இரா. ப. புத்தகம். 24

துறை.

குறியிட்டவர் பொறுப்பிலிருக்கும் பதிவுக் கட்டுவின்றும் எடுக்கப்பட்ட தாள்.

அச்ச பஸ்தகை வாலாயம்

எண் தேதி 19 .

எடுத்த தேதி.	எதன் பொருட்டு: துறை.	நடப்பு எண்.	ஆண்டு.	தான் எடுக்கும் எழுதிதர் அல்லது பிறிதெழுத்தர் கருதிகொப்பம்.	திருப்பித் தொடுத்த தேதி.	பிறிதெழுத்தாளர் கருதிகொப்பம்.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

No. 59 I.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

CIVIL WORKS.

Irrigation.

Calcutta, the 16th March 1896.

Read—

Revenue Report of Irrigation Works in Rajputana for the year 1894-95, forwarded with letter No. 66 S., dated the 6th January 1896, from the Secretary to the Agent to the Governor General and Chief Commissioner, Rajputana, Public Works Department.

OBSERVATIONS.—The average rainfall of the Ajmere-Merwara District was 26·92 inches in 1894-95 as against 27·64 inches in 1893-94 and was considerably above the normal annual rainfall of the ten years ending 1891-92 which is shown as less than 19 inches.

Notwithstanding this fact the tanks were not sufficiently filled as the rainfall was very evenly distributed throughout the season, and there were no heavy falls on which a large 'flow off' mainly depends.

The average of eight stations in Ajmere was 25·33 inches, whilst the average of five stations in Merwara was 28·51 inches for the year under review.

2. The Capital outlay during the year amounted to Rs. 53,365 (including indirect charges), and was incurred wholly on tanks in the Ajmere District. The 17 new tanks, *viz.*, 4 in Ajmere and 13 in Merwara, to which reference was made in last year's review, were made over during the year to the Revenue Department for irrigation purposes. The total Capital expenditure to the end of the year in the three Sub-Collectorates of Ajmere, Beawar and Todgarh amounted to Rs. 24,19,180.

3. The actual financial results of the year under review, taken from the Revenue Accounts, are shown below:—

TANKS IN	Total Capital outlay to end of the year, including indirect charges.	GROSS REVENUE COLLECTED.			WORKING EXPENSES.			Net Revenue	Percentage of net revenue on Capital to end of year.
		Irrigation Revenue.	Miscellaneous receipts.	TOTAL.	Direct.	Indirect.	TOTAL.		
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Ajmere Sub-Collectorate . . .	15,66,279	57,101	2,286	59,387	22,884	915	23,799	35,588	2·27
Beawar Sub-Collectorate . . .	6,40,663	49,092	771	49,863	6,201	201	6,402	43,461	6·78
Todgarh Sub-Collectorate . . .	2,12,238	25,394	125	25,519	9,479	375	9,854	15,665	7·38
TOTAL, 1894-95 .	24,19,180	1,31,587	3,182	1,34,769	38,564	1,491	40,055	94,714	3·91
TOTAL FOR 1893-94 .	23,65,815	1,39,595	2,331	1,41,926	44,326	1,384	45,710	96,216	4·07

The year's working resulted in a net profit of Rs. 94,714, or 3·91 per cent. on the total direct and indirect Capital outlay, against 4·07 per cent. in the

previous year. The decrease in the gross revenue, amounting to Rs. 7,157, is explained as having been due to the fact that during the year under review the tanks received a smaller supply of water than in the preceding year, with the consequence that the area irrigated was proportionately less.

The irrigation revenue collected was made up as follows :—

	1894-95.	1893-94.
	Rs.	Rs.
Water-rates directly paid	11,571	10,836
Share of enhanced land revenue	1,20,016	1,28,759
	1,31,587	1,39,595

4. The areas irrigated and the irrigation assessments are shown in the following table :—

Sub-Collectorate.	Irrigation Revenue assessed.	Area.			Assessment per acre.
		Irrigated.	Protected.	Total.	
	Rs.	Acres.	Acres.	Acres.	Rs.
Ajmere	53,288	9,459	5,063	14,522	3·67
Beawar	47,099	9,331	5,201	14,532	3·24
Todgarh	24,939	3,507	1,359	4,866	5·13
Total, 1894-95	1,25,326	22,297	11,623	33,920	3·69
Total for 1893-94	1,25,103	20,608	13,636	34,244	3·65

The irrigation revenue assessed includes assessments due on protected as well as on irrigated areas.

