductive works .. .. .	1,95,164
<b>Revenue Account—</b>	
Productive works .. .. .	23,195
Unproductive works .. .. .	15,24,194
<b>Works for which no Capital Accounts are kept</b> .. .. .	<b>3,48,803</b>
<b>Irrigation Works—</b>	
Contribution works .. .. .	2,860
Miscellaneous expenditure .. .. .	8,142
18-B, Navigation, Embankment, etc. .. .. .	49,847
Famine Relief outlay on Irrigation Works .. .. .	....
<b>Grand Total ..</b>	<b>21,52,205</b>

**B.—FIGURES FOR WORKS FOR WHICH CAPITAL ACCOUNTS ARE KEPT.**

3. The receipts on Capital Irrigation Works compared with the year's working expenses show a profit of Rs. 16,16,630. If, however, interest charges on works in operation are taken into account, the result shows a loss of Rs. 25,15,712 :—

Class of works.	Direct receipts.	Indirect receipts.	Total direct and indirect receipts.	Direct Expenditure,		
				Capital.	Working expenses (including the share of collection charges).	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
<b>WORKS FOR WHICH CAPITAL ACCOUNTS ARE KEPT.</b>						
Productive .. ..	1,58,516	9,986	1,68,502	....	27,157	27,157
Unproductive .. ..	30,56,409	10,984	30,67,393	1,95,164	15,92,108	17,87,272
Grand Total .. ..	32,14,925	20,970	32,35,895	1,95,164	16,19,265	18,14,429
Total average .. ..	29,40,285	23,979	29,64,264	4,05,944	16,59,098	20,65,042

4. The area irrigated by works for which capital accounts are kept was 316,585 acres showing an increase of 62,304 acres compared with the average. The details of the area irrigated and the estimated value of crops are given below :—

Class of works.	Area irrigated.			Value of crops.		
	1937-38	Average.	Difference.	1937-38	Average.	Difference.
	Acres.	Acres.	Acres.	Rs.	Rs.	Rs.
<b>WORKS FOR WHICH CAPITAL ACCOUNTS ARE KEPT.</b>						
Productive .. ..	6,992	6,000	+ 992	2,76,000	3,11,000	- 35,000
Unproductive .. ..	309,593	248,281	+ 61,312	2,03,30,000	1,57,38,000	+45,92,000
Total .. ..	316,585	254,281	+ 62,304	2,06,06,000	1,60,49,000	+45,57,000

**C.—FIGURES FOR WORKS FOR WHICH NO CAPITAL ACCOUNTS ARE KEPT.**

5. These are works for which no Capital Accounts are kept or miscellaneous works. The receipts on these works are principally

in the form of a share of the land revenue and are termed " Indirect " and as such are book credits, so that figures of revenue appearing in the Finance Accounts, as distinguished from the statistical statements in the Irrigation Administration Report, are very small, being for direct revenue only, viz., proceeds from sale of water, etc. The following statement gives a comparison of the figures for the year under report and the average :—

Class of works.	Revenue.			Expendi- ture.	Net Revenue.
	Direct.	Indirect.	Total.		
	Rs.	Rs.	Rs.	Rs.	Rs.
Works for which no Capital Accounts are kept.	56,049	6,70,386	7,26,435	4,17,803	3,08,632
Total for 1937-38 .. .. .	56,049	6,70,386	7,26,435	4,17,803	3,08,632
Average Total .. .. .	77,872	6,95,737	7,73,609	4,81,274	2,92,335
Miscellaneous Irrigation Expenditure.	..	..	..	8,142	-8,142
Total for 1937-38 .. .. .	..	..	..	8,142	-8,142
Average Total .. .. .	..	..	..	4,599	-4,599
18-B, Navigation, etc. .. .. .	13,156	..	13,156	49,847	-36,691
Grand Total for 1937-38 .. .. .	69,205	6,70,386	7,39,591	4,75,792	2,63,799

6. The following statement shows the details of the area irrigated and estimated value of crops :—

Class of works.	Area irrigated.			Value of crops.		
	1937-38.	Average.	Difference.	1937-38.	Average.	Difference.
	Acres.	Acres.	Acres.	Rs.	Rs.	Rs.
Works for which neither Capital nor Revenue Accounts are kept.	168,500	161,589	6,911	54,20,000	54,57,000	-37,000

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Administrative Accounts  
Public Works Department  
(Irrigation)  
Province of Bombay

