

Revenue (1897) Department.

MISCELLANEOUS SERIES.

G.O., No. 2867

DATED 5th June.

[Despatch Abstract.]

Comm^d to the Secy of Rev. Pros. P. W. D.
approving the final issue of the Irrigation Budget
Estimates for 1897-98 as drawn up by the
Chief Engineer for Irrigⁿ.

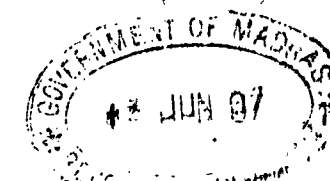
BACK PAPERS.

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

FURTHER PAPERS.

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

IRRIGATION.
ACCOUNT.



Government { 1897 } of Madras. PUBLIC WORKS.

Current Number
2672

Recd.

Enclosures

Regd.

Spare copies

1897.

G.O., No. 392 I., 23rd April 1897.

C. Onis no. 2867 of 5th June 1897

Communicated.
to the Board of Rv.

APRIL.

[Signature]

rs
10-6-97
List

10-6-97 { *To the Board of Rv. Secy*
Let
u do L.R.
u do S.R.

Irrigation Budget Estimates

The final issue of the — for 1897-98, as drawn up by the Chief Engineer for Irrigation, approved and copies thereof ordered to be forwarded to the Government of India.

ms 46

ms 4/6/97

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

READ—the following paper:—

No. 95 I.

Note by the Chief Engineer for Irrigation.

The accompanying final issue of the budget estimates of the Irrigation Branch for 1897-98, which has been prepared to work up to the following grants approved by the Government of India in its orders, No. ⁴/_{B.O.} A.I., dated 19th March 1897, printed in Proceedings of Madras Government, No. 337 I., dated 3rd April 1897, is submitted to Government:—

	Rs.
35. Construction of Protective works, Irrigation—Imperial	...
42. Major Works (Working Expenses)—Imperial	1,69,500
43. Minor Works and Navigation—	13,70,000
Provincial	...
Incorporated Local	28,95,000
49. Capital Expenditure not charged to Revenue—Imperial	9,000
	9,50,000

IMPERIAL.

2. The distribution of the grants under "35. Protective Works, Irrigation" and "42. Major works (Working expenses)" shown in the preliminary budget has been adhered to.

3. In his letter, No. 39 E.I./C., dated 26th March 1897, the Superintending Engineer, V Circle, requested that the preliminary grant of Rs. 17,500 provided under "42. Maintenance and repairs" for the Negapatam division may be increased by Rs. 10,000 for expenditure on the following works:—

	Rs.
Harichendranadi; Palavar channel: Clearing bed of—	...
Marakakarayar channel: Clearing the—	4,000
	6,000

He represented that the Executive Engineer taking advantage of the present working season, has put the works in hand in anticipation of an allotment of funds. In memo., No. 4 V., dated 1st April 1897, the Superintending Engineer was informed that his demand cannot be complied with in the absence of a reserve, and his attention was drawn to Proceedings of Madras Government, No. 180 I., dated 22nd February 1897, in view to expenditure being restricted to the sanctioned grant.

4. For carrying out the works connected with the Opar odai dam of the Srivai-kuntam anicut system which was breached last year, the Superintending Engineer, VI Circle, requested, in his endorsement, No. 334 T.N., dated 7th April 1897, that an additional grant of Rs. 5,000 under "42" and of a similar amount under "49" may

be provided. In memo. No. 20 T.N., dated 10th April 1897, it was intimated to him that, pending the sanction of the estimates stated to be under preparation, no funds can be provided for the works. The work being urgent, has been put in hand.

5. Under "49. Capital Expenditure not charged to Revenue," the amount provided in the preliminary budget for the Cauvery delta system for works outlay amounted to Rs. 1,16,354. Of this amount Rs. 29,553 have been allotted to the works included in the schedule forwarded by the Superintending Engineer, V Circle, with his letter, No. 40 E.I./C., dated 26th March 1897, and the balance, Rs. 86,801, has been provided for fitting lift shutters to the Grand anicut for which an estimate, amounting to Rs. 1,29,200, was submitted for the sanction of the Government of India in Proceedings of Madras Government, No. 155 I., dated 13th February 1897. The lakh of rupees originally provided for the Kalingaroyen channel improvements is not now required for that system, the Government of India having declined to extend the term of sanction to the project in its letter, No. 41 I., dated the 5th February 1897, printed in Proceedings of Madras Government, No. 219 I., dated 3rd March 1897, pending the receipt of a further explanation. Half of this amount has, therefore, been diverted to the Cauvery delta system for commencing the improvements to the Coleroon upper anicut for which an estimate of Rs. 6,57,000 was submitted for the sanction of the Government of India in Proceedings of Madras Government, No. 299 I., dated 22nd March 1897.

6. In Proceedings of Madras Government, No. 68 I., dated 20th January 1897, the grant proposed for the Gôdâvari Delta system having been reduced from Rs. 1,63,000 to Rs. 5,000 owing to the curtailment by the Government of India of the amount applied for in the schedule of demands, the Superintending Engineer, I Circle, in his letter, No. 2436 G.D., dated 18th February 1897, reported that the reduced amount was not at all sufficient for the works in this delta. Rs. 50,000 at least were represented to be required for providing falling shutters for the Gôdâvari anicut, in the Gôdâvari Eastern division, and Rs. 20,000 for works in the other two divisions. In memo., No. 35 G.D., dated 6th March 1897, he was instructed to expedite the submission, for the sanction of Government, of the estimates for the works intended to be carried out during the year, and it was also intimated to him that when those estimates were duly sanctioned, arrangements will be made to provide the funds required for expenditure on them either by re-appropriation from the grants for other systems or by an application to the Government of India for an additional assignment. A grant of Rs. 50,000 is now provided by transfer from the provision formerly made for the Kalingaroyan channel.

PROVINCIAL.

7. In the preliminary budget Rs. 16,174 were provided for works of the Palar anicut system on Capital account. As the schedule forwarded by the Superintending Engineer, IV Circle, with his letter No. 60/I., dated 3rd April 1897, works up to Rs. 13,061 only, the balance of Rs. 3,113 not required for this system has been held in reserve, together with the sum of Rs. 2,590 originally allotted for repairing and improving the Athalai tank in the Madura division. This bank having been included in the list of tanks proposed to be maintained under the Periyar project, any expenditure on it will have to be met from Imperial funds with reference to G.O., No. 176 I., dated 20th February 1897.

8. In his letter No. 3718 K.W. of the 23rd March 1897, the Superintending Engineer, II Circle, reported the necessity for an additional allotment of Rs. 50,000 for the Kistna Western division under Agricultural works, an estimate amounting to Rs. 68,800 for raising and strengthening the right bank of the Kistna river from head to 13 miles having already been sanctioned by him and another estimate for larger amount for the lower portion of the bank being under preparation. In memo., No. 55 K.S., dated 30th March 1897, he was informed that the Government of India having reduced the preliminary grant under this head by Rs. 1.55 lakh (*vide* Proceedings of Madras Government, No. 316 I., dated 25th March 1897), there were no funds available to meet his demand and that the amount absolutely required for expenditure on embankments should be provided by re-appropriations of the grants

provided for his circle. In compliance with his telegram of the 8th instant, the preliminary grant for the Buckingham Canal under Capital account has been reduced by Rs. 12,450, inclusive of the percentage charge for establishment and tools and plant, the proposed grant for the Kistna Northern division under repairs to Agricultural works being augmented by that extent.

20th April 1897.

(Signed) W. HUGHES,
Chief Engineer for Irrigation.

ORDER—No. 392 I., dated 23rd April 1897.

The final issue of the Irrigation budget estimates for 1897-98, as drawn up by the Chief Engineer for Irrigation, is approved, and 50 * printed copies thereof will be forwarded to the Government of India.

* Fifteen copies to Simla and the remainder to Calcutta.

[Here enter No. 393 I., dated 23rd April 1897.]

(True Extract.)

for point *W. Hughes*
Under Secretary to Government,
Irrigation Branch.

To the Chief Engineer for Irrigation.

„ the „ T. R. S.
„ Superintending Engineers.
„ the Superintending Engineer on Special Duty,
Cauvery Completion Estimates.
„ the Examiner, Public Works Accounts.
„ the Revenue Department.
„ the Financial „

20/16

Exd. T. K. Narayana Aiyangar.

IMPERIAL-MAJOR WORKS.

MADRAS PRESIDENCY.

FINAL ISSUE.

Public Works Department.

BUDGET ESTIMATE

OF

REVENUE AND EXPENDITURE

UNDER

IRRIGATION-MAJOR WORKS

IN THE

MADRAS PRESIDENCY

FOR THE YEAR

1897-98.

MADRAS,
23rd April 1897.

(Signed) W. HUGHES,
Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

CONTENTS

	PAGE
BUDGET ESTIMATE OF REVENUE	2
ABSTRACT BUDGET ESTIMATE OF EXPENDITURE	6
DETAILS OF THE BUDGET ESTIMATE OF EXPENDITURE—	
PART I.—Arranged by Projects	7
„ II.—Detail of Estimate for Original Works	8
„ III.—Detail of Estimate for Maintenance and Repairs	31
„ IV.—Detail of the Budget Estimate for Establishment	36
„ IV-A.—Detail of the provision for Establishment by Systems of Canals	38
„ V.—Detail of Estimate for Tools and Plant	39
„ VI.—Detail of Estimate of Suspense Balances	42

IMPERIAL—MAJOR WORKS.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

REVENUE.

Abstract Budget Estimate of Revenue expected from Irrigation—Major Works in the Madras Presidency
for the year from 1st April 1897 to 31st March 1898.

		Actual Realizations, 1895-96.	Budget Estimate, 1896-97.	Revised Estimate, 1896-97.	Budget Estimate, 1897-98.
IRRIGATION.		Rs.	Rs.	Rs.	Rs.
IMPERIAL.					
MAJOR WORKS (DIRECT RECEIPTS). (PRODUCTIVE.)					
Gó dávari Delta System, Collections in the Public Works Department.		1,09,978	1,20,000	1,14,000	1,11,000
Kistna Delta System	do. do.	54,297	48,000	50,200	53,600
Pennérú Anicut System	do. do.	709	400	700	700
Sangam Anicut System	do. do.	551	600	600	600
Cauvery Delta System	do. do.	2,524	3,500	2,700	2,500
Srívaikuntam Anicut System	do. do.	1,110	1,000	1,200	1,200
Barur tank	do. do.	39	...	...	...
Kurnool-Cuddapah Canal.	Collections in the Revenue Department ...	1,26,155	97,895	1,18,000	1,18,000
	Deduct Collection Charges ...	6,307	4,895	5,900	5,900
	Net Collections in the Revenue Department ...	1,19,848	93,000	1,12,100	1,12,100
	Collections in the Public Works Department...	8,713	10,000	10,000	9,800
Total ...		1,28,561	1,03,000	1,22,100	1,21,900
(PROTECTIVE.)					
Rushikulya, Collections in the Public Works Department.		533	1,500	1,500	1,500
Total ...		2,98,302	2,78,000	2,93,000	2,93,000

IMPERIAL—MAJOR WORKS.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

REVENUE.

Memorandum of the Amounts to be credited to each Project on account of Share of Enhanced Land
Revenue due to, or dependent on, the Works.

		Actual Realizations, 1895-96.	Budget Estimate, 1896-97.	Revised Estimate, 1896-97.	Budget Estimate, 1897-98.
IRRIGATION.		Rs.	Rs.	Rs.	Rs.
XXIX. MAJOR WORKS—PORTION OF LAND REVENUE DUE TO IRRIGATION.					
Gó dávari Delta—					
Irrigation Revenue ...		24,47,457	28,80,000	25,29,000	28,29,000
Deduct Revenue due to old Irrigation ...		1,24,000	1,24,000	1,24,000	1,24,000
Revenue due to the System ...		23,23,457	27,56,000	24,05,000	27,05,000
Share of enhanced Land Revenue ...		1,47,726	1,70,000	1,54,400	1,54,400
Total ...		24,71,183	29,26,000	25,59,400	28,59,400
Deduct Collection Charges in the Civil Department ...		1,23,559	1,46,300	1,28,400	1,43,400
Net Revenue ...		23,47,624	27,79,700	24,31,000	27,16,000
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges ...		849	1,300	1,000	1,000
Total ...		23,48,473	27,81,000	24,32,000	27,17,000
Kistna Delta—					
Irrigation Revenue ...		20,92,295	24,30,000	25,10,000	25,85,000
Deduct Revenue due to old Irrigation ...		71,000	71,000	71,000	71,000
Revenue due to the System ...		20,21,295	23,59,000	24,39,000	25,14,000
Share of enhanced Land Revenue ...		1,40,888	1,80,000	1,90,000	2,00,000
Total ...		21,62,183	25,39,000	26,29,000	27,14,000
Deduct Collection Charges in the Civil Department ...		1,08,389	1,27,000	1,31,000	1,36,000
Net Revenue ...		20,53,794	24,12,000	24,98,000	25,78,000
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges ...		5,607	10,000	10,000	10,000
Total ...		20,59,401	24,22,000	25,08,000	25,88,000
Pennérú Anicut—					
Irrigation Revenue ...		2,63,848	2,63,000	2,64,000	2,64,000
Deduct Revenue due to old Irrigation ...		1,17,000	1,17,000	1,17,000	1,17,000
Revenue due to the System ...		1,46,848	1,46,000	1,47,000	1,47,000
Share of enhanced Land Revenue ...		20,509	20,000	21,000	21,000
Total ...		1,67,357	1,66,000	1,68,000	1,68,000
Deduct Collection Charges in the Civil Department ...		8,368	8,300	8,400	8,400
Net Revenue ...		1,58,989	1,57,700	1,59,600	1,59,600
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges ...		522	300	400	400
Total ...		1,59,511	1,58,000	1,60,000	1,60,000

GOVERNMENT OF MADRAS.

REVENUE—continued.

Memorandum of the Amounts to be credited to each Project on account of Share of Enhanced Land Revenue due to, or dependent on, the Works—continued.

	Actual Realizations, 1895-96.	Budget Estimate, 1896-97.	Revised Estimate, 1896-97.	Budget Estimate, 1897-98.
	Rs.	Rs.	Rs.	Rs.
IRRIGATION—continued.				
XXIX. MAJOR WORKS—PORTION OF LAND REVENUE DUE TO IRRIGATION—continued.				
Sangam Anicut—				
Irrigation Revenue	3,07,687	4,01,000	3,08,000	3,09,000
Deduct Revenue due to old Irrigation	1,39,000	1,39,000	1,39,000	1,39,000
Revenue due to the System	1,68,687	2,62,000	1,69,000	1,70,000
Share of enhanced Land Revenue	16,292	22,000	16,000	16,500
Total	1,84,979	2,84,000	1,85,000	1,86,500
Deduct Collection Charges in the Civil Department	9,249	14,000	9,300	9,200
Net Revenue	1,75,730	2,70,000	1,75,700	1,77,300
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	6,277	6,000	6,300	6,700
Total	1,82,007	2,76,000	1,82,000	1,84,000
Cauvery Delta—				
Irrigation Revenue	44,35,373	41,50,000	42,03,000	42,54,000
Deduct Revenue due to old Irrigation	35,44,111	33,17,000	33,56,000	33,97,900
Revenue due to the System	8,91,262	8,33,000	8,47,000	8,56,100
Share of enhanced Land Revenue	1,10,520	1,17,000	1,10,950	1,12,000
Total	10,01,782	9,50,000	9,57,950	9,68,100
Deduct Collection Charges in the Civil Department	50,089	48,000	47,950	48,100
Net Revenue	9,51,693	9,02,000	9,10,000	9,20,000
Srivaikuntam Anicut—				
Irrigation Revenue	1,56,738	1,85,000	1,85,000	1,85,000
Deduct Revenue due to old Irrigation	79,000	79,000	79,000	79,000
Revenue due to the System	77,738	1,06,000	1,06,000	1,06,000
Share of enhanced Land Revenue	1,805	2,000	2,000	2,000
Total	79,543	1,08,000	1,08,000	1,08,000
Deduct Collection Charges in the Civil Department	3,977	5,000	5,000	5,000
Net Revenue	75,566	1,03,000	1,03,000	1,03,000

GOVERNMENT OF MADRAS.

REVENUE—continued.

Memorandum of the Amounts to be credited to each Project on account of Share of Enhanced Land Revenue due to, or dependent on, the Works—continued.