Of the irrigated areas, 11,801 acres were cultivated under kharif and 10,496 acres under rabi crop, against 8,839 and 11,769 acres, respectively, in the preceding year. There were no remissions or suspensions of water revenue during the year under review.

5. The following table shows the distribution of the working expenses :—

	1893-94.	1894-95.	Difference.
	Rs.	Rs.	Rs.
Works	1,899	3,005	+1,106
Maintenance and Repairs	27,493	18,626	—8,867
Establishment	16,971	17,320	+349
Tools and Plant	—2,037	—387	+1,650
Leave and Pension Allowances	1,384	1,491	+107
Total	45,710	40,055	—5,655

The cost of working expenses per acre amounted to Rs. 1·18 as compared with Rs. 1·33 in the preceding year.

The establishment charges were made up of the following items :—

	Rs.
Direction	2,143
Executive	7,520
Civil Officers	7,657
	17,320

6. Experiments were made during the year to ascertain the outturn of the several crops irrigated, and the results have been tabulated. The value of these tables for purposes of future comparison will depend not only on the accuracy of individual experiments, but also more particularly on the adoption of a precisely similar method in every case.

The value of crops raised during the year is estimated at Rs. 6,07,766 against Rs. 5,20,083 in the preceding year.

7. Measurements taken during the year to test the influence of the tanks on the spring level of wells, show that out of a total of 486 wells measured, 268 were benefited by the tanks, while the remainder were unaffected by them. Of the 268 wells which derived advantage, the spring levels of 202, registered in September 1894, had decreased by the following April. Of the remainder the level was practically unchanged.

8. From Statement I—E attached to the Report, in which information is given regarding the areas irrigated and the duty of water, it appears that there was no irrigation during the year from the Makrera new and old tanks and the Ladpura tank, in the Ajmere District, nor from the Chitar tank in the Merwara District.

9. The report was received on the 11th January 1896, and is accompanied by a map of the Ajmere and Merwara Districts showing the positions of the tanks.

Order.—Ordered, that a copy of this review be forwarded to the Agent to the Governor General and Chief Commissioner, Rajputana, for information.

Also that a copy of the review and of the report be forwarded to the Governments of Madras, Bombay, Bengal, the North-Western Provinces and Oudh, and the Punjab, in the Public Works Department, for information.

Also that a copy of the review and of the report be forwarded to the Revenue and Agricultural Department for information.

Also that the review be published in the *Gazette of India*.

Ordered further, that copies of this review and of the report be forwarded to Her Majesty's Secretary of State for India for information.

Colonel, R.E.,
Secy. to the Govt. of India.

G. I. C. P. O.—No. 1558 P. W. D.—19-3-96.—170.

To. The Secy to the Govt of Madras.
P. W. Deptt.
6 copies of Review
& 1 copy of Report

No. 3027

Circl
6 S.C
Ans: 25-3-96

No. 325. Dy 4 April /96.

Communicated to the
Chief Engineer for Irrigation

Ans dt
28/3

Issue
Ans dt

DESPATCHED
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To The Chief Engineer for Irrig.
with 15 C. Spencer

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No. 53 I.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

CIVIL WORKS.

Irrigation.

Calcutta, the 25th February 1895.

Read—

Revenue Report of Irrigation Works in Rajputana for the year 1893-94, forwarded with letter No. 4 S., dated the 1st January 1895, from the Secretary to the Agent to the Governor General and Chief Commissioner, Rajputana, Public Works Department.

OBSERVATIONS.—The average rainfall of both Districts (27·3 inches) in the year 1893-94 was less than that of 1892-93, which exceeded 37 inches, but was in excess of the normal rainfall, which may be taken at about 20 inches; the monsoon broke early and was well distributed, and a large area was cultivated with kharif crop. The tanks, both in Ajmere and Merwara, although not so well filled as in the preceding year, received generally a sufficient supply of water to secure the rabi crops. Considered separately, the average rainfall in the Ajmere and Merwara Districts amounted to 25·02 and 30·26 inches, and was less than that of the previous year by 12·26 and 7·07 inches, respectively.

