



Government of Bombay  
Public Works Department

# Irrigation Administration Report

## Province of Bombay

### Part II

**Administrative Accounts  
and  
Statistical Statements**

*For the Year 1936-37*

BOMBAY

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# Irrigation Administration Report of the Province of Bombay.

## Part II—Administrative Accounts and Statistical Statements, 1936-37.

### GENERAL

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

1. In the year 1936-37 the direct expenditure (excluding collection charges) on all Irrigation Works in the Bombay Province amounted to Rs. 24 lakhs compared with Rs. 26 lakhs in the previous year, and Rs. 25·2 lakhs, the average\*. The total is classified as follows :—

	Amount. Rs.
Works .. .. .	1,95,126
Extensions and Improvements .. .. .	2,06,860
Repairs .. .. .	8,64,543
Establishment (including pensionary charges) .. .. .	11,22,841
Tools and Plant .. .. .	15,227
Other charges .. .. .	2,977
Gratuitous Reliefs .. .. .	....
Suspense Account .. .. .	....
<i>Deduct—</i>	
Receipts and recoveries on Capital account .. .. .	5,279
Interest .. .. .	....
<b>Total ..</b>	<b>24,02,295</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 :—

	Amount. Rs.
<b>Capital Account—</b>	
Productive works .. .. .	....
Unproductive works .. .. .	2,59,197
<b>Revenue Account—</b>	
Productive works .. .. .	22,242
Unproductive works .. .. .	16,34,500
<b>Works for which no Capital Accounts are kept—</b>	
Works for which neither Capital nor Revenue Accounts are kept .. .. .	4,20,000
<b>Irrigation Works—</b>	
Contribution works .. .. .	10,582
Miscellaneous Expenditure .. .. .	3,120
15-B, Navigation, Embankment, etc. .. .. .	52,654
Famine Relief outlay on Irrigation Works .. .. .	....
<b>Grand Total ..</b>	<b>24,02,295</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. 13,44,503. If, however, interest charges on works in operation are taken into account, the result shows a loss of Rs. 28,14,418 :—

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 .. ..	1,57,767	9,959	1,67,726	....	26,236	26,236
Unproductive .. ..	28,87,381	11,534	28,98,915	2,59,197	16,95,902	19,55,099
Total .. ..	30,45,148	21,493	30,66,641	2,59,197	17,22,138	19,81,335
Total average .. ..	27,63,765	25,812	27,90,577	5,25,144	15,87,984	21,13,128

4. The area irrigated by works for which capital accounts are kept was 313,944 acres showing an increase of 93,750 acres, compared with the average. The details of the area irrigated and the estimated value of crops are given below :—

	Area irrigated.			Estimated value of crops.		
	1936-37	Average.	Difference.	1936-37	Average.	Difference.
	Acres.	Acres.	Acres.	Rs.	Rs.	Rs.
<b>WORKS FOR WHICH CAPITAL ACCOUNTS ARE KEPT.</b>						
Productive .. ..	7,191	5,148	2,043	3,44,316	2,45,913	98,403
Unproductive .. ..	306,753	215,046	91,707	1,79,74,758	1,36,69,300	43,05,458
Total .. ..	313,944	220,194	93,750	1,83,19,074	1,39,15,213	44,03,861

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

5. These are works for which neither Capital nor Revenue 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.					
Works for which neither Capital nor Revenue Accounts are kept.	60,616	6,57,216	7,17,832	4,87,181	2,30,651
Total for 1936-37 .. ..	60,616	6,57,216	7,17,832	4,87,181	2,30,651
Average Total .. ..	89,370	7,09,975	7,99,345	4,73,508	3,25,837
Miscellaneous Irrigation Expenditure	..	..	..	3,120	-3,120
Total for 1936-37 .. ..	..	..	..	3,120	-3,120
Average Total .. ..	..	..	..	7,169	-7,169
15-B, Navigation, etc. .. ..	10,440	..	10,440	52,654	-42,214
Grand Total for 1936-37 ..	71,056	6,57,216	7,28,272	5,42,955	1,85,317