	Actual Realizations, 1895-96.	Budget Estimate, 1896-97.	Revised Estimate, 1896-97.	Budget Estimate, 1897-98.
	Rs.	Rs.	Rs.	Rs.
IRRIGATION—continued.				
XXIX. MAJOR WORKS—PORTION OF LAND REVENUE DUE TO IRRIGATION—continued.				
Barur Tank—				
Irrigation Revenue	11,022	14,000	12,000	14,000
Deduct Revenue due to old Irrigation	2,000	2,000	2,900	2,000
Revenue due to the System	9,022	12,000	10,000	12,000
Share of enhanced Land Revenue	30	...	...	...
Total	9,052	12,000	10,000	12,000
Deduct Collection Charges in the Civil Department	453	1,000	1,000	1,000
Net Revenue	8,599	11,000	9,000	11,000
Kurnool-Cuddapah Canal—				
Share of enhanced Land Revenue under tanks owing to supply of canal water	4,956	8,400	6,300	6,300
Deduct Collection Charges in the Civil Department	248	400	300	300
Net Revenue	4,708	8,000	6,000	6,000
Rushikulya Project—				
Irrigation Revenue	63,535	1,00,000	90,000	1,10,000
Deduct Revenue due to old Irrigation	25,816	30,000	30,000	33,000
Revenue due to the System	37,719	70,000	60,000	77,000
Share of enhanced Land Revenue	32	150	150	200
Total	37,751	70,150	60,150	77,200
Deduct Collection Charges in the Civil Department	1,887	3,950	2,950	4,200
Net Revenue	35,864	66,200	57,200	73,000
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	...	800	800	1,000
Total	35,864	67,000	58,000	74,000
Total—				
Irrigation Revenue	97,77,955	1,04,23,000	1,01,01,000	1,05,50,000
Deduct Revenue due to old Irrigation	41,01,927	38,79,000	39,18,000	39,62,900
Revenue due to the System	56,76,028	65,44,000	61,83,000	65,87,100
Share of enhanced Land Revenue	4,42,758	5,19,550	5,00,800	5,12,400
Total	61,18,786	70,63,550	66,83,800	70,99,500
Deduct Collection Charges in the Civil Department	3,06,219	3,53,950	3,34,300	3,55,600
Net Revenue	58,12,567	67,09,600	63,49,500	67,43,900
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	13,255	18,400	18,500	19,100
Total	58,25,822	67,28,000	63,68,000	67,63,000

IMPERIAL—MAJOR WORKS.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Abstract Budget Estimate of Expenditure on Irrigation—Major Works in the Madras Presidency
for the year from 1st April 1897 to 31st March 1898.

	Reference to Detailed Estimate.	Actual Outlay, 1895-96.	Budget Estimate, 1896-97.	Revised Estimate, 1896-97.	Budget Estimate, 1897-98.
IMPERIAL.	PAGES.	Rs.	Rs.	Rs.	Rs.
MAJOR (PROTECTIVE) WORKS.					
<i>Famine Relief and Insurance.</i>					
35. CONSTRUCTION OF PROTECTIVE IRRIGATION WORKS.					
1. Works ... { In progress ... 1,33,618 Not commenced ... 5,000	8 & 9	1,92,432	1,53,646	1,66,910	1,38,618
2. Establishment ...	38	38,392	33,039	36,000	30,732
3. Tools and plant ...	39	3,595	2,315	...	150
5. Receipts on capital account ...		752	...	...	...
Total ...		2,26,477	1,89,000	2,03,000	1,69,500
42. (WORKING EXPENSES).					
1. Extensions and im- { In progress ... provements. Not commenced ... 69,481	8 to 11	65,124	57,712	57,578	69,481
2. Maintenance and repairs ...	31 to 35	6,29,765	5,71,224	8,42,254	6,38,183
3. Establishment ...	38	5,14,080	5,56,121	5,88,963	5,68,610
4. Tools and plant ...	39 to 41	1,06,914	94,943	1,00,205	93,726
5. Refunds of revenue ...		220	...	...	...
Total, Working Expenses ...		13,16,103	12,80,000	15,89,000	13,70,000
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.					
49. IRRIGATION.					
1. Works ... { In progress ... 2,98,812 Not commenced ... 4,33,731	10 to 30	10,64,874	7,46,752	6,71,086	7,32,543
2. Establishment ...	38	2,37,963	1,62,518	1,43,882	1,59,357
3. Tools and plant ...	41	36,915	31,730	28,068	58,100
5. Receipts on capital account ...		2,389	...	...	...
Total, Capital Expenditure ...		13,37,363	9,41,000	7,86,000	9,50,000

IMPERIAL—MAJOR WORKS.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Part I.

Details of the Budget Estimate of Expenditure on Irrigation—Major Works in the Madras Presidency
for the year 1897-98, arranged by Projects and Objects of Work.

	Amount of Sanctioned Estimate.	Actual Outlay to end of 1895-96.	Budget Estimate, 1896-97.	Probable Outlay during 1896-97 (Revised Estimate).	Budget Estimate, 1897-98.	Remarks and References.
IMPERIAL.	Rs.	Rs.	Rs.	Rs.	Rs.	
MAJOR (PROTECTIVE) WORKS.						
<i>Famine Relief and Insurance.</i>						
35. CONSTRUCTION OF PROTECTIVE IRRIGATION WORKS.						
<i>Capital Account.</i>						
Rushikulya Project ...	43,68,000	39,07,154	1,89,000	2,03,000	1,69,500	Government of India register No. 7 I. of 1894-95. Proceedings of Madras Govt. No. 846 I. of 7th November 1894.
42. MAJOR WORKS (WORKING EXPENSES).						
Gódlavari Delta ...	...	...	5,30,000	5,12,260	4,80,000	
Kistna do. ...	...	...	5,26,000	7,41,020	5,75,000	
Pennér Anicut ...	...	...	19,000	16,680	20,000	
Sangam do. ...	...	...	43,000	39,830	37,000	
Kurnool-Cuddapah Canal ...	...	...	86,000	86,837	94,200	
Birur Tank Project ...	...	...	3,800	3,650	2,500	
Cauvery Delta ...	...	...	18,200	48,294	25,000	
Srivaikuntam Anicut ...	...	...	24,000	68,300	27,000	
Periyár Project ...	...	...	...	40,000	71,000	
Rushikulya Project ...	...	...	30,000	32,099	38,300	
Total ...	...	...	12,80,000	15,89,000	13,70,000	
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.						
49. IRRIGATION.						
<i>Works in Progress.</i>						
Gódlavari Delta System ...	1,13,84,155	1,09,32,065	84,000	80,204	55,000	P.M.G., No. 376 I., dated 24th October 1896, No. 464 I., dated 29th May 1896, No. 507 I., dated 12th June 1896, No. 618 I., dated 29th July 1896, No. 649 I., dated 5th August 1896, No. 7 I., dated 4th January 1897, and No. 14 I., dated 5th January 1897.
Kistna Delta do. ...	1,39,19,784	1,13,76,820	5,75,000	5,95,042	4,50,000	Government of India register No. 8 I. of 1894-95. P.M.G., No. 862 I., dated 22nd Sept. 1894. Government of India letter No. 10 I. of 22nd Jan. 1889, P.M.G., No. 62 I. of 11th Feb. 1889, No. 857 I. of 11th Oct. 1893, and No. 34 I. of 17th Jan. 1894.
Cauvery Delta ...	17,80,101	16,87,283	76,100	46,448	1,93,000	P.M.G., No. 876 I., dated 24th October 1896, No. 473 I., dated 4th June 1896, No. 514 I., dated 16th June 1896, No. 663 I., dated 11th August 1896, No. 667 I., dated 11th August 1896, No. 919 I., dated 3rd November 1896, No. 937 I., dated 10th November 1896, No. 1086 I., dated 23rd December 1896, and No. 77 I., dated 20th January 1897.
Srivaikuntam Anicut ...	13,77,561	13,61,847	13,100	1,415	2,000	P.M.G., No. 876 I., dated 24th October 1896, and No. 852 I., dated 22nd October 1896.
Periyár Project ...	84,71,000	80,85,047	1,63,100	33,160	2,50,000	Government of India register No. 10 I. of 1894-95. P.M.G., No. 1057 I., dated 22nd December 1894.
Total ...	...	...	...	...	9,50,000	

IMPERIAL—MAJOR WORKS.

GOVERNMENT

CHARG

Part

Details of the Budget Estimate for Original Works under Irrigation

Statement for Original Works under Irrigation						
Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.		
Ganjám	...	3. Works	IMPERIAL.			
			MAJOR (PROTECTIVE) WORKS.			
			Famine Relief and Insurance.			
			35. CONSTRUCTION OF PROTECTIVE IRRIGATION WORKS.			
			Capital Account.			
			RUSHIKULYA PROJECT.			
			(1) HEAD WORKS.			
			Rushikulya Section.			
			1	Suradá reservoir dam	...	...
			2	Channel to take Pathama river into Suradá reservoir.	...	...
			3	Waste weir channel, Suradá reservoir	...	...
Ganjám	...	3. Works	(3) Distributaries.			
			4	Irrigation sluices	...	...
			5	Masonry works	...	...
			6	Irrigation channels	...	...
			Mahánadi Section.			
			(1) Head Works.			
			7	Compensation for land, Russellkonda reservoir dam.	...	...
			8	Russellkonda reservoir dam	...	...
			Total, Rushikulya Project		...	...
			IRRIGATION.			
			42. MAJOR WORKS (WORKING EXPENSES).			
EXTENSIONS AND IMPROVEMENTS.						
Gódavari Delta System.						
9	Extensions and improvements	...	...			
10	Do.	do.	...			
11	Do.	do.	...			
Total				...		

MADRAS PRESIDENCY.

OF MADRAS.

ES.

II.

Major Works in the Madras Presidency for the year 1897-98.

Amount of estimate.	OUTLAY		Grant for 1897-98.	Item No.	Remarks and references.
	To end of 1895-96.	Probable during 1896-97.			
Rs.	Rs.	Rs.	Rs.		
2,75,000	2,11,853	24,000	30,000	1	Government of India Register No. 7 I. of 1894-95. P.M.G., No. 846 I. of 7th November 1894.
41,160	21,158	9,000	10,000	2	
21,800	11,380	5,000	5,000	3	
16,148	...	1,19,946.	2,000	4	
61,602			18,000	5	
1,50,000			58,618	6	
47,220	...	...	5,000	7	
4,73,560	4,30,738	4,000	10,000	8	
...	...	...	1,38,618		
...	...	3,500	8,000	9	
...	...	4,000	3,000	10	
...	...	7,000	10,000	11	
...		14,500	21,000		

GOVERNMENT

CHARG

Part

Details of the Budget Estimate for Original Works under Irrigation

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.
EXTENSIONS AND IMPROVEMENTS—cont.				
Kistna Delta System.				
Kistna Eastern ...	...		12	Extensions and improvements ...
Do. Northern.	...		12A	Do. do. ...
Do. Western.	...		13	Do. do. ...
				Total ...
Pennèru Anicut System.				
Nellore ...	...		14	Extensions and improvements ...
				Deduct old maintenance charges ...
				Net grant ...
Sangam Anicut System.				
Nellore ...	...		15	Extensions and improvements ...
				Deduct old maintenance charges ...
				Net grant ...
Kurnool-Cuddapah Canal.				
Kurnool ...	...		16	Extensions and improvements ...
Cauvery Delta System.				
Tanjore ...	...		17	Extensions and improvements ...
Negapatam ...	...		18	Do. do. ...
Trichinopoly ...	...		19	Do. do. ...
				Total ...
Sriraikuntam Anicut System.				
Tinnevely ...	...		20	Extensions and improvements ...
				Deduct old maintenance charges ...
				Net grant ...
				Total, Extensions and Improvements ...
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.				
49. IRRIGATION.				
GODAVARI DELTA SYSTEM.				
OPEN CAPITAL ACCOUNT.				
Eastern Section.				
(3) Distributaries.				
Cocanada Canal.				
Godavari Eastern.	...	3. Works	21	Murumanda channel ...
				Total, Eastern Section ...

OF MADRAS.

ES—cont.

II—cont.

Major Works in the Madras Presidency for the year 1897-98—continued.

Amount of estimate.	OUTLAY		Grant for 1897-98.	Item No.	Remarks and references.
	To end of 1895-96.	Probable during 1896-97.			
Rs.	Rs.	Rs.	Rs.		
...	...	10,640	16,000	12	
...	...	360	...	12A	
...	...	3,000	3,000	13	
...	...	14,000	19,000		
...	...	3,500	2,411	14	
...	...	3,564	3,564		
...	...	64	1,103		
...	...	4,365	3,975	15	
...	...	345	345		
...	...	4,020	3,630		
...	...	6,000	8,000	16	
...	...	14,750	12,000	17	
...	...	2,854	4,000	18	
...	...	350	1,000	19	
...	...	17,954	17,000		
...	...	516	2,306	20	
...	...	352	352		
...	...	164	1,954		
...	...	...	69,481		
1,380	...	700	680	21	P.M.G., No. 507 L, dated 12th June 1896.
...	...	...	680		

IMPERIAL—MAJOR WORKS.

GOVERNMENT

CHARG

Part

Details of the Budget Estimate for Original Works under Irrigation

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.
				C
Gódávari Central.	...	2. Land ...	22	OPEN CAPITAL ACCOUNT—cont. Central Section. (2) Main Canals and Branches. Bank Canal. Compensation for land and trees for diversion of Bank canal at Gedhelanka set.
		Do. ...	23	Bendamurlanka Canal. Compensation for land and trees for diversion of Bendamurlanka canal (Kowsika channel) at Godi.
		Do. ...	24	(4) Drainages and Protective Works. Compensation for land taken up for improvements to Pelivela drain.
				Total, Central Section ...
				Western Section.
Gódávari Western.	...	11. Buildings ...	25	(2) Main Canals and Branches. Main Canal. Constructing a rest-house with out-buildings at Chettipett. Deduct amount written back to Revenue Account—vide G.O., No. 237 I., dated 7th March 1896.
				(3) Distributaries. Bank Canal.
		4. Earthwork ...	26	Excavating Pedamallam channel ...
				Total, Western Section ...
			26-A	Reserve ...
		Total, Gódávari Delta System ...		
KISTNA DELTA SYSTEM.				
MAJOR WORKS.				
Works in Progress.				
Kistna Northern.	Bezwada ...	3. Works ...	27	(I) Head Works. Raising the apron of the Kistna anicut ...
				Western Section.
				Western Delta Main Canal.
Kistna Western.	Seetanagram.	3. Regulators ...	28	(2) Main Canals and Branches. Constructing head-sluice ...
				Eastern Section.
				Ellore Canal.
Kistna Eastern...	...	4. Earthwork ...	29	(4) Drainage and Protective Works. Excavating Pedapad escape drain ...

OF MADRAS.

ES—cont.

II—cont.

Major Works in the Madras Presidency for the year 1897-98—continued.

Amount of estimate.	OUTLAY		Grant for 1897-98.	Item No.	Remarks and references.
	To end of 1895-96.	Probable during 1896-97.			
Rs.	Rs.	Rs.	Rs.		
850	...	230	620	22	P.M.G., No. 14 I., dated 5th January 1897.
2,426	...	737	1,689	23	" " 7 I. " 4th " "
...	...	...	378	24	Estimate under preparation.
...	...	...	2,687		
5,620	...	...	...		
2,900	...	1,680	1,040	25	P.M.G., No. 811 I., dated 8th October 1896.
2,720	...	...	...		
1,510	...	1,350	160	26	" " 618 I. " 29th July 1896.
...	...	...	1,200		
...	...	...	40,651	26-A	
...	...	...	45,218		
...	...	...	20,000	27	The execution of the work has been approved—vide G.O., No. 592/A I., dated 16th July 1896. Estimate will be sent.
88,000	45,881	33,700	8,400	28	G.O., No. 112 I., dated 3rd February 1896.
4,665	...	...	4,665	29	" " 695 I. " 17th August 1896.