2. The capital outlay during the year amounted to Rs. 97,354 (including indirect charges), and was incurred wholly on tanks in the Ajmere District. The new tanks constructed during the scarcity of 1891-92, which number 17, *i. e.*, 4 in the Ajmere and 13 in the Merwara District, were not made over to the Revenue Department for irrigation purposes before the close of the year under review owing to non-completion of their ducts, but arrangements were being made for completing all necessary work as early as possible. The total capital expenditure on the three groups of tanks to the end of the year amounted to Rs. 23,65,815.

3. The following statement shows the actual financial results of the year under review as given in the Revenue Accounts:—

Tanks in	Total Capital outlay to end of the year, including indirect charges.	Gross Revenue collected.			Working Expenses.			Net Revenue.	Percentage of net Revenue on Capital to end of year.
		Irrigation Revenue.	Miscellaneous receipts.	Total.	Direct.	Indirect.	Total.		
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Ajmere Sub-Collectorate	15,12,914	62,603	1,232	63,835	32,487	1,066	33,553	30,282	2·00
Beawar Sub-Collectorate	6,40,663	50,625	685	51,310	6,687	174	6,861	44,449	6·94
Todgurh Sub-Collectorate	2,12,238	26,367	414	26,781	5,152	144	5,296	21,485	10·12
Total, 1893-94	23,65,815	1,39,595	2,331	1,41,926	44,326	1,384	45,710	96,216	4·07
Total for 1892-93	22,68,461	90,024	1,965	91,989	96,571	2,278	98,849	—6,860	...

This year's working resulted in a net profit of Rs. 96,216, or 4·07 per cent. on the total direct and indirect Capital outlay, against a deficit of Rs. 6,860 of the previous year.

The irrigation revenue collected was made up as follows:—

	1893-94.	1892-93.
	Rs.	Rs.
Water-rates directly paid . .	10,836	4,064
Share of enhanced land revenue .	1,28,759	85,960
	1,39,595	90,024

The share of enhanced land revenue is made up of water-rates, share of well assessments, and the difference between dry and wet rates which are collected with the land revenue.

4. The revenue assessed for the year is compared in the following table with the area irrigated. The decrease of Rs. 2,590, as compared with the assessment of the year 1892-93, is due to the supply of water in the tanks having been smaller than in that year, and consequently to a more limited area being irrigated:—

Sub-Collectorate.	Irrigation revenue assessed.	Area.			Assessment per acre.
		Irrigated.	Protected.	Total.	
	Rs.	Acres.	Acres.	Acres.	Rs.
Ajmere	54,663	9,347	5,575	14,922	3·66
Beawar	45,934	8,371	5,983	14,354	3·20
Todgurh	24,506	2,890	2,078	4,968	4·93
Total, 1893-94 .	1,25,103	20,608	13,636	34,244	3·65
Total for 1892-93 .	1,27,693	19,911	16,419	36,330	3·51

The irrigation revenue assessed includes assessments due on protected as well as on irrigated areas.

Of the irrigated area, 8,839 acres were cultivated under kharif and 11,769 acres under rabi crop, against 3,800 and 16,111 acres, respectively, in the preceding year. Rupees 3,875 were remitted by the Local Administration during the year 1893-94 on account of the kharif of 1891 and the rabi of 1892 which were both years of scarcity.

5. The following table shows the distribution of the working expenses:—

	1892-93.	1893-94.	Difference.
	Rs.	Rs.	Rs.
New Works, Maintenance and Repairs . . .	77,192	29,392	—47,800
Establishment	20,862	16,971	—3,891
Tools and Plant	—1,483	—2,037	—554
Leave and Pension Allowances	2,278	1,384	—894
Total .	98,849	45,710	—53,139

The decrease of Rs. 53,139 in the working expenses, as compared with the figures of the previous year, is due to the closing of the famine relief works and

the withdrawal of extra establishment therefrom. The cost of working expenses per acre was Rs. 1·33, against Rs. 2·72 in the preceding year.

The establishment charges were divided as follows:—

	Rs.
Direction	2,939
Executive	6,143
Civil Officers	7,889
	16,971

The outlay on new works and repairs was Rs. 1,899 and Rs. 27,493, respectively.

6. The average results of the experimental cutting of crops of different kinds have not been given, as the rules for conducting these experiments were introduced too late to allow of experiments with the kharif crops of 1893. Some test cuttings of barley were made in the following rabi harvest, and the figures showing the results are given in the report. They are, however, very incomplete. The value of crops raised during the year is estimated at Rs. 5,20,083, against Rs. 5,90,961 in the preceding year.