For the Year 1937-38

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Name of Work.	No. 1, General Abstract of Financial Results.	No. 2, Capital Account.	No. 3, Revenue Account.	No. 4, Interest Account.	No. 5, Account of Indirect Charges.	No. 6, Statement comparing charges to date with sanctioned estimates.	Account of land sale.
	Pages	Pages	Pages	Pages	Pages	Pages.	
<b>Review.</b>							
<b>PRODUCTIVE.</b>							
1 Godikeri Tank ..	2 to 5	....	10	11	11	....	
2 Mavinkop Tank ..	2 to 5	....	12 to 13	14	14	....	
3 Ekrak Tank ..	2 to 5	....	15 to 16	17	17	....	
4 Shahada Channel ..	2 to 5	....	18 to 19	20	20	....	
<b>UNPRODUCTIVE.</b>							
5 Kasurdi Tank ..	2 to 5	....	21 to 22	23	23	....	
6 Chikhli Canal ..	2 to 5	....	24 to 25	26	26	....	
7 Hathmati and Khari- cut Canals.	2 to 5	....	27 to 28	29	29	....	
8 Dambal Tank ..	2 to 5	....	30 to 31	32	32	....	
9 Medleri Tank ..	2 to 5	....	33 to 34	35	35	....	
10 Hartala Tank ..	2 to 5	....	36 to 37	38	38	....	
11 Mhaswa Tank ..	2 to 5	....	39 to 40	41	41	....	
12 Madag Tank ..	2 to 5	....	42 to 43	44	44	....	
13 Asundi Tank ..	2 to 5	....	45 to 46	47	47	....	
14 Muchkundi Tank ..	2 to 5	....	48 to 49	50	50	....	
15 Bhadalwadi Tank ..	2 to 5	....	51 to 52	53	53	....	
16 Bhatodi Tank ..	2 to 5	....	54 to 55	56	56	....	
17 Koregaon Tank ..	2 to 5	....	57 to 58	59	59	....	
18 Krishna Canal ..	2 to 5	....	60 to 61	62	62	....	
19 Upper Man River Works.	2 to 5	....	63 to 64	65	65	....	
20 Maini Tank ..	2 to 5	....	66 to 67	68	68	....	
21 Ashti Tank ..	2 to 5	....	69 to 70	71	71	....	
22 Revari Canal ..	2 to 5	....	72 to 73	74	74	....	
23 Shirsuphal Tank ..	2 to 5	....	75 to 76	77	77	....	
24 Lower Panjhra River Works.	6 to 9	....	78 to 79	80	80	....	
25 Yerla River Irrigation Works.	6 to 9	....	81 to 82	83	83	....	
26 Patul Tank ..	6 to 9	....	84 to 85	86	86	....	



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	Pages	Pages	Pages	Pages	Pages	Pages	
<i>UNPRODUCTIVE—contd.</i>							
27 Mutha Canal including Matoba Tank.	6 to 9	87 to 88	89 to 90	91	91	92	
28 Gokak Canal—1st Section and Storage Works.	6 to 9	....	93 to 94	95	95	....	
29 Mhaswad Tank ..	6 to 9	....	96 to 97	98	98	....	
30 Jamda Canal ..	6 to 9	....	99 to 100	101	101	....	
31 Pathri Tank ..	6 to 9	....	102 to 103	104	104	....	
32 Victoria Tank ..	6 to 9	105 to 106	....	107	107	108	
33 Budhihal Tank ..	6 to 9	109	....	110	110	111	
34 Nira Left Bank Canal and Shetphal Tank.	6 to 9	112 to 113	114 to 115	116	116	117	
35 Kadwa River Works ..	6 to 9	....	118 to 119	120	120	....	
36 Wangroli Tank ..	6 to 9	....	121 to 122	123	123	....	
37 Tranza Nagrama Tank.	6 to 9	....	124 to 125	126	126	....	
38 Savli Tank ..	6 to 9	....	127 to 128	129	129	....	
39 Chankapur Tank ..	6 to 9	....	130 to 131	132	132	....	
40 Sahist Tank ..	6 to 9	....	133 to 134	135	135	....	
41 Suki River ..	6 to 9	....	....	136	136	....	
42 Godavari Canal ..	6 to 9	137 to 138	139 to 140	141	141	142	
43 Futelao Tank ..	6 to 9	....	143 to 144	145	145	....	
44 Dharma Canal ..	6 to 9	....	146 to 147	148	148	....	
45 Gokak Canal Survey ..	6 to 9	....	....	149	149	....	
46 Nira Right Bank Canal.	6 to 9	150 to 151	152	153	153	154	
46A Do. Combined Account No. 6.	6 to 9	....	....	..	..	156 to 157	
47 Pravara River Works	6 to 9	158 to 160	161 to 162	163	163	164	
48 Gokak Canal, 2nd Section.	6 to 9	....	....	165	..	....	

## REVIEW OF THE ADMINISTRATIVE ACCOUNT OF IRRIGATION WORKS, BOMBAY PROVINCE, FOR THE YEAR 1937-38.

There are 48 Irrigation Works in the Province of which four are classed as Productive.

2. The revenue accounts of the Irrigation Works have been prepared on the basis adopted in past years. While the direct receipts and working expenses relate to the financial year, the indirect receipts consisting of the irrigation share of land revenue and the collection charges, thereof, pertain to the revenue year running from 1st August to 31st July.