GOVERNMENT

CHARG

Part

Details of the Budget Estimate for Original Works under Irrigation

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.
Kistna Eastern —cont.	...	...	...	Major Works—cont.
				Pedalanka Channel.
				(3) Distributaries.
				Improvements to Sanarudravaram channel ...
				Constructing pipe sluices along Pedalanka channel.
				Improving Nandiraz codu ...
				Bantumilli Canal.
				(3) Distributaries.
				Constructing seven ramps for the extension ...
				Masulipatam Canal.
				(2) Main Canals and Branches.
				Widening Masulipatam canal, 1st reach ...
				Do. do. 2nd " ...
				Total, Major Works ...
				Minor Works estimated to cost Rs. 2,500 each and under.
				Ellore Canal.
				(2) Main Canals and Branches.
				Minor works ...
				(3) Distributaries.
				Minor works ...
				Do. ...
				Do. ...
				Ryves' Canal.
				(3) Distributaries.
				Minor works ...
				Do. ...
				Pulleru Canal.
				(3) Distributaries.
				Minor works ...
				Do. ...
				Do. ...
				Pedalanka Channel.
				(3) Distributaries.
				Minor works ...
				Do. ...
				Do. ...

OF MADRAS.

ES—cont.

II—cont.

Major Works in the Madras Presidency for the year 1897-98—continued.

Amount of estimate.	OUTLAY		Grant for 1897-98.	Item No.	Remarks and references.
	To end of 1896-97.	Probable during 1896-97.			
Rs.	Rs.	Rs.	Rs.		
2,900	...	2,200	700	30	G.O., No. 467 I., dated 20th June 1894.
7,500	2,632	1,868	3,000	31	" " " " " " "
3,100	...	...	3,100	32	" " " " " " "
2,720	1,157	500	1,000	33	G.O., No. 521 I., dated 10th July 1894.
23,700	...	17,000	6,700	34	G.O., No. 359 I., dated 24th April 1896.
15,750	...	...	15,750	35	" " 496 I. " 12th June "
...	...	...	34,915		
12,980	...	6,980	6,000	36	
1,520	563	150	807	37	
3,490	500	758	2,232	38	
645	187	23	435	39	
2,000	...	1,000	1,000	40	
800	216	...	584	41	
3,210	86	250	2,874	42	
3,410	1,026	800	1,593	43	
1,400	...	400	1,000	44	
130	...	50	80	45	
3,735	...	500	3,235	46	
1,615	254	200	1,161	47	

IMPERIAL—MAJOR WORKS.

GOVERNMENT

CHARG

Part

Details of the Budget Estimate for Original Works under Irrigation

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.
Kistna Eastern —cont.	...	5. Miscellaneous...	48	Minor Works—cont. Bantumilli Canal. (3) Distributaries. Minor works
		3. Works ...	49	Masulipatam Canal. (3) Distributaries.
		4. Earthwork ...	50	Minor works
		5. Miscellaneous.	51	Do.
				Do.
				Total, Minor Works ...
		2. Land ...	52	Land compensation
				Grand Total, Kistna Eastern Division ...
				WESTERN SECTION. Works in Progress.
		2. Land ...	53	Main Canal. (2) Main Canals and Branches. Compensation for land for widening Western Delta main canal
Kistna Western...	...	2. Land ...	54	Bank Canal. Compensation for land required for improvements to Bank canal.
		12. Earthwork ...	55	Improvements to Bank canal
				(3) Distributaries.
		4. Earthwork ...	56	Improvements to Iskapalli channel
		Do. ...	57	Excavating Varahapuram channel
		Do. ...	58	Do. Ullipalem Branch channel
		Do. ...	59	Do. Allaparru do.
				(4) Drainage and Protective Works.
		3. Works ...	60	Aqueduct to carry Vellatur channel across Répalle main drain straight cut.
		4. Earthwork ...	61	Excavating the proposed straight cut on Répalle main drain.
		Do. ...	62	Excavating Allaparru drain
		Do. ...	63	Do. Kuchinapudi drain
				Nizampatam Canal.
		2. Land ...	64	(4) Drainage and Protective Works.
		5. Miscellaneous.	65	Compensation for land for Tenali drain Fixing B.M. stones on Tenali drain

MADRAS PRESIDENCY.

OF MADRAS.

ES—cont.

II—cont.

Major Works in the Madras Presidency for the year 1897-98—continued.

Amount of estimate.	OUTLAY		Grant for 1897-98.	Item No.	Remarks and references.
	To end of 1895-96.	Probable during 1896-97.			
Rs.	Rs.	Rs.	Rs.		
3,183	1,204	420	1,559	48	
15,775	...	700	15,000	49	
11,460	...	1,460	10,000	50	
1,285	...	500	785	51	
...	...	...	48,345		
...	...	...	20,000	52	
...	...	...	1,03,260		
4,080	2,052	...	500	53	
6,000	3,016	...	500	54	
1,13,715	75,537	2,000	3,000	55	
11,400	6,008	3,600	1,800	56	
9,680	2,127	4,600	2,900	57	
3,710	4	1,300	2,400	58	
5,860	...	3,700	2,160	59	
14,200	4,732	7,500	2,000	60	
39,760	6,686	15,000	15,000	61	
5,100	6	1,000	4,000	62	
3,700	...	3,000	700	63	
12,150	3,302	...	1,000	64	
2,892	1,626	500	700	65	

GOVERNMENT

CHARG

Part

Details of the Budget Estimate for Original Works under Irrigation

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.
Kistna Western —cont.	...	2. Land ... 12. Earthwork ... 3. Works ... 4. Earthwork ... Do. ... 15. Miscellaneous... Do. ... Do. ... Do. ... Do. ... Do. ... Do. ... 3. Regulators ... 2. Land ... 3. Works ... 4. Earthwork ... 2. Land ... 3. Works ... 5. Miscellaneous...	66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84	<p>WESTERN SECTION—cont. Works in Progress—cont. Commamúr Canal. (2) Main Canals and Branches. Compensation for land for improvements to Commamúr canal. Improvements to Commamúr canal ... (4) Drainage and Protective Works. Constructing an under tunnel at 8 miles 1½ furlongs of Commamúr canal. Excavating Tungabhadra drain ... Excavating Nallamada drain ... Total, Works in Progress ... Works not Commenced. Main Canal. (2) Main Canals and Branches. Constructing cattle-crossing at Tadepalli, 1 mile 4 furlongs. Constructing cattle-crossing at Kunchanapalli, 3 miles 1 furlong. Constructing cattle-crossing at Vadheswaram, 3 miles 6 furlongs. Constructing cattle-crossing at Mallemputti, 5 miles 1 furlong. Constructing cattle-crossing at Revendrapad, 7 miles 4 furlongs. Constructing cattle-crossing at Tummapudi, 9 miles 1 furlong. Constructing cattle-crossing at Morampudi, 10 miles 6 furlongs. Bank Canal. (2) Main Canals and Branches. Improving head-sluice channel of Bank canal ... (3) Distributaries. Compensation for land for excavating Varahapuram channel. Bridge about 5 miles to carry Vellatúr-Thanddle road. Vellatúr channel ... (4) Drainage and Protective Works. Compensation for land required for Répalle main drain straight cut. Constructing an iron girder bridge over Répalle main drain to carry the Nandivelugu-Iyalur road at 9 miles. Three cattle-crossings on Répalle main drain ...</p>

OF MADRAS.

ES—cont.

II—cont.

Major Works in the Madras Presidency for the year 1897-98—continued.

Amount of estimate.	OUTLAY		Grant for 1897-98.	Item No.	Remarks and references.
	To end of 1895-96.	Probable during 1896-97.			
Rs.	Rs.	Rs.	Rs.		
16,068	14,059	...	300	66	
2,45,330	2,14,904	1,000	2,000	67	
37,000	34,608	1,500	1,000	68	
2,01,111	1,67,182	30,000	10,000	69	Revised estimate will be submitted.
1,32,065	98,856	...	5,000	70	
...	...	...	54,960		
4,180	...	3,500	680	71	G.O., No. 366 I., dated 13th April 1897.
4,010	...	3,000	1,010	72	
4,500	...	3,500	1,000	73	
3,700	...	3,000	700	74	
3,940	...	3,000	940	75	
3,890	...	2,000	1,890	76	
3,470	...	2,000	1,470	77	
6,600	...	...	6,000	78	G.O., No. 813 I., dated 9th October 1896.
12,000	...	1,000	5,000	79	
...	...	...	4,000	80	Estimates under preparation.
...	...	...	10,000	81	
12,400	...	1,000	5,000	82	
10,000	...	...	5,000	83	
6,000	...	2,000	4,000	84	

IMPERIAL—MAJOR WORKS.

GOVERNMENT

CHARG

Part

Details of the Budget Estimate for Original Works under Irrigation

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.
Kistna —cont.	Western ...	9. Navigation ... 4. Earthwork ... 3. Works ... Do. ... 4. Earthwork ... Do. ... 3. Works ... 4. Earthwork ... 3. Works ... 2. Land ... 5. Miscellaneous... 9. Navigation ... 15. Miscellaneous... 2. Land ... Do. ... Do. ... Do. ... Do. ...	85 86 87 88 89 90 91 92 93 	

MADRAS PRESIDENCY.

OF MADRAS.

ES—cont.

II—cont.

Major Works in the Madras Presidency for the year 1897-98—continued.

Amount of estimate.	OUTLAY		Grant for 1897-98.	Item No.	Remarks and references.
	To end of 1896-97.	Probable during 1896-97.			
Rs.	Rs.	Rs.	Rs.		
2,910	...	...	2,000	85	G.O., No. 819 I., dated 9th October 1896.
13,800	...	2,000	5,000	86	" " 883 I., " 27th " "
3,217	...	1,000	2,000	87	" " 166 I., " 16th February 1897.
...	...	1,500	10,000	88	Estimate under preparation.
7,400	...	2,000	5,400	89	} G.O., No. 166 I., dated 16th February 1897.
3,900	...	...	3,900	90	
20,000	...	...	5,000	91	
84,940	...	10,000	20,000	92	
25,000	...	7,000	10,816	93	
...	...	...	1,10,806		
300	...	...	200	94	
770	224	100	350	95	
2,340	8	700	1,600	96	
1,220	661	...	560	97	
1,000	171	...	300	98	
1,500	...	...	500	99	
1,905	1,798	...	100	100	
600	...	...	200	101	
800	...	...	200	102	

GOVERNMENT

CHARG

Part

Details of the Budget Estimate for Original Works under Irrigation

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.
Kistna Western —cont.	...	2. Land	...	Bank Canal—cont.
				(3) Distributaries—cont.
				Compensation for land for Kuchenapudi Branch channel.
				Compensation for land for diversion of Razu channel at 573' from head of proposed surplus channel at 45 miles 6 furlongs of bank canal.
				Compensation for land for proposed surplus channel at 45 miles 6 furlongs of Bank canal.
				Compensation for land for proposed surplus channel at 44 miles 4½ furlongs, Bank canal.
				Compensation for land for Venkannah's channel.
				Compensation for land for proposed channel at 45 miles 2 furlongs and 310 feet of Bank canal.
				Constructing an under-tunnel at 0¼ mile of Varahapuram channel.
				Tail escape and bridge to Varahapuram channel.
				Earthenware pipe sluices to Varahapuram channel.
				Sluice at 3 miles 2 furlongs of Iskapalli channel.
				Sluice at 4 miles 2½ furlongs of Iskapalli channel.
				Small bridge at 5 miles 6½ furlongs of Iskapalli channel.
				Sluice at 6 miles 0 furlong of Iskapalli channel.
				Small bridge at 7 miles 3 furlongs and 230 feet of Iskapalli channel.
				Sluice at 7 miles 4 furlongs on right bank of Iskapalli channel.
				Do. on left bank do.
				Small bridge at 8 miles 5 furlongs and 230 feet of Iskapalli channel.
				Sluice at 8¼ miles on right bank of Iskapalli channel.
				Do. left bank do.
				Drop at 3 miles 4 furlongs of Aravapalli channel.
				Tail escape to Aravapalli channel
				Do. Allaparru Branch channel
				Do. Ullipalem Branch channel
				Do. Kuchinapudi Branch channel
				Two additional sluices to Iskapalli channel
				Excavating Aravapalli Branch channel
				Do. Kuchinapudi Branch channel
				Do. surplus channel at 45 miles 6 furlongs of Bank canal.
				Excavating a channel at 44 miles 4 furlongs and 330 feet of Bank canal.
				Excavating Venkannah's channel at 44 miles 0 furlong and 330 feet of Bank canal.
				Excavating a channel at 45 miles 2 furlongs and 330 feet of Bank canal.
				Constructing cattle-crossing No. 5 at 5 miles 4 furlongs of Varahapuram channel.

OF MADRAS.

ES—cont.

II—cont.

Major Works in the Madras Presidency for the year 1897-98—continued.

Amount of estimate.	OUTLAY		Grant for 1897-98.	Item No.	Remarks and references.
	To end of 1896-97.	Probable during 1896-97.			
Rs.	Rs.	Rs.	Rs.		
350	...	...	200	103	
840	...	...	300	104	
370	...	...	200	105	
420	...	...	200	106	
260	...	...	100	107	
330	...	...	100	108	
1,105	...	...	1,000	109	
1,200	...	500	700	110	
1,000	...	500	500	111	
470	131	200	100	112	
480	2	300	200	113	
1,680	391	1,000	250	114	
480	2	300	150	115	
1,650	319	1,000	300	116	
480	1	300	150	117	
480	...	300	180	118	
1,530	190	1,000	300	119	
490	...	300	190	120	
490	...	300	190	121	
440	...	300	140	122	
220	...	150	100	123	
230	...	100	130	124	
240	...	100	140	125	
210	...	100	110	126	
...	...	800	300	127	
2,360	5	1,250	1,100	128	
1,840	281	1,150	400	129	
910	...	600	310	130	
870	...	400	470	131	
1,160	...	...	1,000	132	
540	...	300	210	133	
675	...	300	375	134	

IMPERIAL—MAJOR WORKS.

GOVERNMENT

CHARG

Part

Details of the Budget Estimate for Original Works under Irrigation

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.
Kistna Western —cont.	...	Bank Canal—cont.		
		(3) Distributaries—cont.		
		5. Miscellaneous...	135	Constructing cattle-crossing No. 6 at 6 miles 7 furlongs and 220 feet of Varahapuram channel.
		Do. ...	136	Constructing cattle-crossing No. 7 at 8 miles 1 furlong of Varahapuram channel.
		Do. ...	137	Demarcation stones for Varahapuram channel ...
		Do. ...	138	Do. do. Aravapalle Branch channel
		Do. ...	139	Do. do. Ullipalem do.
		Do. ...	140	Do. do. Allaparru do.
		Do. ...	141	Do. do. Kuchinapudi do.
		(4) Drainage and Protective Works.		
		1. Preliminary expenses.	142	Fixing B.Ms. on Gunderu-Bhattiprole drain ...
		2. Land ...	143	Compensation for land for excavating Allaparru drain.
		Do. ...	144	Compensation for land for excavating Kuchinapudi drain.
		5. Miscellaneous.	145	Fixing B.M. and demarcation stones on Répalle main drain.
		Do.	146	Fixing demarcation stones on Allaparru drain ...
		Nizampatam Canal.		
		(2) Main Canals and Branches.		
		2. Land ...	147	Compensation for land for improvements to West side channel.
		11. Buildings ...	148	Nizampatam rest-house ...
		(3) Distributaries.		
		2. Land ...	149	Compensation for land for West side channel extension.
		Do. ...	150	Compensation for Branch channel for West side channel extension.
		(4) Drainage and Protective Works.		
		5. Miscellaneous ...	151	Demarcation stones on Pedapalli drain ...
		Commamúr Canal.		
		(2) Main Canals and Branches.		
		5. River and Hill torrent works.	152	Opening vents in the east side wall of Kollimerla aqueduct at 19 miles 5 furlongs of Commamúr canal.
		(3) Distributaries.		
		2. Land ...	153	Compensation for Bápatla channel ...
		Do. ...	154	Do. for land for Tungabhadra-Bodapad channel.
		Do. ...	155	Compensation for Cherukur branch ...
		Do. ...	156	Compensation for Allera channel ...
		3. Works ...	157	Constructing head-sluice to Cherukur channel ...

MADRAS PRESIDENCY.

OF MADRAS.

ES—cont.

II—cont.

Major Works in the Madras Presidency for the year 1897-98—continued.