7. Information regarding the measurement of the depth of water in wells is given in para. 14 of the report. Of the 483 wells, of which the measurement of the spring level was taken between September 1893 and April 1894, 268 were benefited by tanks and 215 were independent of tanks.

In Ajmere, out of 66 wells which derived benefit from the tanks in their vicinity, the spring level of 45 wells registered in September 1893 had decreased by the following April, and of the remainder the level was practically unchanged.

In Merwara, out of 202 wells benefited by tanks, the spring level in 154 wells had decreased by April 1894, as compared with the level in September 1893. In the remaining 48 wells the water had either increased or showed no substantial difference.

8. Information regarding the discharge and duty of water of some of the tanks is given in statement I. E. attached to the report. Four tanks in the Merwara District, and one tank in the Ajmere District, have been included in this statement. There was no irrigation from the Rajaosi tank, the Makrera new and old tanks, and the Lalpura new tank in the Ajmere District.

9. The report, which is submitted in print for the first time, was received on January 7th, 1895. It has been correctly prepared, and a map of the Ajmere and Merwara Districts showing the position of every tank is attached thereto.

Order.—Ordered, that a copy of this review be forwarded to the Agent to the Governor General and Chief Commissioner, Rajputana, for information.

Also that a copy of the review and of the report be forwarded to the Governments of Madras, Bombay, Bengal, the North-Western Provinces and Oudh, and the Punjab, in the Public Works Department, for information.

Also that a copy of the review and of the report be forwarded to the Revenue and Agricultural Department for information.

Also that the review be published in the *Gazette of India*.

Ordered further, that copies of this review and of the report be forwarded to Her Majesty's Secretary of State for India for information.

J. W. OTTLEY, *Lieut.-Col., R.E.*,

Depy. Secy. to the Govt. of India.

G. I. C. P. O. No. 1302 P. W. D.—26-2-95—160.—J. N. D.

No. 59 I.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

CIVIL WORKS.

Irrigation.

Calcutta, the 16th March 1896.

Read—

Revenue Report of Irrigation Works in Rajputana for the year 1894-95, forwarded with letter No. 66 S., dated the 6th January 1896, from the Secretary to the Agent to the Governor General and Chief Commissioner, Rajputana, Public Works Department.

OBSERVATIONS.—The average rainfall of the Ajmere-Merwara District was 26·92 inches in 1894-95 as against 27·64 inches in 1893-94 and was considerably above the normal annual rainfall of the ten years ending 1891-92 which is shown as less than 19 inches.

Notwithstanding this fact the tanks were not sufficiently filled as the rainfall was very evenly distributed throughout the season, and there were no heavy falls on which a large 'flow off' mainly depends.

The average of eight stations in Ajmere was 25·33 inches, whilst the average of five stations in Merwara was 28·51 inches for the year under review.

2. The Capital outlay during the year amounted to Rs. 53,365 (including indirect charges), and was incurred wholly on tanks in the Ajmere District. The 17 new tanks, *viz.*, 4 in Ajmere and 13 in Merwara, to which reference was made in last year's review, were made over during the year to the Revenue Department for irrigation purposes. The total Capital expenditure to the end of the year in the three Sub-Collectorates of Ajmere, Beawar and Todgarh amounted to Rs. 24,19,180.

3. The actual financial results of the year under review, taken from the Revenue Accounts, are shown below:—

TANKS IN	Total Capital outlay to end of the year, including indirect charges.	GROSS REVENUE COLLECTED.			WORKING EXPENSES.			Net Revenue	Percentage of net revenue on Capital to end of year.
		Irrigation Revenue.	Miscellaneous receipts.	TOTAL.	Direct.	Indirect.	TOTAL.		
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Ajmere Sub-Collectorate . . .	15,66,279	57,101	2,286	59,387	22,884	915	23,799	35,588	2·27
Beawar Sub-Collectorate . . .	6,40,663	49,092	771	49,863	6,201	201	6,402	43,461	6·78
Todgarh Sub-Collecturate . . .	2,12,238	25,394	125	25,519	9,479	375	9,854	15,665	7·38
TOTAL, 1894-95 .	24,19,180	1,31,587	3,182	1,34,769	38,564	1,491	40,055	94,714	3·91
TOTAL FOR 1893-94 .	23,65,815	1,39,595	2,331	1,41,926	44,326	1,384	45,710	96,216	4·07

The year's working resulted in a net profit of Rs. 94,714, or 3·91 per cent. on the total direct and indirect Capital outlay, against 4·07 per cent. in the

previous year. The decrease in the gross revenue, amounting to Rs. 7,157, is explained as having been due to the fact that during the year under review the tanks received a smaller supply of water than in the preceding year, with the consequence that the area irrigated was proportionately less.