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

Class of works.	Area irrigated.			Estimated value of crops.		
	1936-37.	Average.	Difference.	1936-37.	Average.	Difference.
	Acres.	Acres.	Acres.	Rs.	Rs.	Rs.
Works for which neither Capital nor Revenue Accounts are kept.	153,745	167,466	-13,721	46,99,877	74,93,198	-27,93,321

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Administrative Accounts  
Public Works Department  
(Irrigation)  
Bombay Province

For the Year 1936-37

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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.
	Pages	Pages	Pages	Pages	Pages	Pages
Review.						
<b>PRODUCTIVE.</b>						
1 Godikeri Tank ..	2 to 5	....	10	11	11	....
2 Mavinkop Tank ..	2 to 5	....	12 to 13	14	14	....
3 Ekruk 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 Chikhi Canal ..	2 to 5	....	24 to 25	26	26	....
7 Hahmati 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 to 57	58	58	59
17 Koregaon Tank ..	2 to 5	....	60 to 61	62	62	....
18 Krishna Canal ..	2 to 5	....	62 to 64	65	65	....
19 Upper Man River Works.	2 to 5	....	66 to 67	68	68	....
20 Maini Tank ..	2 to 5	....	69 to 70	71	71	....
21 Ashti Tank ..	2 to 5	....	72 to 73	74	74	....
22 Revari Canal ..	2 to 5	....	75 to 76	77	77	....
23 Shirsuphal Tank ..	2 to 5	....	78 to 79	80	80	....
24 Lower Panjhra River Works.	6 to 9	....	81 to 82	83	83	....
25 Yerla River Irrigation Works.	6 to 9	....	84 to 85	86	86	....
26 Parsul Tank ..	6 to 9	....	87 to 88	89	89	....



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	Pages	Pages	Pages	Pages	Pages	Pages
UNPRODUCTIVE— <i>contd.</i>						
27 Mutha Canal includ- ing Matoba Tank.	6 to 9	90 to 91	92 to 93	94	94	95
28 Golak Canal—1st Section and Storage Works.	6 to 9	....	96 to 97	98	98	....
29 Mhaswad Tank ..	6 to 9	....	99 to 100	101	101	....
30 Jamda Canal ..	6 to 9	....	102 to 103	104	104	....
31 Pathri Tank ..	6 to 9	....	105 to 106	107	107	....
32 Victoria Tank ..	6 to 9	108 to 109	....	110	110	111
33 Budhihal Tank ..	6 to 9	112	....	113	113	114
34 Nira Left Bank Canal and Shetphal Tank.	6 to 9	115 to 116	117 to 118	119	119	120
35 Kadwa River Works ..	6 to 9	....	121 to 122	123	123	....
36 Wangroli Tank ..	6 to 9	....	124 to 125	126	126	....
37 Tranza Nagrama Tank.	6 to 9	....	127 to 128	129	129	....
38 Savli Tank ..	6 to 9	....	130 to 131	132	132	....
39 Chankapur Tank ..	6 to 9	....	133 to 134	135	135	....
40 Sahiat Tank ..	6 to 9	....	136 to 137	138	138	....
41 Suki River ..	6 to 9	....	....	139	139	....
42 Godavari Canal ..	6 to 9	140 to 141	142 to 143	144	144	145
43 Futelao Tank ..	6 to 9	....	146 to 147	148	148	....
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## REVIEW OF THE ADMINISTRATIVE ACCOUNTS OF IRRIGATION WORKS, BOMBAY PROVINCE, FOR THE YEAR 1936-37.

There are 48 Irrigation works in the Province, of which 4 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. 28·52 lakhs during the year under review as compared with losses of Rs. 28·40 and 31·05 lakhs, respectively, for the years 1934-35 and 1935-36. The slight improvement in 1936-37 compared with 1935-36 is mainly due to the increase in the revenue receipts of Godavari Canal and Pravara river works and to the decrease in the average rate of interest from 5·07 per cent. to 4·98 per cent.