Amount of estimate.	OUTLAY		Grant for 1897-98.	Item No.	Remarks and references.
	To end of 1896-96.	Probable during 1896-97.			
Rs.	Rs.	Rs.	Rs.		
705	...	300	400	135	
725	...	300	425	136	
670	140	250	280	137	
420	...	100	320	138	
370	...	100	270	139	
420	...	100	320	140	
380	193	100	100	141	
170	41	...	100	142	
100	...	...	100	143	
100	...	...	100	144	
340	...	200	140	145	
200	45	50	100	146	
600	...	...	200	147	
1,100	...	...	500	148	
1,400	230	...	500	149	
400	17	...	200	150	
180	...	...	180	151	
1,700	960	200	500	152	
615	...	...	100	153	
550	33	...	200	154	
230	...	...	100	155	
240	...	...	100	156	
760	...	...	500	157	

GOVERNMENT

CHARG

Part

Details of the Budget Estimate for Original Works under Irrigation

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.
Kistna Western —cont.	...	3. Works	Bank Canal—cont.	
			(3) Distributaries—cont.	
			Bápatla Tank East Branch.	
			158	Head-sluice
			159	Pipe sluice No. 1 at 0 mile 1 furlong
			160	Bridge at 0 mile 6 furlongs and 330 feet
			161	Pipe sluice No. 2 at 1 mile ½ furlong
			162	Bridge at 1 mile 3 furlongs and 580 feet
			163	Do. 1 mile 6 furlongs and 220 feet
			164	Pipe sluice No. 4 at 1 mile 7½ furlongs
			165	Tail drop
			Bápatla Tank West Branch.	
			166	Head-sluice
			167	Pipe sluice No. 1 at 0 mile 4 furlongs
			168	Bridge at 0 mile 4½ furlongs
			169	Do. 1 mile 6 furlong and 290 feet
			170	Do. 1 mile 5 furlongs and 20 feet
			171	Do. on Cherukur channel
			172	Pipe sluice No. 4 at 1 mile 6½ furlongs of West branch, Bápatla tank.
			173	Pipe sluice No. 5 at 2 miles 2½ furlongs of West branch, Bápatla tank.
			174	Pipe sluice No. 6 at 2 miles 7 furlongs of West branch, Bápatla tank
			175	Cattle-crossing at 1 mile 23 feet of A.B. channel.
			176	Cattle-crossing at 2 miles 2 furlongs and 540 feet of A.B. channel.
			177	Demarcation stones on Bápatla channel, East branch.
			178	Demarcation stones on Bápatla channel, West branch.
			(4) Drainage and Protective Works. O	
			179	Two Cattle-crossings at Rs. 500 each on Ramperu drain.
			(2) Main Canals and Branches.	
			180	Constructing cattle-crossing at Garikepad at 23 miles 5 furlongs of Commamúr canal.
			181	Constructing cattle-crossing at Cherukur at 30/1 mile of Commamúr canal.
			182	Constructing cattle-crossing at Potucutla at 34 miles 5 furlongs of Commamúr canal.
			183	Constructing cattle-crossing at Gazalapalem at 43 miles 3 furlongs and 580 feet of Commamúr canal.
			Total, Minor Works Costing Rs. 2,500 and under.	
			Total, Kistna Western Section ...	
			Grand Total, Kistna Delta System ...	

OF MADRAS.

ES—cont.

II—cont.

Major Works in the Madras Presidency for the year 1897–98—continued.

Amount of estimate.	OUTLAY		Grant for 1897–98.	Item No.	Remarks and references.
	To end of 1895–96.	Probable during 1896–97.			
Rs.	Rs.	Rs.	Rs.		
1,020	...	900	100	158	
110	...	...	100	159	
1,270	...	500	700	160	
95	...	...	100	161	
1,170	...	400	700	162	
1,210	...	500	700	163	
110	...	...	100	164	
400	...	100	300	165	
1,050	...	400	600	166	
110	...	...	100	167	
1,130	...	400	700	168	
1,100	...	400	700	169	
1,070	...	400	600	170	
150	...	...	150	171	
95	...	...	100	172	
115	...	...	100	173	
95	...	...	100	174	
480	...	250	230	175	
500	...	300	200	176	
470	...	...	470	177	
600	...	...	600	178	
1,000	...	200	800	179	
1,740	...	1,500	240	180	
750	...	...	750	181	
1,200	...	500	700	182	
1,260	...	1,000	240	183	
...	...	...	30,050		
...	...	...	1,95,816		
...	...	...	3,27,476		

IMPERIAL—MAJOR WORKS.

GOVERNMENT

CHARG

Part

Details of the Budget Estimate for Original Works under Irrigation

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.
CAUVERY DELTA SYSTEM.				
OPEN CAPITAL ACCOUNT.				
(1) Head Works.				
Tanjore ...	...	3. Works ...	184	Fitting lift shutters to the Grand anicut ...
			185	Improvements to the Coleroon Upper anicut ...
(2) Main Canals and Branches.				
Negapatam ...	...	3. Regulators ...	186	Fitting the Mudikondanar bridge with shutters.
		Do. ...	187	Constructing a regulator of 9 vents across the Vettar just below the offtake of Odemboghyar.
(3) Distributaries.				
Tanjore ...	...	3. Works ...	188	Providing screw-gearing shutters of Colonel Drake-Brockman's pattern to head-slucies of North and South Rajan channels.
		Do. ...	189	Improving Maraneri Iyanar tank
		Do. ...	190	Improving Vadakari Kohoor channel, Thirumalarajanar left bank, 64th mile.
		4. Earthwork ...	191	Improvements to Santhanavary channel, an off-take of the Vettar.
		2. Land ...	192	Improving the Kali voikal, an offtake of the Vickramanar (2. Land Rs. 500).
Negapatam ...	...	3. Works ...	193	Improving Melaperumalai dam across Marakarkaryar and providing a new head to the Melaperumalai channel.
(4) Drainages and Protective Works.				
Tanjore ...	...	3. Works ...	194	Constructing a foot-bridge at the infall of Vickramanar drainage into Vennar.
		Do. ...	195	Constructing a drainage sluice, Nickunnam drainage channel.
		Do. ...	196	Constructing a syphon for Ayappadi drainage under Thennangodian drainage on Nargalar left bank.
		Do. ...	197	Enlarging the Keeranur drain in Nandalar
		Do. ...	198	Constructing masonry regulating dam across Porai voikal for Varisaputhu Vadagal lands.
		Do. ...	199	Constructing a regulating dam across Iyavianar for Anthugudi irrigation.
Total, Cauvery Delta System ...				
SRIVAİKUNTAM ANICUT SYSTEM.				
OPEN CAPITAL ACCOUNT.				
(2) Main Canals and Branches.				
Tinnevely ...	...	14. Tanks and reservoirs.	200	Palayakoyal tank improvements ...
PERIYAR PROJECT.				
(2) Main Canals and (3) Distributaries.				
Madura ...	...		201	Works ...

MADRAS PRESIDENCY.

OF MADRAS.

ES—cont.

II—cont.

Major Works in the Madras Presidency for the year 1897-98—continued.

Amount of estimate.	OUTLAY		Grant for 1897-98.	Item No.	Remarks and references.
	To end of 1895-96.	Probable during 1896-97.			
Rs.	Rs.	Rs.	Rs.		
1,05,000	...	...	86,801	184	Estimate submitted to the Government of India for sanction in P.M.G., No. 155 I., dated 13th February 1897.
5,34,000	...	...	39,430	185	Estimate submitted to the Government of India for sanction in P.M.G., No. 299 I., dated 22nd March 1897.
5,860	...	5,350	510	186	P.M.G., No. 473 I., dated 4th June 1896.
23,600	9,863	12,746	1,500	187	" " 921 I. " 2nd November 1896.
2,500	...	...	2,500	188	P.M.G., No. 937 I., dated 10th November 1896.
3,920	...	520	3,400	189	" " 599 I. " 31st July 1895.
2,170	...	934	1,236	190	" " 186 I. " 23rd February 1897.
5,590	...	400	5,190	191	" " 667 I. " 11th August 1896.
2,610	...	...	2,610	192	" " 1086 I. " 23rd December 1896.
4,970	...	...	4,970	193	" " 919 I. " 3rd November 1896.
1,180	...	480	700	194	P.M.G., No. 909 I., dated 1st November 1895.
1,490	...	690	800	195	
1,700	...	300	1,400	196	
3,700	238	2,400	1,062	197	" " 6 I. " 3rd January 1896.
2,350	...	...	1,175	198	
2,500	...	...	2,500	199	
...	...	...	1,55,784		Estimates under preparation.
2,580	...	1,080	1,626	200	P.M.G., No. 650 I., dated 12th August 1895.
...	...	...	2,02,439	201	The distribution of this amount by component works has not been reported by the Superintending Engineer, VI Circle.

IMPERIAL—MAJOR WORKS.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES—continued.

Part II—continued.

General Abstract of the Grants provided for above.

	In India.	In England.	Total.
	Rs.	Rs.	Rs.
FAMINE RELIEF AND INSURANCE.			
35. Construction of Protective Irrigation Works.			
Rushikulya Project	1,38,618	...	1,38,618
IRRIGATION.			
42. MAJOR WORKS (WORKING EXPENSES).			
Gódavari Delta System	21,000	...	21,000
Kistna do.	19,000	...	19,000
Pennéru Anicut System	— 1,103	...	— 1,103
Sangam do.	3,630	...	3,630
Kurnool-Cuddapah Canal	8,000	...	8,000
Cauvery Delta System	17,000	...	17,000
Srivaikuntam Anicut System	1,954	...	1,954
Total ...	69,481	...	69,481
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.			
49. Irrigation.			
Gódavari Delta System	45,218	...	45,218
Kistna do.	3,27,476	...	3,27,476
Cauvery Delta System	1,55,784	...	1,55,784
Srivaikuntam Anicut System	1,626	...	1,626
Periyár Project	2,02,439	...	2,02,439
Total ...	7,32,543	...	7,32,543

IMPERIAL—MAJOR WORKS.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Part III.

Detail of the Budget Estimate for Maintenance and Repairs of Irrigation Major Works in the Madras Presidency for the year 1897-98.

Executive division.		ESTIMATE, 1897-98.		ESTIMATE, 1896-97.	
		Amount.	Total.	Amount.	Total.
		Rs.	Rs.	Rs.	Rs.
IRRIGATION.					
42. MAJOR WORKS (WORKING EXPENSES).					
<i>Rushikulya Project.</i>					
<i>Head Works.</i>					
Ganjám	Mahánadi section	5,000	...	6,000	...
	Rushikulya do.	1,000	...	1,000	...
	Do. canal	16,000	...	12,000	...
	Mahánadi do.	8,000	...	5,106	...
TOTAL, RUSHIKULYA PROJECT ...		...	30,000	...	24,106
<i>Gódavari Delta System.</i>					
Eastern Division.	Head works	20,000	...	25,000	...
	Main canal	500	...	2,000	...
	Bank do.	9,000	...	10,000	...
	Cocanada canal	8,000	...	8,000	...
	Sámalkót do.	7,000	...	8,000	...
	Mundapetta do.	5,000	...	6,500	...
	Coringa do.	5,000	...	5,000	...
	Kovur-Manjair junction canal	500	...	500	...
	Injeram canal	3,500	...	3,000	...
	Tooliabhaga drain, 31 miles	500	...	500	...
	Takee drain, 27 do.	500	...	4,000	...
	Biccavole drain, 17 do.	500	...	500	...
	Compensation	...	60,000	2,000	75,000
		...	...	1,000	...
Central Division.	Head works	6,000	...	6,000	...
	Main canal	10,000	...	10,000	...
	Gunnaram canal	12,000	...	12,000	...
	Bank canal	7,000	...	7,000	...
	Amalápuram canal	4,000	...	5,000	...
	Bendamurlanka canal	1,000	...	1,000	...
	Billakurru canal	15,000	...	17,000	...
	Drainages	...	55,000	1,000	60,000
	Compensation	...	...	...	...
Western Division.	Head works	5,000	...	6,000	...
	Main canal	2,000	...	3,000	...
	Kakaraparu canal	9,000	...	10,000	...
	Gostanadi and Velpur canal	6,000	...	7,000	...
	Bank canal	10,000	...	13,000	...
	Narsápur do.	10,000	...	15,000	...
	Ellore do.	6,000	...	6,000	...
	Attili do.	1,000	...	1,000	...
	Junction do.	5,000	...	8,000	...
	Venkiah and Weyeru canal	8,000	...	9,000	...
	Undi canal	...	...	...	...
	Nakkala drain, 25 miles	...	...	...	...
	Kaza do. 16 do.	19,435	...	20,427	...
	Mogultur do.	...	...	...	...
	Gonter do.	...	...	...	...
	Gostanadi do.	...	...	...	...
	Yannamadurru drain, 32 miles	...	...	2,000	...
	Compensation	...	81,435	...	1,02,427
TOTAL, GODAVARI DELTA SYSTEM ...		...	1,96,435	...	2,37,427

IMPERIAL—MAJOR WORKS.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES—continued.

Part III—continued.

Detail of the Budget Estimate for Maintenance and Repairs of Irrigation Major Works in the Madras Presidency for the year 1897-98—continued.

Executive division.		ESTIMATE, 1897-98.		ESTIMATE, 1896-97.	
		Amount.	Total.	Amount.	Total.
	IRRIGATION—continued. 42. MAJOR WORKS (WORKING EXPENSES)—continued. Kistna Delta System. Eastern Section.	Rs.	Rs.	Rs.	Rs.
Kistna Eastern Division.	Ellore canal	20,000		20,000	
	Masulipatam canal	24,000		24,000	
	Ryves' canal	16,500		16,500	
	Pulleru do.	28,500		21,301	
	Polraz do.	15,000		15,000	
	Bantumilli canal	15,000		15,000	
	Pamarru junction canal	1,000		15,000	
	Pedalanka channel	12,000		12,000	
			1,32,000		1,23,801
Kistna North-ern Division.	Head works	13,000		10,000	
	Main canal	6,000		5,000	
	Ellore do.	4,000		4,000	
	Masulipatam canal	7,000		2,000	
	Ryves' canal	5,000		5,000	
			35,000		26,000
Kistna Western Division.	Main canal	5,000		5,000	
	Bank do.	40,000		30,000	
	Commamur canal	40,000		40,000	
	Nizampatam do.	29,024		24,500	
	Compensation			500	
			1,14,024		1,00,000
	TOTAL, KISTNA DELTA SYSTEM ...		2,81,024		2,49,801
	Pennér Anicut System.				
Nellore Division.	Head works	5,000		5,000	
	Main canal	2,000		2,000	
	Jaffer Sahib's canal	2,500		2,500	
	Sarvapalle do.	1,500		1,500	
	Kistnapatam do.	3,000		3,000	
	Delta tanks and reservoirs	10,000		10,000	
	Total	24,000		24,000	
	Deduct old maintenance charges ...	* 13,860		* 13,860	
			10,140		10,140
	NET TOTAL, PENNERU ANICUT SYSTEM ...		10,140		10,140

* These sums are provided in the budget estimates for Minor Works and Navigation for 1897-98.

IMPERIAL—MAJOR WORKS.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES—continued.

Part III—continued.

Detail of the Budget Estimate for Maintenance and Repairs of Irrigation Major Works in the Madras Presidency for the year 1897-98—cont.

Executive division.		ESTIMATE, 1897-98.		ESTIMATE, 1896-97.	
		Amount.	Total.	Amount.	Total.
	IRRIGATION—continued. 42. MAJOR WORKS (WORKING EXPENSES)—continued. Sangam Anicut System.	Rs.	Rs.	Rs.	Rs.
Nellore Division—cont.	Head works	4,000		4,000	
	Kanigiri canal	23,000		23,000	
	Duvur do.	3,000		3,000	
	Total	30,000		30,000	
	Deduct old maintenance charges ...	* 11,884		* 11,884	
			18,116		18,116
	NET TOTAL, SANGAM ANICUT SYSTEM ...		18,116		18,116
	Kurnool-Cuddapah Canal.				
Kurnool Division.	Annual maintenance—				
	Head works	1,200		1,200	
	First section	5,800		5,800	
	Second do.	2,900		2,900	
	Third do.	5,500		5,500	
	Fourth do.	6,400		6,400	
	Fifth do.	5,300		5,300	
	Sixth do.	11,300		11,300	
	Distributaries	11,700		11,700	
	Drainages and Protective Works ...	900		900	
	Special Repairs	8,732		5,000	
	Reserve	1,000		1,000	
			60,732		57,000
	TOTAL, KURNOOL-CUDDAPAH CANAL ...		60,732		57,000
Salem Division.	Barur Tank Project	1,447	1,447	1,500	1,500
	Cauvery Delta System.				
Tanjore Division.	Upper Coleroon anicut	2,000		2,000	
	Grand anicut	3,000		3,000	
	Cauvery	5,631		5,800	
	Kodumurti and Puthaur	1,000		1,000	
	Arasillár	1,250		1,250	
	Trimulrajen	1,700		1,700	
	Mudicondappar	1,500		1,500	
	Nattar	300		300	
	Keerthemanar	200		200	
	Veerasholen	600		600	
	Solasudamaniar	700		700	
	Munjalaar	910		910	
	Vellapar	800		800	
	Vanjeaur	300		300	
	South Puthar	200		200	
	Vennár	2,000		2,000	
	Vettár	2,090		2,090	
	Odemboghly	100		100	
	Nundalar	1,200		1,200	

* These sums are provided in the budget estimates for Minor Works and Navigation for 1897-98.