The irrigation revenue collected was made up as follows :—

	1894-95.	1893-94.
	Rs.	Rs.
Water-rates directly paid	11,571	10,836
Share of enhanced land revenue . .	1,20,016	1,28,759
	1,31,587	1,39,595

4. The areas irrigated and the irrigation assessments are shown in the following table :—

Sub-Collectorate.	Irrigation Revenue assessed.	Area.			Assessment per acre.
		Irrigated.	Protected.	Total.	
	Rs.	Acres.	Acres.	Acres.	Rs.
Ajmere	53,288	9,459	5,063	14,522	3·67
Beawar	47,099	9,331	5,201	14,532	3·24
Todgarh	24,939	3,507	1,359	4,866	5·13
Total, 1894-95 .	1,25,326	22,297	11,623	33,920	3·69
Total for 1893-94 .	1,25,103	20,608	13,636	34,244	3·65

The irrigation revenue assessed includes assessments due on protected as well as on irrigated areas.

Of the irrigated areas, 11,801 acres were cultivated under kharif and 10,496 acres under rabi crop, against 8,839 and 11,769 acres, respectively, in the preceding year. There were no remissions or suspensions of water revenue during the year under review.

5. The following table shows the distribution of the working expenses :—

	1893-94.	1894-95.	Difference.
	Rs.	Rs.	Rs.
Works	1,899	3,005	+1,106
Maintenance and Repairs	27,493	18,626	—8,867
Establishment	16,971	17,320	+349
Tools and Plant	—2,037	—387	+1,650
Leave and Pension Allowances . . .	1,384	1,491	+107
Total .	45,710	40,055	—5,655

The cost of working expenses per acre amounted to Rs. 1·18 as compared with Rs. 1·33 in the preceding year.

The establishment charges were made up of the following items :—

	Rs.
Direction	2,143
Executive	7,520
Civil Officers	7,657
	17,320

6. Experiments were made during the year to ascertain the outturn of the several crops irrigated, and the results have been tabulated. The value of these tables for purposes of future comparison will depend not only on the accuracy of individual experiments, but also more particularly on the adoption of a precisely similar method in every case.

The value of crops raised during the year is estimated at Rs. 6,07,766 against Rs. 5,20,083 in the preceding year.

7. Measurements taken during the year to test the influence of the tanks on the spring level of wells, show that out of a total of 486 wells measured, 268 were benefited by the tanks, while the remainder were unaffected by them. Of the 268 wells which derived advantage, the spring levels of 202, registered in September 1894, had decreased by the following April. Of the remainder the level was practically unchanged.

8. From Statement I—E attached to the Report, in which information is given regarding the areas irrigated and the duty of water, it appears that there was no irrigation during the year from the Makrera new and old tanks and the Ladpura tank, in the Ajmere District, nor from the Chitar tank in the Merwara District.

9. The report was received on the 11th January 1896, and is accompanied by a map of the Ajmere and Merwara Districts showing the positions of the tanks.

Order.—Ordered, that a copy of this review be forwarded to the Agent to the Governor General and Chief Commissioner, Rajputana, for information.

Also that a copy of the review and of the report be forwarded to the Governments of Madras, Bombay, Bengal, the North-Western Provinces and Oudh, and the Punjab, in the Public Works Department, for information.

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Also that the review be published in the *Gazette of India*.

Ordered further, that copies of this review and of the report be forwarded to Her Majesty's Secretary of State for India for information.

W. S. S. BISSET, *Colonel, R.E.*,
Secy. to the Govt. of India.

G. I. C. P. O.—No. 1558 P. W. D.—19-3-96.—170.

No. 325. Dy 4th April/96.

Communicated to the Chief Engineer for Irrigation.

(Sd) R Reid.

To

The Chief Engineer for Irrigation

No. 59 I.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

CIVIL WORKS.

Irrigation.

Calcutta, the 16th March 1896.