3. The financial results of all irrigation works in the Province taken together show an aggregate net loss of Rs. 25·53 lakhs during the year under review as compared with losses of Rs. 31·05 and 28·52 lakhs, respectively, for the years 1935-36 and 1936-37. The slight improvement in 1937-38 compared with 1936-37 is partly due to the increase in the revenue receipts of Hathmati and Khari Cut Canal, Godavari Canal, Nira Right Bank Canal and Pravara River Works and partly to the reduction in the working expenses and in the average rate of interest.

### PRODUCTIVE WORKS.

4. During the year under review, there were 4 irrigation works under this class, three of which have been in operation for over 51 years and one for 15 years. The return on capital during 1936-37 and 1937-38 was as follows :—

		Return on capital.	
		1936-37.	1937-38.
Gadikeri Tank	..	8·94 p. c.	10·20 p. c.
Ekruk Tank	..	8·80 p. c.	9·77 p. c.
Shahada Channel	..	8·52 p. c.	4·05 p. c.
Mavinkop Tank	..	2·68 p. c.	0·45 p. c.

The last has failed to yield an adequate return, for the second year in succession. The low return is due to a decrease in revenue receipts and also to an increase in the working expenses due to special repairs carried out during the year.

### UNPRODUCTIVE WORKS.

5. The number of Irrigation works under this class, during the year under review, was 44 as in the preceding year. Of these 39 are in operation, 3 are under construction and 1 has been held in abeyance. Twenty-eight of these canals have been in operation for over 48 years and the rest from 14 to 34 years. In the case of the four works shown

as under construction, a small expenditure is incurred annually on two works, viz. Victoria and Budhihal Tanks, while there is no expenditure at all on other two works, viz. Suki River and Gokak Canal survey from 1912-13 and 1925-26, respectively.

6. No work under this class has shown satisfactory results.

7. In the following instances, the working expenses during the year exceeded the revenue :—

			Deficit in revenue.	
			Rs.	
(1) Dambøl Tank	..	..	..	7,456
(2) Hartala Tank	..	..	..	674
(3) Muchkundi Tank	..	..	..	661
(4) Koregaon Tank	..	..	..	1,798
(5) Krishna Canal	..	..	..	3,236
(6) Jamda Canal	..	..	..	4,889
(7) Wangroli Tank	..	..	..	1,289
(8) Tranza-Nagrama Tank	..	..	..	467
(9) Savli Tank	..	..	..	450
(10) Futelao Tank	..	..	..	5,925
(11) Dharma Canal	..	..	..	2,584

8. Cases in which there was an increase in the working expenses not accompanied by corresponding increase in receipts are noted below as required by Article 328 of the Account Code :—

Name of Canal.	Working Expenses.		Receipts.	
	1936-37.	1937-38.	1936-37.	1937-38.
	Rs.	Rs.	Rs.	Rs.
(1) Bhadalwadi Tank ..	3,057	3,489	4,917	4,884
(2) Bhatodi Tank ..	2,092	2,832	6,061	5,251
(3) Koregaon Tank ..	1,894	1,963	2,359	165
(4) Krishna Canal ..	21,964	42,540	76,351	39,304
(5) Rewari Canal ..	2,150	2,168	3,240	2,816
(6) Shirsuphal Tank ..	2,715	2,974	5,236	3,493
(7) Mutha Canal including Matoba Tank.	91,244	1,02,916	4,12,954	3,25,643
(8) Nira Left Bank Canal and Shetphal Tank.	2,06,510	2,07,279	7,06,090	5,14,372
(9) Futelao Tank ..	1,277	5,955	23	30

9. The following canals have shown marked decline in gross receipts during the year as compared with those in the preceding year :—

Name of Canal.	Receipts.	
	1936-37.	1937-38.
	Rs.	Rs.
(1) Chikhli Canal .. ..	3,704	2,769
(2) Dambal Tank .. ..	2,661	2,006
(3) Hartala Tank .. ..	926	225
(4) Asundi Tank .. ..	1,395	806
(5) Muchkundi Tank .. ..	882	749
(6) Bhatodi Tank .. ..	6,061	5,251
(7) Koregaon Tank .. ..	2,359	165
(8) Krishna Canal .. ..	76,351	39,304
(9) Upper Man River Works .. ..	5,317	4,799
(10) Maini Tank .. ..	9,563	5,046
(11) Rewari Canal .. ..	3,240	2,816
(12) Shirsuphal Tank .. ..	5,236	3,493
(13) Lower Panjhra River Works .. ..	25,042	22,353
(14) Mutha Canal including Matoba Tank. .. ..	4,12,954	3,25,643
(15) Mhaswad Tank .. ..	20,909	19,745
(16) Jamda Canal .. ..	15,466	9,901
(17) Nira Left Bank Canal .. ..	7,06,090	5,14,372
(18) Chankapur Tank .. ..	90,592	76,133
(19) Dharma Canal .. ..	5	-739

P. R. RAU,  
Accountant General.