GOVERNMENT OF MADRAS.

CHARGES—continued.

Part III—continued.

Detail of the Budget Estimate for Maintenance and Repairs of Irrigation Major Works in the Madras Presidency for the year 1897-98—cont.

Executive division.		ESTIMATE, 1897-98.		ESTIMATE, 1896-97.	
		Amount.	Total.	Amount.	Total.
	IRRIGATION—continued.				
	42. MAJOR WORKS (WORKING EXPENSES)—continued.				
	Cauvery Delta System—continued.				
Tanjore Division—cont.	Vicramanar	Rs. 1,050		Rs. 1,050	
	Kona voikal	600		600	
	Pudumanar	1,500		1,500	
	Ooppanaur	800		800	
	Vadavaur	500		500	
	Munneyar	2,000		2,000	
	Noolar	1,000		1,000	
	Shollanar	200		200	
	Palavar	2,000		2,000	
	Iyavianar	1,600		1,600	
	Mainkarinar	1,200		1,200	
	Thirunagari channel	200		200	
	Ambanar	200		200	
	Kadalayar	600		600	
	Chittar	400		400	
	Thenkorayar	200		200	
	Pravadynar	100		100	
	Puthaur	200		200	
Negapatam Division.	Vennaur	1,000	39,831	1,100	40,000
	Vettaur	1,000		1,400	
	Odemboghyar	1,500		1,500	
	Corayaur	2,000		2,500	
	Pamanayaur	2,500		3,500	
	Pandavyaur	1,000		1,000	
	Vellayaur	1,500		1,500	
	Athiveeramanar	1,500		2,000	
	Harichendranady	800		800	
	Mullayaur	2,000		1,976	
	Iyanar	200		200	
	Drainage and protective works	2,500		4,500	
	Unforeseen and incomplete works				
Trichinopoly Division.	Annual maintenance—		17,500		21,976
	Punguni channel	900		840	
	Peruvalai do.	1,150		900	
	Iyen do.	1,200		1,200	
	Special Repairs—				
	Punguni channel	1,030		200	
	Peruvalai do.	1,750		1,000	
	Iyen do.	2,100		1,500	
	Compensation	670		360	
	Total		8,800		6,000
	Deduct old maintenance charges		66,131		67,976
	NET TOTAL, CAUVERY DELTA SYSTEM		1,05,634		1,05,634
			— 39,503		— 37,658

* These sums are provided in the budget estimates for Minor Works and Navigation for 1897-98.

GOVERNMENT OF MADRAS.

CHARGES—continued.

Part III—continued.

Detail of the Budget Estimate for Maintenance and Repairs of Irrigation Major Works in the Madras Presidency for the year 1897-98—continued.

Executive division.		ESTIMATE, 1897-98.		ESTIMATE, 1896-97.	
		Amount.	Total.	Amount.	Total.
	IRRIGATION—continued.				
	42. MAJOR WORKS (WORKING EXPENSES)—continued.				
	Srivaikuntam Anicut System.				
Tinnevelly Division.	Head works	Rs. 1,000		Rs. 500	
	North main channel	3,000		3,500	
	Tanks fed by the above channel	7,000		4,000	
	South main channel	2,500		3,000	
	Tanks fed by the above channel	6,500		5,000	
	Deduct old maintenance charges		20,000		16,000
			* 5,208		* 5,208
	NET TOTAL, SRIVAİKUNTAM ANICUT SYSTEM		14,792		10,792
	Periyár Project.				
Madura Division.	Main canal	15,000			
	Branch channels	10,000			
	Rent payable to the Travancore Government under the Periyár lease	40,000			
			65,000		

* These sums are provided in the budget estimates for Minor Works and Navigation for 1897-98.

General Abstract of the Grants provided for above.

	In India.		In England.		Total.	
	Rs.		Rs.		Rs.	
IMPERIAL.						
Major Works.						
42. IRRIGATION (WORKING EXPENSES).						
Rushikulya Project	30,000				30,000	
Gódávári Delta System	1,96,435				1,96,435	
Kistna do. do.	2,81,024				2,81,024	
Pennérú Anicut do.	10,140				10,140	
Sangam Anicut Project	18,116				18,116	
Kurnool-Cuddapah Canal	60,732				60,732	
Barur Tank Project	1,447				1,447	
Cauvery Delta System	— 39,503				— 39,503	
Srivaikuntam Anicut System	14,792				14,792	
Periyár Project	6,5000				6,500	
Total	6,38,183				6,38,183	

IMPERIAL—MAJOR WORKS.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Part IV.

Detail of the Budget Estimate for Establishment of the Irrigation Branch in the Madras Presidency
for the year 1897-98.

	Budget Estimate, 1897-98.	Revised Estimate, 1896-97.
IMPERIAL.	Rs.	Rs. 2
FAMINE RELIEF AND INSURANCE.		
35. Construction of Protective Irrigation Works.		
Grant for Works	1,38,618	1,66,910
<i>Deduct item for which no charge for Establishment is admissible.</i>		
Compensation for land	5,000	10,000
Net Grant ...	1,33,618	1,56,910
Contribution to Provincial Funds at 23 per cent. on the Net Grant ...	30,732	36,090
IRRIGATION.		
42. Major Works (Working Expenses).		
Grant for Works and Repairs	7,07,664	8,99,832
<i>Deduct items for which no charge for Establishment is admissible.</i>		
Compensation for land, Gôdâvari Delta System	1,500	5,000
Do. do. Kistna do.	1,000	500
Do. do. Cauvery do.	670	360
Rent payable to the Travancore Government under the Periyâr lease	40,000	40,000
Total ...	43,170	45,860
Net Grant ...	6,64,494	8,53,972
A. 23 per cent. on the Net Grant	1,52,834	1,96,413
Direct Revenue	2,93,000	2,93,000
<i>Deduct estimated collections in the Revenue Department of water-rates levied on lands irrigated under the Kurnool-Cuddapah Canal</i>	1,12,100	1,12,100
Net Direct Revenue ...	1,80,900	1,80,900
B. 10 per cent. on Net Direct Revenue	18,090	18,090
Irrigation Revenue from Major (Productive) Works exclusive of enhanced share of Land Revenue	65,10,100	61,23,000
Add estimated collections in the Revenue Department of water-rates levied on land irrigated under the Kurnool-Cuddapah Canal	1,18,000	1,18,000
Total ...	66,28,100	62,41,000

IMPERIAL—MAJOR WORKS.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES—continued.

Part IV—continued.

Detail of the Budget Estimate for Establishment of the Irrigation Branch in the Madras Presidency
for the year 1897-98—continued.

	Budget Estimate, 1897-98.	Revised Estimate, 1896-97.
	Rs.	Rs.
C. 6 per cent. on Irrigation Revenue	3,97,686	3,74,460
Total, A + B + C ...	5,68,610	5,88,963
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.		
49. Irrigation.		
Total Grant for Works	7,32,543	6,71,086
<i>Deduct item for which no charge for Establishment is admissible.</i>		
Land compensation	39,687	45,512
Net Grant ...	6,92,856	6,25,574
Contribution to Provincial Funds at 23 per cent. on Net Grant ...	1,59,357	1,43,882

IMPERIAL—MAJOR WORKS.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Part IV-A.

Distribution of the Provision for Establishment by System of Canals for the year 1897-98.

	ESTABLISHMENT CHARGES.						
	23 per cent. on the Grant for Works and Repairs, exclusive of Land Compensation.		10 per cent. on Direct Revenue.		6 per cent. on Indirect Revenue.		Total.
	Grant.	Per-centage.	Estimated Revenue.	Per-centage.	Estimated Revenue.	Per-centage.	
IMPERIAL.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
FAMINE RELIEF AND INSURANCE.							
35. Construction of Protective Irrigation Works.							
Rushikulya Project	1,33,618	30,732	...	...	...	...	30,732
IRRIGATION.							
42. MAJOR WORKS (WORKING EXPENSES).							
Gódávári Delta System	2,15,935	49,665	1,11,000	11,100	27,05,000	1,62,300	2,23,065
Kistna do. do.	2,99,024	68,776	53,600	5,360	25,14,000	1,50,840	2,24,976
Pennérú Anicut System	9,037	2,078	700	70	1,47,000	8,820	10,968
Sangam Anicut Project	21,746	5,002	600	60	1,70,000	10,200	15,262
Kurnool-Cuddapah Canal	68,732	15,808	9,800	980	1,18,000	7,080	23,868
Barur Tank Project	1,447	333	...	...	12,000	720	1,053
Cauvery Delta System	23,173	5,330	2,500	250	8,56,100	51,366	46,286
Srivaikuntam Anicut System	16,746	3,852	1,200	120	1,06,000	6,360	10,332
Periyár Project	25,000	5,750	...	...	...	...	5,750
Rushikulya Project	30,000	6,900	1,500	150	...	...	7,050
Total ..	6,64,494	1,52,834	1,80,900	18,090	66,28,100	3,97,686	5,68,610
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.							c
49. IRRIGATION.							
Gódávári Delta System	42,531	9,782	...	...	...	...	9,782
Kistna Delta System	2,90,976	66,924	...	...	...	...	66,924
Cauvery Delta System	1,55,284	35,716	...	...	...	...	35,716
Srivaikuntam Anicut System	1,626	374	...	...	...	...	374
Periyár Project	2,02,439	46,561	...	...	...	...	46,561
Total ..	6,92,856	1,59,357	...	...	...	...	1,59,357
GRAND TOTAL ..	14,90,968	3,42,923	1,80,900	18,090	66,28,100	3,97,686	7,58,699

IMPERIAL—MAJOR WORKS.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Part V.

Detail of the Budget Estimate for Tools and Plant under Irrigation Major Works in the Madras Presidency for the year 1897-98.

	Budget Estimate, 1897-98.	Budget Estimate, 1896-97.
IMPERIAL.	Rs.	Rs.
FAMINE RELIEF AND INSURANCE.		
35. Construction of Protective Irrigation Works.	150	2,315
Tools and Plant required for the Rushikulya Project		
IRRIGATION.		
42. MAJOR WORKS (WORKING EXPENSES).		
Godavari Delta System.		
Eastern Division.		
8. Repairs and carriage—		
Maintenance of floating plant including existing ferries	20,000	20,500
Special repairs to do. do.	5,000	5,000
Charges on account of steamers used by Public Works officers on duty	4,500	2,500
Machinery	2,000	2,000
Total ..	31,500	30,000
Central Division.		
8. Repairs and carriage, repairs to floating plant, tools and machinery	3,000	4,000
Western Division.		
2. Plant and machinery	2,000	1,500
3. Tools	...	500
8. Repairs and carriage—		
Repairs to floating plant	3,000	3,000
Tools		
Machinery		
Total ..	5,000	5,000
TOTAL, GODAVARI DELTA SYSTEM ..	39,500	39,000
Kistna Delta System.		
Eastern Division.		
8. Repairs and carriage—		
Annual maintenance of ferry boats	4,000	4,000
Special repairs to ferry boats	1,000	1,000
Repairs and conveyance of tools, &c.	500	500
Total ..	5,500	5,500
Northern Division.		
1. Scientific instruments	500	500
2. Tools—New supply	500	500
Navigation Plant—		
2. Pumps for maintaining two Cockburn's dredgers	3,500	8,000
8. Repairs and carriage—		
Annual repairs of floating plant	25,000	25,500
Special repairs of do.	9,000	9,300
Repairs to machinery	700	700
Charges on account of steamer used by Public Works officers	800	800
Repairs and carriage of tools and plant	500	500
Total ..	40,500	45,800

IMPERIAL—MAJOR WORKS.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES—continued.

Part V—continued.

Detail of the Budget Estimate for Tools and Plant under Irrigation Major Works in the Madras Presidency for the year 1897-98—cont.

	Budget Estimate, 1897-98.	Budget Estimate, 1896-97.
	Rs.	Rs. C
IRRIGATION—continued.		
42. MAJOR WORKS (WORKING EXPENSES)—continued.		
Western Division.		
8. Repairs and carriage—		
Repairs to dredgers		
Maintenance of floating plant		
Repairs and conveyance of tools, &c.		
Do. to scientific instruments		
	4,000	4,000
Total ..	4,000	4,000
TOTAL, KISTNA DELTA SYSTEM ..	50,000	55,300
Ponneru Anicut System.		
8. Repairs and carriage		
Deduct old maintenance charges	5	5
NET TOTAL, PENNERU ANICUT SYSTEM ..	5	5
Sangam Anicut System.		
8. Repairs and carriage		
Deduct old maintenance charges	49	50
	57	57
NET TOTAL, SANGAM ANICUT SYSTEM ..	8	7
Kurnool-Cuddapah Canal.		
1. Scientific and mathematical instruments		
8. Repairs and carriage—		
Annual maintenance of floating plant	300	300
Miscellaneous and sundries	1,000	1,036
	300	300
TOTAL, KURNOOL CANAL ..	1,600	1,636
Cauvery Delta.		
Tanjore division—		
3. Tools—		
New supplies		
8. Repairs and carriage	2,300	200
	200	200
Total ..	2,500	200
Negapatam division—		
3. Tools—		
New supplies		
8. Repairs and carriage	200	200
	100	100
Total ..	300	300
Trichinopoly—		
8. Repairs and carriage	20	
TOTAL, CAUVERY DELTA SYSTEM ..	2,820	500
Deduct old maintenance charges ...	1,603	1,603
NET TOTAL, CAUVERY DELTA SYSTEM ..	1,217	1,103

* These sums are provided in the budget estimates for Minor Works and Navigation for 1897-98.

IMPERIAL—MAJOR WORKS.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES—continued.

Part V—continued.

Detail of the Budget Estimate for Tools and Plant under Irrigation Major Works in the Madras Presidency for the year 1897-98—cont.

	Budget Estimate, 1897-98.	Budget Estimate, 1896-97.
	Rs.	Rs.
IRRIGATION—continued.		
42. MAJOR WORKS (WORKING EXPENSES)—continued.		
Srivaikuntam Anicut System—		
8. Repairs and carriage		
Deduct old maintenance charges ...	78	78
NET TOTAL, SRIVAIKUNTAM ANICUT SYSTEM ..	78	78
Periyár project		
8. Repairs and carriage	250	
Rushikulya project system—		
8. Repairs and carriage	1,250	200
TOTAL, 42. MAJOR WORKS (WORKING EXPENSES) ..	93,726	94,943
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.		
49. Irrigation.		
Gódvári Delta System.		
Eastern division—		
3. Tools		165
Kistna Delta System.		
Eastern division—		
4. Navigation plant—		
Ferry boats	5,000	5,000
Northern division—		
4. Navigation plant—		
Two double trap punts		8,900
Constructing No. 1 stern wheel steamer	31,200	
Do. „ 2 do.	11,600	
16. Subordinate staff boats	3,000	
A new staff boat for officers	4,800	
12. Dinghies		
Western division—		
Tamway from Kolanukoduru quarry		10,000
4. Navigation plant—		
Ferry ballacuts		2,078
TOTAL, KISTNA DELTA SYSTEM ..	55,600	25,978
Srivaikuntam Anicut System.		
3. Tools—Tinnevely division		87
Cauvery Delta System.		
3. Tools—Tanjore division	1,500	
Periyár Project.		
3. Tools—Madura division	1,000	5,500
TOTAL, CAPITAL ACCOUNT ..	58,100	31,730

* These sums are provided in the budget estimates for Minor Works and Navigation for 1897-98.

IRRIGATION—MAJOR WORKS.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Part VI.

Abstract of the Probable Increase or Decrease in the Suspense Accounts of Irrigation Major Works in the Madras Presidency for the year 1897-98—Nil.

All Suspense Accounts are included under Provincial, 45. Civil Works.

MINOR WORKS AND
NAVIGATION.

FINAL ISSUE.

Public Works Department.

BUDGET ESTIMATE

OF

REVENUE AND EXPENDITURE

UNDER

IRRIGATION MINOR WORKS AND NAVIGATION

IN THE

MADRAS PRESIDENCY

FOR THE YEAR

1897-98.