Read—

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OBSERVATIONS.—The average rainfall of the Ajmere-Merwara District was 26·92 inches in 1894-95 as against 27·64 inches in 1893-94 and was considerably above the normal annual rainfall of the ten years ending 1891-92 which is shown as less than 19 inches.

Notwithstanding this fact the tanks were not sufficiently filled as the rainfall was very evenly distributed throughout the season, and there were no heavy falls on which a large 'flow off' mainly depends.

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3. The actual financial results of the year under review, taken from the Revenue Accounts, are shown below:—

Tanks in	Total Capital outlay to end of the year, including indirect charges.	Gross Revenue collected.			Working Expenses.			Net Revenue.	Percentage of net revenue on Capital to end of year.
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The irrigation revenue collected was made up as follows :—

	1894-95.	1893-94.
	Rs.	Rs.
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Share of enhanced land revenue . .	1,20,016	1,28,759
	1,31,587	1,39,595

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Total, 1894-95 .	1,25,326	22,297	11,623	33,920	3·69
Total for 1893-94 .	1,25,103	20,608	13,636	34,244	3·65

The irrigation revenue assessed includes assessments due on protected as well as on irrigated areas.

Of the irrigated areas, 11,801 acres were cultivated under kharif and 10,496 acres under rabi crop, against 8,839 and 11,769 acres, respectively, in the preceding year. There were no remissions or suspensions of water revenue during the year under review.

5. The following table shows the distribution of the working expenses :—

	1893-94.	1894-95.	Difference.
	Rs.	Rs.	Rs.
Works	1,899	3,005	+1,106
Maintenance and Repairs	27,493	18,626	—8,867
Establishment	16,971	17,320	+349
Tools and Plant	—2,037	—387	+1,650
Leave and Pension Allowances . . .	1,384	1,491	+107
Total .	45,710	40,055	—5,655

The cost of working expenses per acre amounted to Rs. 1·18 as compared with Rs. 1·33 in the preceding year.

The establishment charges were made up of the following items :—

	Rs.
Direction	2,143
Executive	7,520
Civil Officers	7,657
	17,320

6. Experiments were made during the year to ascertain the outturn of the several crops irrigated, and the results have been tabulated. The value of these tables for purposes of future comparison will depend not only on the accuracy of individual experiments, but also more particularly on the adoption of a precisely similar method in every case.

The value of crops raised during the year is estimated at Rs. 6,07,766 against Rs. 5,20,083 in the preceding year.

7. Measurements taken during the year to test the influence of the tanks on the spring level of wells, show that out of a total of 486 wells measured, 268 were benefited by the tanks, while the remainder were unaffected by them. Of the 268 wells which derived advantage, the spring levels of 202, registered in September 1894, had decreased by the following April. Of the remainder the level was practically unchanged.

8. From Statement I—E attached to the Report, in which information is given regarding the areas irrigated and the duty of water, it appears that there was no irrigation during the year from the Makrera new and old tanks and the Ladpura tank, in the Ajmere District, nor from the Chitar tank in the Merwara District.

9. The report was received on the 11th January 1896, and is accompanied by a map of the Ajmere and Merwara Districts showing the positions of the tanks.

Order.—Ordered, that a copy of this review be forwarded to the Agent to the Governor General and Chief Commissioner, Rajputana, for information.

Also that a copy of the review and of the report be forwarded to the Governments of Madras, Bombay, Bengal, the North-Western Provinces and Oudh, and the Punjab, in the Public Works Department, for information.

Also that a copy of the review and of the report be forwarded to the Revenue and Agricultural Department for information.

Also that the review be published in the *Gazette of India*.

Ordered further, that copies of this review and of the report be forwarded to Her Majesty's Secretary of State for India for information.

W. S. S. BISSET, *Colonel, R.E.*,
Secy. to the Govt. of India.

G. I. C. P. O.—No. 1558 P. W. D.—19-3-96.—170.

No. 325. I dy 4 April/96.

Communicated to the Chief Engineer for Irrigation.

(Sd) R R & B.

To

The Chief Engineer for Irrigation.

No. 59 I.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

CIVIL WORKS.

Irrigation.

Calcutta, the 16th March 1896.

Read—

Revenue Report of Irrigation Works in Rajputana for the year 1894-95, forwarded with letter No. 66 S., dated the 6th January 1896, from the Secretary to the Agent to the Governor General and Chief Commissioner, Rajputana, Public Works Department.