### 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 50 years, and one for 14 years. The return on capital during the year was as follows :—

	Return on capital,
Gadikeri Tank .. .. .	8·94 per cent.
Ekruk Tank .. .. .	8·80 ..
Shahada Channel .. .. .	8·52 ..
Mavinkop Tank .. .. .	2·68 ..

The low return on the last is due to an increase in 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, 4 are under construction and 1 has been held in abeyance. Twenty-eight of these canals have been in operation for over 47 years and the rest from 13 to 33 years. In the case of the four works which are shown as under construction, it is found that a small expenditure is incurred annually on two works, viz. Victoria and Budhihal Tanks, while there is no expenditure at all on the other two works, viz. Suki River and Gokak Canal survey from 1912-13 and 1925-26 respectively.

6. With the exception of the Krishna Canal, the return from which was 4·15 per cent., no work under this class has shown satisfactory results.

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

Name of Canal.	Deficit in Revenue.	
	Rs.	
(1) Hathmati and Kharicut Canal .. ..	..	2,632
(2) Dambal Tank .. ..	..	26,474
(3) Hartala Tank .. ..	..	23
(4) Madag Tank .. ..	..	268
(5) Muchkundi Tank .. ..	..	620
(6) Upperman River Works .. ..	..	10,195
(7) Jamda Canal .. ..	..	1,541
(8) Kadwa River Works .. ..	..	5,903
(9) Wangroli Tank .. ..	..	4,405
(10) Tranza Nagrama Tank .. ..	..	958
(11) Savli Tank .. ..	..	4,162
(12) Sahiat Tank .. ..	..	1,128
(13) Futelao Tank .. ..	..	1,254
(14) Dharma Canal .. ..	..	2,129
(15) Nira Right Bank Canal .. ..	..	87,275

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

Name of Canal.	Working 1935-36.	Expenses 1936-37.	Receipts	
			1935-36.	1936-37.
	Rs.	Rs.	Rs.	Rs.
(1) Hathmati and Kharicut Canal.	38,719	39,701	1,37,267	37,069
(2) Madag Tank ..	1,329	3,173	2,886	2,905
(3) Muchkundi Tank ..	1,281	1,502	929	882
(4) Koregaon Tank ..	1,739	1,894	2,354	2,359
(5) Upperman River Works.	5,522	15,512	2,606	5,317
(6) Yerla River Irrigation Works.	8,704	11,784	11,876	13,819
(7) Parsul Tank ..	1,652	1,767	2,479	1,805
(8) Kadwa River Works..	23,967	29,676	20,998	23,770
(9) Dharma Canal ..	1,813	2,134	498	5
(10) Nira Right Bank Canal.	3,51,226	3,58,490	3,32,384	2,71,215

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

Name of Canals.	Receipts.	
	1935-36.	1936-37.
	Rs.	Rs.
(1) Hathmati and Kharicut Canal ..	1,37,267	37,069
(2) Asundi Tank .. ..	2,122	1,395
(3) Bhadal Wadi Tank .. ..	7,454	4,917
(4) Shirsuphal Tank .. ..	10,013	5,236
(5) Parsul Tank .. ..	2,479	1,805
(6) Mhaswad Tank .. ..	27,083	20,909
(7) Nira Left Bank Canal .. ..	7,59,725	7,06,090
(8) Wangroli Tank .. ..	7,124	2,451
(9) Tranza Nagrama Tank .. ..	1,694	977
(10) Savli Tank .. ..	11,783	1,402
(11) Sahiat Tank .. ..	5,657	2,179
(12) Futelao Tank .. ..	500	23
(13) Dharma Canal .. ..	498	5
(14) Nira Right Bank Canal .. ..	3,32,384	2,71,215

P. R. RAU,  
Accountant General.