MADRAS,
23rd April 1897.

(Signed) W. HUGHES,
Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

CONTENTS

	PAGE
ABSTRACT BUDGET ESTIMATE OF REVENUE	2
ABSTRACT BUDGET ESTIMATE OF EXPENDITURE	3
 DETAILS OF THE BUDGET ESTIMATE OF EXPENDITURE—	
PART I.—Arranged by Projects	5
" II.—Detail of the Budget Estimate for Original Works	8
" III.—Detail of the Budget Estimate for Maintenance and Repairs	24
" IV.—Detail of the Budget Estimate for Establishment	26
" IV-A.—Distribution of the provision for Establishment by System	27
" V.—Detail of the Budget Estimate for Tools and Plant	29
" VI.—Detail of Estimate of Suspense Balances	30

APPENDIX—

SCHEDULE A.—Showing the Distribution of the grants for Minor Original Works and Repairs ...	31
---	----

PROVINCIAL—MINOR WORKS
AND NAVIGATION.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

REVENUE.

Abstract Budget Estimate of Revenue expected from Irrigation Minor Works and Navigation in the Madras Presidency for the year from 1st April 1897 to 31st March 1898.

	Actual Realizations, 1895-96.	Budget Estimate, 1896-97.	Revised Estimate, 1896-97.	Budget Estimate, 1897-98.
PROVINCIAL.	Rs.	Rs.	Rs.	Rs.
IRRIGATION AND NAVIGATION WORKS.				
Works for which Capital and Revenue Accounts are kept.				
Thadapalli Channel System ...	89	80	80	80
Arkenkotta Channel System ...	6	...	...	...
Kalingaroyen Channel System ...	157	420	420	120
Pálár Anicut System ...	2,156	1,540	1,300	1,300
Poincy Anicut System ...	226	600	600	500
Cheyáru Anicut System ...	258	200	200	200
Chembrambakam Tank System ...	140	30	180	140
Madras Water-supply and Irrigation Extension ...	10,103	13,380	13,500	12,500
Valluru Anicut System ...	21	...	20	20
Tirukkóyilár Anicut System ...	378	570	570	570
Mehamattur Anicut System ...	47	30	50	50
Vriddhachalam Anicut System ...	130	50	50	50
Shatlatope Anicut System ...	215	300	300	300
Pelandorai Anicut System ...	105	250	250	250
Lower Coleroon Anicut System ...	1,024	1,000	1,030	1,030
Maradur Anicut System ...	197	350	250	290
Buckingham Canal ...	1,08,383	1,10,000	1,10,000	1,11,400
Védáranniyam Canal ...	1,136	1,200	1,200	1,200
Total ...	1,24,771	1,30,000	1,30,000	1,30,000
Works for which neither Capital nor Revenue Accounts are kept, P.W.D. ...	6,830	10,000	10,000	10,000
AGRICULTURAL WORKS.				
Works for which neither Capital nor Revenue Accounts are kept ...	24,239	30,000	25,000	25,000
TOTAL ...	1,55,840	1,70,000	1,65,000	1,65,000

PROVINCIAL—MINOR WORKS
AND NAVIGATION.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Abstract Budget Estimate of Expenditure on Irrigation Minor Works and Navigation in the Madras Presidency for the year from 1st April 1897 to 31st March 1898.

	Reference to Detailed Estimate.	Actual Outlay, 1896-96.	Budget Estimate, 1896-97.	Revised Estimate, 1896-97.	Budget Estimate, 1897-98.
PROVINCIAL.	PAGES.	Rs.	Rs.	Rs.	Rs.
MINOR WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.					
CAPITAL.					
1. Works ... { In progress ... 2,30,493 Not commenced ... 95,105 }	8 to 15	4,93,224	9,22,858	5,40,519	3,25,598
2. Establishment ...	27	1,06,799	1,78,019	1,18,026	73,656
3. Tools and Plant ...	29	17,360	21,733	51,181	4,406
Receipts on capital account ...		—1,392	...	...	...
Total, Capital ...		6,15,991	11,22,610	7,09,726	4,03,660
REVENUE.					
1. Extensions and Improvements. { In progress ... 24,913 Not commenced ... }	16 to 19	21,540	22,659	30,901	24,913
2. Maintenance and Repairs ...	24 & 25	1,93,695	1,72,209	2,30,503	1,89,823
3. Establishment ...	27	60,473	57,819	73,123	62,389
4. Tools and Plant ...	29	4,851	3,875	5,275	2,875
Refunds of Revenue ...		133	...	...	...
Total, Revenue ...		2,80,692	2,56,562	3,39,802	2,80,000
Total, Minor Works for which Capital and Revenue Accounts are kept ...		8,96,683	13,79,172	10,49,528	6,83,660
MINOR WORKS FOR WHICH NEITHER CAPITAL NOR REVENUE ACCOUNTS ARE KEPT.					
1. Works—					
Major ... { In progress ... 52,212 Not commenced ... 7,330 }	18 & 19	1,16,669	1,09,000	1,68,823	59,542
Minor ...	18 & 19	1,686	2,13,857	1,37,088	1,67,789
2. Repairs ...	25	10,79,110	10,34,051	10,02,270	9,04,818
3. Establishment ...	28	5,47,928	5,42,994	5,33,714	4,97,189
4. Tools and Plant ...	29	18,224	19,856	19,099	16,552
Refunds of Revenue ...		101	...	...	...
Total, Minor Works for which neither Capital nor Revenue Accounts are kept ...		17,63,718	19,19,758	18,60,994	16,45,890
AGRICULTURAL WORKS.					
Works for which neither Capital nor Revenue Accounts are kept.					
1. Works—					
Major ... { In progress ... 59,420 Not commenced ... }	20 & 21	98,015	92,500	1,20,056	59,420
Minor ...	20 & 21	13,277	13,900	23,233	17,700
2. Repairs ...	25	3,13,998	3,74,389	5,95,258	3,77,212
3. Establishment ...	28	90,819	1,08,407	1,67,191	1,04,467
4. Tools and Plant ...	29	6,108	6,874	10,740	6,650
Refunds of Revenue ...		336	...	...	...
Total, Agricultural Works ...		5,22,553	5,96,070	9,16,478	5,65,450
Total, Provincial ...		31,82,954	38,95,000	38,27,000	28,95,000

PROVINCIAL—MINOR WORKS
AND NAVIGATION.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES—continued.

Abstract Budget Estimate of Expenditure on Irrigation Minor Works and Navigation in the Madras Presidency for the year from 1st April 1897 to 31st March 1898—continued.

	Reference to Detailed Estimate.	Actual Outlay, 1895-96.	Budget Estimate, 1896-97.	Revised Estimate, 1896-97.	Budget Estimate, 1897-98.
PAGES.		Rs.	Rs.	Rs.	Rs.
GRAND TOTAL, PROVINCIAL 43. MINOR WORKS AND NAVIGATION.					
Works ... { In progress 3,42,125 Not commenced 3,12,837 }		7,44,411	13,74,774	10,20,620	6,54,962
Repairs		15,86,803	15,80,649	18,28,031	14,71,854
Establishment		8,06,019	8,87,239	8,92,054	7,37,701
Tools and Plant		46,543	52,338	86,295	30,483
Refunds of Revenue		570	...	...	...
Receipts on capital account		—1,392	...	...	...
Total, Provincial ...		31,82,954	38,95,000	38,27,000	28,95,000
LOCAL IRRIGATION CESS FUND.					
43. MINOR WORKS AND NAVIGATION.					
Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.					
I. Original Works		7,253	3,000	6,000	7,000
II. Repairs		20,162	5,000	6,000	2,000
Total ...		27,415	8,000	12,000	9,000

PROVINCIAL—MINOR WORKS
AND NAVIGATION.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Part I.

Details of the Budget Estimate of Expenditure on Irrigation Minor Works and Navigation in the Madras Presidency for the year 1897-98, arranged by Projects and Objects of Work.

	Amount of Sanctioned Estimate.	Actual Outlay to end of 1895-96.	Budget Estimate, 1896-97.	Probable Outlay during 1896-97 (Revised Estimate).	Budget Estimate, 1897-98.	Remarks and References.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
PROVINCIAL.						
43. MINOR WORKS AND NAVIGATION.						
Minor Works for which Capital and Revenue Accounts are kept.						
CAPITAL.						
Works in Progress.						
Kurnool-Cuddapah Canal ...	19,350	5,345	18,450	16,974	3,490	P.M.G., No. 766 I., dated 20th September 1895, and No. 1098 I., dated 19th December 1895.
Munneyeru Project	3,68,000	1,44,566	1,23,000	1,59,900	90,030	P.M.G., No. 1089 I., dated 17th December 1893, and No. 497 I., dated 12th June 1896. Revised estimate under preparation.
Sagilēru Project	3,61,000	2,68,171	1,10,700	98,400	42,180	P.M.G., No. 10 I., dated 9th January 1894, and No. 915 I., dated 21st November 1894.
Pālār Anicut System	20,96,790	19,51,936	12,300	8,610	14,840	Government of India Register No. 17 I. of 1884-85. Vide P.M.G., No. 83 I., dated 30th January 1891; No. 1002 I., dated 17th November 1893; No. 1053 I., dated 2nd December 1893; No. 652 I., dated 14th August 1895; No. 84 I., dated 23rd January 1896; and No. 303 I., dated 31st March 1896.
Pelandorai Anicut System ...	5,06,640	4,12,385	...	32,273	52,830	P.M.G., No. 378 I., dated 9th May 1894; No. 1088 I., dated 18th December 1895; No. 301 I., dated 31st March 1896; and No. 551 I., dated 2nd July 1896.
Lower Coleroon Anicut System.	9,15,712	5,97,399	78,720	93,000	1,10,340	P.M.G., No. 835 I., dated 8th October 1892; No. 960 I., dated 6th November 1893; No. 372 I., dated 5th May 1894; No. 181 I., dated 25th Feb. 1895; No. 273 I., dated 21st March 1896; No. 535 I., dated 25th June 1896; and No. 555 I., dated 3rd July 1896.
Buckingham Canal	86,14,000	82,03,148	1,50,140	2,48,976	89,950	Government of India Register No. 15 I. of 1883-84; P.M.G. No. 8 I., dated 8th January 1895.
Other Projects	...	...	...	51,593	...	
Total, Capital ..	...	...	...	7,09,726	4,03,660	
REVENUE.						
Kurnool-Cuddapah Canal ...	...	...	...	1,722	...	
Ganjām Minor Rivers System ...	...	...	3,690	12,300	12,300	
Cumbum Tank System	...	...	2,460	984	2,460	
Thadapalli Channel System ...	...	...	4,300	8,988	6,030	
Arkenkotta do. do.	...	...	1,840	2,829	2,340	
Kalingaroyen do. do.	...	...	2,500	7,398	2,350	
Pālār Anicut System	...	...	43,602	55,682	40,220	
Poiney do. do.	...	...	12,360	11,130	12,350	
Cheyāru do. do.	...	...	16,010	27,230	18,470	
Chembrambakam Tank System.	...	...	—2,040	—2,109	—2,770	
Madras Water-supply and Irrigation Extension.	...	...	—270	2,817	—360	
Valluru Anicut System	...	...	900	656	3,940	
Tirukkōyilār Anicut System ...	...	...	12,350	8,783	13,590	

PROVINCIAL—MINOR WORKS
AND NAVIGATION.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Part I—continued.

Details of the Budget Estimate of Expenditure on Irrigation Minor Works and Navigation in the Madras Presidency for the year 1897–98, arranged by Projects and Objects of Work—continued.

	Amount of Sanctioned Estimate.	Actual Outlay to end of 1895–96.	Budget Estimate, 1896–97.	Probable Outlay during 1896–97 (Revised Estimate).	Budget Estimate, 1897–98.	Remarks and References.
PROVINCIAL—continued.	Rs.	Rs.	Rs.	Rs.	Rs.	
43. MINOR WORKS AND NAVIGATION—continued.						
<i>Minor Works for which Capital and Revenue Accounts are kept—continued.</i>						
REVENUE—cont.						
Mehamattur Anicut System ...	...	...	1,850	3,389	1,850	
Vridhdachalam Anicut System...	...	...	3,700	4,930	3,690	
Shatiatope Anicut System ...	...	...	14,660	16,259	14,790	
Pelandorai do. do. ...	...	...	4,190	17,105	4,180	
Lower Coleroon Anicut System.	...	...	28,390	31,616	27,780	
Nandyar Channel System ...	...	...	5,050	2,252	9,360	
Maradur Anicut System ...	...	...	11,110	20,940	17,240	
Chilka Lake Canal ...	...	...	370	370	370	
Buckingham Canal ...	...	...	85,110	98,714	83,470	
Védaranniyam Canal ...	...	...	4,430	5,817	6,350	
Total, Revenue ..	...	...	2,56,562	3,39,802	2,80,000	
Total, Minor Works for which Capital and Revenue Ac- counts are kept.	...	...	13,79,172	10,49,528	6,83,660	
<i>Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.</i>						
Old maintenance charges ...	...	...	4,21,282	4,23,622	4,26,136	
Ordinary Minor Works ...	...	...	7,90,946	8,50,825	6,96,754	
Tank Restoration Works— Execution ...	...	...	6,77,530	5,51,547	4,88,000	
Minor Works, Revenue Department.	...	...	30,000	35,000	35,000	
Total ...	...	...	19,19,758	18,60,994	16,45,890	
Total, Irrigation and Navigation Works.	...	...	32,98,930	29,10,522	23,29,550	
AGRICULTURAL WORKS.						
<i>Works for which neither Capital nor Revenue Accounts are kept.</i>						
MAJOR ORIGINAL WORKS.						
<i>In Progress.</i>						
Raising the Vasista Gódvári right bank from head to Chinchinada.	72,800	15,826	30,000	35,596	21,378	P.M.G., No. 56 I., dated 19th January 1893.

PROVINCIAL—MINOR WORKS
AND NAVIGATION.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Part I—continued.

Details of the Budget Estimate of Expenditure on Irrigation Minor Works and Navigation in the Madras Presidency for the year 1897–98, arranged by Projects and Objects of Work—continued.

	Amount of Sanctioned Estimate.	Actual Outlay to end of 1895–96.	Budget Estimate, 1896–97.	Probable Outlay during 1896–97 (Revised Estimate).	Budget Estimate, 1897–98.	Remarks and References.
PROVINCIAL—continued.	Rs.	Rs.	Rs.	Rs.	Rs.	
AGRICULTURAL WORKS —continued.						
<i>Works for which neither Capital nor Revenue Accounts are kept —continued.</i>						
MAJOR ORIGINAL WORKS—cont.						
<i>In Progress—cont.</i>						
Raising the Kistna river left bank below the anicut.	78,300	23,498	10,000	10,000	35,892	P.M.G., No. 278 I., dated 28th March 1893.
Raising Mudicondanar both banks from road No. 15 to eastern limit of Kumbakónam bridge.	5,150	...	...	3,000	2,150	P.M.G., No. 402 I., dated 7th May 1896.
Total, Major Original Works ...	...	...	...	...	59,420	
Minor Original Works ...	...	...	...	...	17,700	
Repairs ...	...	...	...	...	3,77,213	
Establishment ...	...	...	...	...	1,04,467	
Tools and Plant ...	...	...	...	...	6,650	
Total, Agricultural Works ...	...	...	...	...	5,65,450	
Total, Provincial ...	...	...	...	...	28,95,000	
LOCAL IRRIGATION CESS FUND.						
43. MINOR WORKS AND NAVIGATION.						
<i>Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.</i>	...	...	8,000	12,000	9,000	
Total ...	...	...	8,000	12,000	9,000	

PROVINCIAL—MINOR WORKS
AND NAVIGATION.

MADRAS PRESIDENCY.