OBSERVATIONS.—The average rainfall of the Ajmere-Merwara District was 26·92 inches in 1894-95 as against 27·64 inches in 1893-94 and was considerably above the normal annual rainfall of the ten years ending 1891-92 which is shown as less than 19 inches.

Notwithstanding this fact the tanks were not sufficiently filled as the rainfall was very evenly distributed throughout the season, and there were no heavy falls on which a large 'flow off' mainly depends.

The average of eight stations in Ajmere was 25·33 inches, whilst the average of five stations in Merwara was 28·51 inches for the year under review.

2. The Capital outlay during the year amounted to Rs. 53,365 (including indirect charges), and was incurred wholly on tanks in the Ajmere District. The 17 new tanks, *viz.*, 4 in Ajmere and 13 in Merwara, to which reference was made in last year's review, were made over during the year to the Revenue Department for irrigation purposes. The total Capital expenditure to the end of the year in the three Sub-Collectorates of Ajmere, Beawar and Todgarh amounted to Rs. 24,19,180.

3. The actual financial results of the year under review, taken from the Revenue Accounts, are shown below :—

TANKS IN	Total Capital outlay to end of the year, including indirect charges.	GROSS REVENUE COLLECTED.			WORKING EXPENSES.			Net Revenue.	Percentage of net revenue on Capital to end of year.
		Irrigation Revenue.	Miscellaneous receipts.	TOTAL.	Direct.	Indirect.	TOTAL.		
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Ajmere Sub-Collectorate . . .	15,66,279	57,101	2,286	59,387	22,884	915	23,799	35,588	2·27
Beawar Sub-Collectorate . . .	6,40,663	49,092	771	49,863	6,201	201	6,402	43,461	6·78
Todgarh Sub-Collectorate . . .	2,12,238	25,394	125	25,519	9,479	375	9,854	15,665	7·38
TOTAL, 1894-95 .	24,19,180	1,31,587	3,182	1,34,769	38,564	1,491	40,055	94,714	3·91
TOTAL FOR 1893-94 .	23,65,815	1,39,595	2,331	1,41,926	44,326	1,384	45,710	96,216	4·07

The year's working resulted in a net profit of Rs. 94,714, or 3·91 per cent. on the total direct and indirect Capital outlay, against 4·07 per cent. in the

previous year. The decrease in the gross revenue, amounting to Rs. 7,157, is explained as having been due to the fact that during the year under review the tanks received a smaller supply of water than in the preceding year, with the consequence that the area irrigated was proportionately less.

The irrigation revenue collected was made up as follows :—

	1894-95.	1893-94.
	Rs.	Rs.
Water-rates directly paid	11,571	10,836
Share of enhanced land revenue . .	1,20,016	1,28,759
	1,31,587	1,39,595

4. The areas irrigated and the irrigation assessments are shown in the following table :—

Sub-Collectorate.	Irrigation Revenue assessed.	Area.			Assessment per acre.
		Irrigated.	Protected.	Total.	
	Rs.	Acres.	Acres.	Acres.	Rs.
Ajmere	53,288	9,459	5,063	14,522	3·67
Beawar	47,099	9,331	5,201	14,532	3·24
Todgarh	24,939	3,507	1,359	4,866	5·13
Total, 1894-95 .	1,25,326	22,297	11,623	33,920	3·69
Total for 1893-94 .	1,25,103	20,608	13,636	34,244	3·65

The irrigation revenue assessed includes assessments due on protected as well as on irrigated areas.

Of the irrigated areas, 11,801 acres were cultivated under kharif and 10,496 acres under rabi crop, against 8,839 and 11,769 acres, respectively, in the preceding year. There were no remissions or suspensions of water revenue during the year under review.

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Total .	45,710	40,055	—5,655

The cost of working expenses per acre amounted to Rs. 1·18 as compared with Rs. 1·33 in the preceding year.

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6. Experiments were made during the year to ascertain the outturn of the several crops irrigated, and the results have been tabulated. The value of these tables for purposes of future comparison will depend not only on the accuracy of individual experiments, but also more particularly on the adoption of a precisely similar method in every case.

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8. From Statement I—E attached to the Report, in which information is given regarding the areas irrigated and the duty of water, it appears that there was no irrigation during the year from the Makrera new and old tanks and the Ladpura tank, in the Ajmere District, nor from the Chitar tank in the Merwara District.

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