GOVERNMENT

CHARG

Part

Detail of the Budget Estimate for Original Works under Irrigation

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.
Kurnool	...	14. Miscellaneous.	1	<p>KURNOOL-CUDDAPAH CANAL.</p> <p>OPEN CAPITAL ACCOUNT.</p> <p>2. Main Canals and Branches.</p> <p>Demarcating land under the canal ...</p> <p>MUNNYERU PROJECT.</p> <p>CAPITAL ACCOUNT.</p> <p>2. Main Canals and Branches.</p> <p>Under-tunnel at 12 miles 7 furlongs ...</p> <p>Do. at 14 do. 4 do. ...</p> <p>Do. at 15 do. 3½ do. ...</p> <p>Do. at 16 do. 2 do. ...</p> <p>Do. at 16 do. 7 do. ...</p> <p>Do. at 18 do. 6 do. ...</p> <p>Do. at 19 do. 4 do. ...</p> <p>Do. at 20 do. 3 do. ...</p> <p>Do. at 21 do. 2 do. ...</p> <p>Do. at 22 do. 0 do. ...</p> <p>Do. at 23 do. 3 do. ...</p> <p>Do. at 25 do. 2 do. ...</p> <p>Bridge at 1 mile 0 furlong ...</p> <p>Do. at 12 do. 5/330 furlongs ...</p> <p>Do. at 14 do. 4 furlongs ...</p> <p>Do. at 16 do. 2 do. ...</p> <p>Do. at 17 do. 7 do. ...</p> <p>Do. at 19 do. 7 do. ...</p> <p>Do. at 23 do. 3 do. ...</p> <p>Do. at 24 do. 0 do. ...</p> <p>Excavating and banking Munnyeru main channel.</p> <p>Demarcation stones for branch channels ...</p> <p>3. Distributaries.</p> <p>Sluices for branch channels ...</p> <p>Excavating branch channels ...</p> <p>Demarcation stones for branch channels ...</p> <p>Total, Munnyeru Project ...</p> <p>SAGILERU PROJECT.</p> <p>CAPITAL ACCOUNT.</p> <p>1. Head Works.</p> <p>Constructing an anicut ...</p> <p>Do. scouring sluice ...</p>
Kistna Northern.	...	6. Other cross drainage works.	2	
		Do.	3	
		Do.	4	
		Do.	5	
		Do.	6	
		Do.	7	
		Do.	8	
		Do.	9	
		Do.	10	
		Do.	11	
		Do.	12	
		Do.	13	
		7. Bridges	14	
		Do.	15	
		Do.	16	
		Do.	17	
		Do.	18	
		Do.	19	
		Do.	20	
		Do.	21	
		12. Earthwork	22	
		15. Miscellaneous.	23	
		3. Works	24	
		4. Earthwork	25	
		5. Miscellaneous.	26	
Cuddapah	...	3. Works	27	
		Do.	28	

OF MADRAS.

ES.

II.

Minor Works in the Madras Presidency for the year 1897-98.

Amount of estimate.	OUTLAY		Grant, 1897-98.	Item No.	Remarks and references.
	To end of 1895-96.	Probable during 1896-97.			
Rs.	Rs.	Rs.	Rs.		
13,360	5,345	6,000	2,838	1	P.M.G., No. 1098 I., dated 19th December 1895.
7,500	...	652	6,800	2	
2,300	...	...	1,500	3	
2,240	...	...	2,200	4	
2,210	...	...	2,200	5	
5,760	...	...	5,750	6	
3,600	...	771	2,825	7	
2,210	...	234	1,975	8	
1,600	...	1,301	300	9	
3,500	...	1,396	2,100	10	
2,180	...	...	2,175	11	
2,260	...	...	2,250	12	
2,220	...	...	2,200	13	
2,110	783	882	1,225	14	
1,350	...	...	1,350	15	P.M.G., No. 1069 I., dated 12th December 1893.
1,350	...	...	1,350	16	
1,350	...	...	1,350	17	
1,350	...	...	1,350	18	
1,350	...	170	1,150	19	
1,230	...	...	1,225	20	
1,230	...	...	1,225	21	
1,13,400	37,517	45,036	13,500	22	
2,000	671	...	750	23	
8,380	...	...	8,250	24	
11,000	...	6	6,870	25	
1,000	...	...	1,000	26	
...	...	...	72,870		
50,200	...	...	1,000	27	
14,800	...	...	1,500	28	P.M.G., No. 384 I., dated 22nd April 1897.

PROVINCIAL—MINOR WORKS
AND NAVIGATION.

GOVERNMENT

CHARGE

Part

Detail of the Budget Estimate for Original Works under Irrigation

Detail of the Budget Estimate for Original Works under Irrigation						
Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.		
Cuddapah—cont.	...	3. Regulator ...	29	SAGILERU PROJECT—cont. CAPITAL ACCOUNT—cont. 2. Main Canals and Branches. Constructing head-sluice Regulator at 2 miles 1,340 feet Inlet at 1½ miles Pipe aqueduct at 1 mile 52 chains Bridge No. 1 at 1 mile Do. " 2 at 1½ miles Diversion of Cumbum road Bridge at 5 miles 1,363 feet Excavating Porumamilla supply channel Cutting Kalsapad tank supply channel Raising and strengthening the bund of Chintala- palli tank. Forming cattle ramps Total, Sagileru Project PALAR ANICUT SYSTEM. OPEN CAPITAL ACCOUNT. <i>Reddicalam-Nedumpalli Condam Distributaries.</i> Reddivalam Branch Channel. Deepening and widening the Reddivalam supply channel. Proposed drop at 10,400 feet below head to Reddivalam channel. Proposed under-tunnel at 6,260 feet below head to Reddivalam branch channel. 3. Distributaries. Karivedu-Kolathur and Damal, &c., Project. Kukundi Branch. Compensation for land taken up for Kukundi branch channel. Kolathur Branch. Cutting Karivedu-Kolathur branch channel ... Proposed improvements to the existing head-sluice to Karivedu-Kolathur channel above drop No. 7 in the Govindavady channel. Proposed drop at 5,000 feet below head in Kari- vedu and Kolathur channels.		
		Do. ...	30			
		6. Other cross drainage works.	31			
		Do.	32			
		7. Bridges ...	33			
		Do. ...	34			
		Do. ...	35			
		Do. ...	36			
		12. Earthwork ...	37			
		Do. ...	38			
		14. Tanks and re- servoirs.	39			
		15. Miscellaneous...	40			
		North Arcot ...	...		4. Earthwork ...	41
					3. Works ...	42
					Do. ...	43
2. Land ...	44					
				4. Earthwork ...	45	
				3. Works ...	46	
Do. ...	47					

OF MADRAS.

ES—cont.

II—cont.

Minor Works in the Madras Presidency for the year 1897-98—continued.

Amount of estimate.	OUTLAY		Grant, 1897-98.	Item No.	Remarks and references.
	To end of 1895-96.	Probable during 1896-97.			
Rs.	Rs.	Rs.	Rs.		
17,800	...	80,000	1,500	29	P.M.G., No. 384 I., dated 22nd April 1897.
6,240	...		1,000	30	
3,400	...		700	31	
2,500	...		700	32	
3,750	...		2,000	33	
5,800	...		1,000	34	
4,030	...		1,000	35	
2,730	...		1,000	36	
1,15,000	...		16,893	37	
4,150	...		4,000	38	
15,200	...		1,000	39	
1,050	...		1,000	40	
...	...	...	34,293		
569	...	13	556	41	G.O., No. 147 I., dated 12th February 1897.
330	...	...	330	42	
610	...	...	610	43	
5,150	...	...	5,150	44	
1,430	...	...	1,430	45	
170	...	...	170	46	
280	...	6	274	47	

PROVINCIAL—MINOR WORKS
AND NAVIGATION.

MADRAS PRESIDENCY.

GOVERNMENT

CHARG

Part

Detail of Budget Estimate for Original Works under Irrigation

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.
North Arcot— cont.	...	3. Works	48	PALAR ANICUT SYSTEM— OPEN CAPITAL ACCOUNT—cont. Reddivalam-Nedumpalli. Conduin Distributaries—cont. Damal Branch. Constructing the proposed regulating weir at the crossing of the Avalur supply channel with the Damal channel at 1 mile 7 furlongs below Karivedu tank weir.
		4. Earthwork	49	Improving and strengthening the Avalur channel to supply Damal, &c., tanks.
		3. Works	50	Improvements to the Avalur channel head sluice.
		Do.	51	Providing a tower head to the high level sluice in Kolathur tank.
		3. Works	52	Thakkolam Branch. Providing screw gearing and shutters to the vented weir in Thakkolam channel.
		3. Works	53	Tennel Channel. Constructing an under-tunnel in the proposed channel from Tennel to Nelvoy tank.
		Do.	54	Constructing drop No. 1 in the proposed channel from Tennel to Nelvoy tank.
		Do.	55	Constructing drop No. 2 in the proposed channel from Tennel to Nelvoy tank.
		Do.	56	Constructing a byewash in the proposed channel from Tennel to Nelvoy tank.
		4. Earthwork	57	Cutting a channel from Tennel to Nelvoy tank.
		2. Land	58	Kaveripauk Main Surplus Channel. Demarcating lands already taken up and to be acquired for improving and repairing the Kaveripauk surplus channel.
		3. Works	59	Kaveripauk Main Surplus Channel. Kalapalampattu Branch Channel. Constructing a byewash and seven pot sluices in Thorayur channel.
				Total, Palar Anicut System ...
				PELANDORAI ANICUT SYSTEM. OPEN CAPITAL ACCOUNT. 1. Head Works.
South Arcot	...	3. Works	60	Lowering the anicut crest and fitting it with 6 feet shutters counterweighted and with suitable gearing.

OF MADRAS.

ES—cont.

II—cont.

Minor Works in the Madras Presidency for the year 1897-98—continued.

Amount of estimate.	OUTLAY		Grant for 1897-98.	Item No.	Remarks and references.
	To end of 1895-96.	Probable during 1896-97.			
Rs.	Rs.	Rs.	Rs.		
280	...	239	41	48	
1,250	...	547	703	49	
650	...	...	650	50	
230	...	209	21	51	
418	...	...	418	52	
1,390	...	...	1,390	53	
290	...	166	124	54	G.O., No. 147 I., dated 12th February 1897.
180	...	160	20	55	
260	...	236	24	56	
1,970	...	1,092	878	57	
203	...	...	203	58	
130	...	61	69	59	
...	...	...	13,061		
60,800	...	23,141	37,600	60	P.M.G., No. 551 I., dated 2nd July 1896.

PROVINCIAL—MINOR WORKS
AND NAVIGATION.

GOVERNMENT

CHARG

Part

Detail of the Budget Estimate for Original Works under Irrigation

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.
South Arcot—cont.	...	12. Earthwork ...	61	<p>PELANDORAI ANICUT SYSTEM—cont.</p> <p>OPEN CAPITAL ACCOUNT—cont.</p> <p>2. Main Canals and Branches.</p> <p>Improving Pelandorai main channel from head sluice up to 6th mile drop.</p> <p>Total, Pelandorai Anicut System ...</p> <p>LOWER COLEROON ANICUT SYSTEM.</p> <p>CAPITAL ACCOUNT.</p> <p>1. Head Works.</p> <p>Improvements to the Lower Coleroon anicut ...</p> <p>Fitting screw gearing and iron shutters to the Lower Coleroon anicut system.</p> <p>4. Drainages and Protective Works.</p> <p>Old Coleroon Drain.</p> <p>Aqueduct and bridge extension ...</p> <p>Clearing, widening and forming banks ...</p> <p>Demarcation stones ...</p> <p>Total, Lower Coleroon Anicut System ...</p> <p>BUCKINGHAM CANAL.</p> <p>CAPITAL ACCOUNT.</p> <p>2. Main Canals and Branches.</p> <p>Improvements to canal from Pálar to Merkanam pipe inlet at 49/1 miles.</p> <p>Inlet at ramp 46/3 miles ...</p> <p>Do. at do. 51/3 miles ...</p> <p>Earthwork clearance ...</p> <p>Improvements to banks and berms ...</p> <p>Cutting basin ...</p> <p>Improvements to junction canal from mile $\frac{1}{2}$ to $\frac{3}{4}$ culvert 12 feet span at Mylapur burial-ground.</p> <p>Drain at 3rd mile ...</p> <p>Scoop drain ...</p> <p>Inlet, 40 feet long ...</p> <p>Scour sluice near Capper House Hotel ...</p> <p>Constructing lock at Marine Villa ...</p> <p>Improvements to junction canal ...</p> <p>Incomplete works ...</p> <p>Total, Buckingham Canal ...</p>
Tanjore ...	...	3. Works ...	62 63	<p>Improvements to the Lower Coleroon anicut ...</p> <p>Fitting screw gearing and iron shutters to the Lower Coleroon anicut system.</p>
South Arcot ...	...	3. Works ... 4. Earthwork ... 5. Miscellaneous.	64 65 66	<p>Aqueduct and bridge extension ...</p> <p>Clearing, widening and forming banks ...</p> <p>Demarcation stones ...</p>
Buckingham Canal.	...	6. Other cross drainage works. 12. Earthwork ... 3. Regulators ... 6. Other cross drainage works. 9. Navigation ... 12. Earthwork ...	67 68 69 70 71 72 73 74 75 76 77 78 79 80	<p>Improvements to canal from Pálar to Merkanam pipe inlet at 49/1 miles.</p> <p>Inlet at ramp 46/3 miles ...</p> <p>Do. at do. 51/3 miles ...</p> <p>Earthwork clearance ...</p> <p>Improvements to banks and berms ...</p> <p>Cutting basin ...</p> <p>Improvements to junction canal from mile $\frac{1}{2}$ to $\frac{3}{4}$ culvert 12 feet span at Mylapur burial-ground.</p> <p>Drain at 3rd mile ...</p> <p>Scoop drain ...</p> <p>Inlet, 40 feet long ...</p> <p>Scour sluice near Capper House Hotel ...</p> <p>Constructing lock at Marine Villa ...</p> <p>Improvements to junction canal ...</p> <p>Incomplete works ...</p>

MADRAS PRESIDENCY.

OF MADRAS.

ES—cont.

II—cont.

Minor Works in the Madras Presidency for the year 1897–98—continued.

Amount of estimate.	OUTLAY		Grant, 1897–98.	Item No.	Remarks and references.
	To end of 1895–96.	Probable during 1896–97.			
Rs.	Rs.	Rs.	Rs.		
10,350	...	5,000	5,351	61	P.M.G., No. 1088 L., dated 18th December 1895.
...	...	...	42,951		
1,01,400 7,880	...	20,967 4,380	40,207 3,500	62 63	P.M.G., No. 273 L., dated 21st March 1896. P.M.G., No. 535 L., dated 26th June 1896.
25,240 89,600 360	2,554 1,186 ...	18,628 30,466 ...	4,000 40,000 2,000	64 65 66	P.M.G., No. 835 L., dated 8th October 1892.
...	...	...	89,707		
590	...	...	590	67	
150	...	...	150	68	
290	...	...	290	69	
15,100	...	12,700	2,400	70	
4,870	...	...	4,870	71	
100	...	...	100	72	
2,260	...	...	2,260	73	
2,340	...	...	2,340	74	
11,690	...	...	11,690	75	
550	...	...	550	76	
11,500	...	...	11,500	77	
13,000	...	...	13,000	78	
11,160	...	...	11,160	79	
...	...	...	8,978	80	
...	...	...	69,878		

PROVINCIAL—MINOR WORKS
AND NAVIGATION.

GOVERNMENT

CHARG

Part

Detail of the Budget Estimate for Original Works under Irrigation

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.
REVENUE ACCOUNT.				
Extensions and Improvements.				
Kurnool ...	...		81	Cumbum tank system
Coimbatore ...	...		82	Thadapalli channel system
			83	Arkenkota channel system
North Arcot ...	...		84	Pálár anicut system
				Deduct Old Maintenance Charges ...
				Net ...
Chingleput ...	...		85	Pálár anicut system
				Total, Pálár Anicut System ...
North Arcot ...	...		86	Poincy anicut system
			87	Cheyáru anicut system
Chingleput ...	...		88	Chembrambakam tank system
				Deduct Old Maintenance Charges ...
				Net ...
			89	Madras water-supply and irrigation extension ...
				Deduct Old Maintenance Charges ...
				Net ...
South Arcot ...	...		90	Valluru anicut system
			91	Tirukkóyilár anicut system
			92	Mehamattur anicut system
			93	Vriddhachalam anicut system
			94	Shatiatope anicut system
			95	Pelandorai anicut system
				Deduct Old Maintenance Charges ...
				Net ...
Tanjore ...	...		96	Lower Coleroon anicut system
			97	Do. do.
				Total, Lower Coleroon Anicut System ...

MADRAS PRESIDENCY.

OF MADRAS.

ES—cont.

II—cont.

Minor Works in the Madras Presidency for the year 1897-98—continued.

Amount of estimate.	OUTLAY		Grant, 1897-98.	Item No.	Remarks and references.
	To end of 1895-96.	Probable during 1896-97.			
Rs.	Rs.	Rs.	Rs.		
...	...	50	500	81	
...	...	4,000	1,996	82	
...	...	700	1,000	83	
...	...	9,014	4,000	84	
...	...	* 178	* 178		
...	...	8,836	3,822		
...	...	492	3,280	85	
...	...	9,328	7,102		
...	...	2,000	1,000	86	
...	...	3,500	3,000	87	
...	...	1,200	200	88	
...	...	* 2,283	* 2,283		
...	...	— 1,083	— 2,083		
...	...	319	...	89	
...	...	* 3,600	* 3,600		
...	...	— 3,281	— 3,600		
...	...	132	2,701	90	
...	...	2,000	3,002	91	
...	...	802	500	92	
...	...	1,504	496	93	
...	...	2,194	2,000	94	
...	...	2,505	497	95	
...	...	* 59	* 59		
...	...	2,446	438		
...	...	1,600	2,000	96	
...	...	1,800	1,502	97	
...	...	3,400	3,502		

PROVINCIAL—MINOR WORKS
AND NAVIGATION.

GOVERNMENT

CHARG

Part

Detail of the Budget Estimate for Original Works under Irrigation

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.
				REVENUE ACCOUNT—cont.
				Extensions and Improvements—cont.
Tinnevelly ...	...		98	Maradur anicut system
Buckingham Canal.	...		99	Buckingham canal
				Total, Extensions and Improvements ...
				Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.
				Ordinary Major Original Works.
Gódvári Western.	...		100	Diversion of Yerracalva and construction of masonry dams across it and Gudapalli channel.
Kistna Northern.	...		101	Macherla tank
			102	Ipur do.
			103	Jonapad do.
Nellore ...	...		104	Mopaud tank improvements
Bellary ...	...		105	Budamgunta
			106	Excavating a channel and constructing five syphon sluices for Gundiganoor tank.
			107	Improving Royal cheruvu tank
Kurnool ...	...		108	Pedda and Chinna Mallalammah tank of Ramapuram.
Coimbatore ...	...		109	Constructing an aqueduct and bridge in lieu of Pungaliyur outlet on the Chithrachavady channel.
South Arcot ...	...		110	Cutting a channel from Ponnar river to irrigate lands in Tirukandesweram and other villages.
Trichinopoly ...	...		111	Reconstructing bridge over road No. XX over Ponnery channel.
			112	Improving Kothamangalam tank
Madura ...	...		113	Constructing an under-tunnel at 3,200 feet from the head of Seelampatti channel.
Tinnevelly ...	...		114	Improving Vadukachimathal tank and channel.
				Total ...
			115	Minor original works
			116	Old maintenance charges for works for which Capital and Revenue Accounts are kept.
				Total, Ordinary Works ...
			117	Minor Works, Revenue Department, Minor Original works.

MADRAS PRESIDENCY.

OF MADRAS.

ES—cont.

II—cont.

Minor Works in the Madras Presidency for the year 1897-98—continued.

Amount of estimate.	OUTLAY		Grant, 1897-98.	Item No.	Remarks and references.
	To end of 1895-96.	Probable during 1896-97.			
Rs.	Rs.	Rs.	Rs.		
...	...	...	993	98	
...	...	3,030	2,366	99	
...	...	...	24,913		
8,210	1,293	2,000	5,000	100	P.M.G., No. 13 I., dated 10th January 1895.
26,900	10,342	15,719	500	101	" " 984 I. " 6th November 1893.
31,000	...	10,000	12,000	102	" " 1031 I. " 23rd " "
26,630	...	9,000	10,712	103	" " 148 I. " 16th February 1895.
23,800	5,829	14,000	4,000	104	" " 57 I. " 18th January 1896.
2,780	...	...	2,500	105	" " 856 I. " 22nd October 1896.
3,010	...	1,000	2,010	106	" " 467 I. " 1st June 1896.
10,300	...	4,000	6,300	107	" " 224 I. " 4th March 1896.
4,000	2,051	1,000	1,000	108	" " 5 I. " 3rd January 1896.
4,870	...	2,000	2,870	109	" " 513 I. " 16th June 1896.
14,730	1,996	5,545	2,700	110	" " 232 I. " 9th March 1895.
3,360	...	...	3,360	111	" " 697 I. " 17th August 1896.
4,060	...	...	4,060	112	" " 996 I. " 25th November 1896.
2,710	...	500	710	113	" " 50 I. " 17th January 1896.
3,820	...	...	1,820	114	" " 615 I. " 3rd August 1895.
...	...	...	59,542		
...	...	...	1,29,296	115	
...	...	...	10,381	116	
...	...	...	1,99,219		
...	...	...	28,112	117	

PROVINCIAL—MINOR WORKS
AND NAVIGATION.

GOVERNMENT

CHARG

Part

Detail of the Budget Estimate for Original Works under Irrigation

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.
				<i>Agricultural Works.</i>
				Major Original Works.
Gódvári Western.	...		118	Raising the Vasista right bank from head to Chinchinada.
Kistna Eastern...	...		119	Raising the Kistna river left bank below the anicut.
Tanjore	...		120	Raising Mudicoondanar both banks from road No. 15 to eastern limit of Kumbakónam bridge.
				Total ...
			121	Minor original works
				Total, Agricultural Works ...
				LOCAL IRRIGATION CESS FUND.
				43. MINOR WORKS AND NAVIGATION.
				Minor Works for which neither Capital nor Revenue Accounts are kept.
Salem	...		122	Minor original works
Trichinopoly	...		123	Do.
				Total ...

MADRAS PRESIDENCY.

OF MADRAS.

ES—cont.

II—cont.

Minor Works in the Madras Presidency for the year 1897-98—continued.

Amount of estimate.	OUTLAY		Grant, 1897-98.	Item No.	Remarks and references.
	To end of 1895-96.	Probable during 1896-97.			
Rs.	Rs.	Rs.	Rs.		
72,800	15,826	35,596	21,378	118	P.M.G., No. 56 I., dated 19th January 1893.
78,300	23,498	10,000	35,892	119	" " 278 I. " 28th March 1893.
5,150	...	3,000	2,150	120	" " 402 I. " 7th May 1896.
...	...	...	59,420		
...	...	...	17,700	121	
...	...	...	77,120		
...	...	...	5,000	122	
...	...	...	2,000	123	
...	...	...	7,000		

IRRIGATION—MINOR WORKS AND NAVIGATION.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Part II—continued.

General Abstract of the Grant provided for above.

	LOCAL IRRIGATION CESS FUND.	PROVINCIAL FUNDS.	TOTAL.
	Rs.	Rs.	Rs.
IRRIGATION.			
43. MINOR WORKS AND NAVIGATION.			
WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.			
PROVINCIAL.			
CAPITAL.			
Kurnool-Cuddapah Canal	...	2,838	2,838
Munneyru Project	...	72,870	72,870
Sagilérú Project	...	34,293	34,293
Pálár Anicut System	...	13,061	13,061
Pelandorai Anicut System	...	42,951	42,951
Lower Coleroon Anicut System	...	89,707	89,707
Buckingham Canal	...	69,878	69,878
Total	...	3,25,598	3,25,598
REVENUE.			
Cumbum Tank System	...	500	500
Thadapalli Channel System	...	1,996	1,996
Arkenkotta do.	...	1,000	1,000
Pálár Anicut System	...	7,102	7,102
Poinéy do.	...	1,000	1,000
Cheyáru do.	...	3,000	3,000
Chembrambakam Tank	...	2,083	2,083
Madras Water-supply and Irrigation Extension	...	3,600	3,600
Valluru Anicut	...	2,701	2,701
Tirukkóyilúr Anicut System	...	3,002	3,002
Mehamattur do.	...	500	500
Vriddhachalam do.	...	496	496
Shatiatope do.	...	2,000	2,000
Pelandorai do.	...	438	438
Lower Coleroon do.	...	3,502	3,502
Marudur Anicut System	...	993	993
Buckingham Canal	...	2,366	2,366
Total	...	24,913	24,913
Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept, P.W.D.—			
Major	...	59,542	59,542
Minor	...	1,29,296	1,29,296
Old Maintenance charges for works for which Capital and Revenue Accounts are kept			
"Minor Works, Revenue Department," Minor Original Works	...	10,381	10,381
	...	28,112	28,112
Total	...	2,27,331	2,27,331

IRRIGATION—MINOR WORKS AND NAVIGATION.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Part II—continued.

General Abstract of the Grant provided for above—continued.

	LOCAL IRRIGATION CESS FUND.	PROVINCIAL FUNDS.	TOTAL.
	Rs.	Rs.	Rs.
43. MINOR WORKS AND NAVIGATION—cont.			
PROVINCIAL—continued.			
Agricultural Works.			
Works for which neither Capital nor Revenue Accounts are kept.			
Major works	...	59,420	59,420
Minor works	...	17,700	17,700
Total	...	77,120	77,120
LOCAL IRRIGATION CESS FUND.			
43. MINOR WORKS AND NAVIGATION.			
Minor works for which neither Capital nor Revenue Accounts are kept, P.W.D.—			
Minor works	7,000	...	7,000
Total	7,000	...	7,000

IRRIGATION—MINOR WORKS
AND NAVIGATION.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Part III.

Detail of the Budget Estimate for Maintenance and Repairs of Irrigation Minor Works
in the Madras Presidency for the year 1897-98.

Executive division.		ESTIMATE, 1897-98.		ESTIMATE, 1896-97.	
		Amount.	Total.	Amount.	Total.
		Rs.	Rs.	Rs.	Rs.
	IRRIGATION.				
	43. MINOR WORKS AND NAVIGATION.				
	Minor Works for which Capital and Revenue Accounts are kept.				
	Provincial.				
	Maintenance and Repairs.				
Ganjám	Ganjám Minor Rivers System	10,000	10,000	3,000	3,000
Kurnool	Cumbum Tank System	1,500	1,500	1,500	1,500
Coimbatore	Thadapalli Channel System	2,900	2,900	2,989	2,989
Do.	Arkenkotta Channel System	902	902	996	996
Do.	Kalingaroyen Channel System	1,901	1,901	1,998	1,998
North Arcot	Pálár Anicut System—				
	Head Works				
	Káveripak Channel				
	Govindavádi Channel				
	Mahendravadi Channel				
	Dusi channel				
	Tennampettu Channel				
	Chuckramallur Channel				
	Reserve for incomplete works				
Chingleput	Kambakal Channel	8,400	8,400		
	Total	28,404	33,200		
	Deduct Old Maintenance Charges	* 2,909		* 2,909	
			25,495		30,291
North Arcot	Poincy Anicut System	9,000	9,000	8,000	8,000
Do.	Cheyáru Anicut System	12,000	12,000	10,000	10,000
Chingleput	Chembrambakam Tank System	3,005	3,005	3,000	3,000
	Deduct Old Maintenance Charges	* 3,097		* 3,097	
Do.	Madras Water-supply and Irrigation Extension...	2,499	— 92	2,501	— 97
	Deduct Old Maintenance Charges	* 200		* 200	
Do.	Vallur Anicut System	500	2,299	500	2,301
South Arcot	Shatiatope Anicut System	10,000	10,000	10,000	10,000
Do.	Pelandorai Anicut System	3,000	3,000	3,000	3,000
	Deduct Old Maintenance Charges	* 58		* 58	
			2,942		2,942

* These sums are provided under Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.

IRRIGATION—MINOR WORKS
AND NAVIGATION.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Part III—continued.

Detail of the Budget Estimate for Maintenance and Repairs of Irrigation Minor Works
in the Madras Presidency for the year 1897-98—continued.

Executive division.		ESTIMATE, 1897-98.		ESTIMATE, 1896-97.	
		Amount.	Total.	Amount.	Total.
		Rs.	Rs.	Rs.	Rs.
	IRRIGATION—continued.				
	43. MINOR WORKS AND NAVIGATION—				
	continued.				
	Minor Works for which Capital and Revenue Accounts are kept—continued.				
	Provincial—cont.				
	Maintenance and Repairs—continued.				
South Arcot	Vriddhachalam Anicut System	2,500	2,500	2,500	2,500
Do.	Mehamattur Anicut System	1,000	1,000	1,000	1,000
Do.	Tirukkóvilúr Anicut System	8,000	8,000	7,994	7,994
Do.	Lower Coleroon Anicut System	16,000	16,000	16,000	16,000
Tanjore	Do. do.	3,000	3,000	3,000	3,000
Trichinopoly	Nandiar channel	7,610	7,610	606	606
Tinnevelly	Maradur Anicut System	13,000	13,000	8,004	8,004
Ganjám	Chilka Lake Canal	301	301	301	301
Negapatam	Védáranneyam Canal	5,065	5,065	3,504	3,504
Buckingham Canal.	Buckingham Canal—				
	262 miles	35,370	35,370	35,370	35,370
	M. Maintenance establishment	6,000	6,000	6,000	6,000
	Repairs to masonry works	7,000	7,000	8,000	8,000
	Unforeseen and sundry items	4,030	4,030	3,910	3,910
	Payment to the Madras Municipality being the amount of lease for Trevelyan wharf	1,600	1,600	1,600	1,600
	Total		54,000		54,880
			1,89,823		1,72,209
	Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D., Ordinary works	3,70,000	3,70,000	3,47,000	3,47,000
	Old Maintenance charges	1,42,850	1,42,850	1,42,850	1,42,850
	Tank Restoration works to be executed by ordinary divisions	3,91,968	3,91,968	5,44,201	5,44,201
	Agricultural Works—				
	Repairs	3,77,213	3,77,213	3,74,389	3,74,389
	Total		14,71,854		15,80,649
	LOCAL IRRIGATION CESS FUND.				
	43. MINOR WORKS AND NAVIGATION.				
	Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.				
Salem	Cauvery channels in Salem district	2,000	2,000	2,000	2,000
Trichinopoly	Maradur channel			3,000	3,000
	Total		2,000		5,000

PROVINCIAL—MINOR WORKS
AND NAVIGATION.

MADRAS PRESIDENCY

GOVERNMENT OF MADRAS.

CHARGES.

Part IV.

Detail of the Budget Estimate for Establishment of the Irrigation Branch in the Madras Presidency
for the year 1897-98.

Particulars.	BUDGET ESTIMATE FOR 1897-98.			Revised Estimate for 1896-97.
	Per ensem.	Per annum.	Total.	
	Rs.	Rs.	Rs.	Rs.
IRRIGATION.				
43. Minor Works and Navigation.				
PROVINCIAL.				
Grant for works and repairs	...	...	21,26,816	28,48,651
Deduct items on which no charge for establishment is admis- sible—				
Grant for land compensation	...	...	16,353	56,156
Net Grant for Works and Repairs ...	...	...	21,10,463	27,92,495
A. Share of the Public Works establishment charges at 23 per cent. on the net grant for works and repairs.	...	...	4,85,407	6,42,274
Estimate of Direct Revenue	...	...	1,65,000	1,65,000
B. Share of the Public Works establishment charges at 10 per cent. on Direct Revenue.	...	...	16,500	16,500
Revenue due to old Irrigation under Major Productive Works.	...	...	39,29,900	38,88,000
C. Share of the Public Works establishment at 6 per cent. on Revenue.	...	...	2,35,794	2,33,280
Total, A + B + C ...	...	...	7,37,701	8,92,054
Total, Establishment Charges ...	...	...	7,37,701	8,92,054

IRRIGATION—MINOR WORKS
AND NAVIGATION.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Part IV-A.

Detail of estimated charges for establishment by systems of canals for 1897-98.

	PERCENTAGE ON THE GRANT FOR WORKS AND REPAIRS.		PERCENTAGE ON THE DIRECT REVENUE.		PERCENTAGE ON THE INDIRECT REVENUE.		Cost of Establish- ment actually employed.	Total Charges for Establish- ment.
	Grant for Works and Repairs.	23 per cent.	Direct Revenue.	10 per cent.	Indirect Revenue.	6 per cent.		
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
IRRIGATION.								
43. MINOR WORKS AND NAVIGATION.								
PROVINCIAL.								
Minor Works for which Capital and Revenue Accounts are kept.								
Capital.								
Kurnool-Cuddapah Canal	2,838	652	...	...	...	...	...	652
Munneyru Project	72,870	16,760	...	...	...	...	...	16,760
Sagilérú Project	34,293	7,887	...	...	...	...	...	7,887
Pálár Anicut System	7,708	1,773	...	...	...	...	...	1,773
Pelandorai Anicut System	42,951	9,879	...	...	...	...	...	9,879
Lower Coleroon Anicut System	89,707	20,633	...	...	...	...	...	20,633
Buckingham Canal	69,878	16,072	...	...	...	...	...	16,072
Total ...	3,20,245	73,656	...	...	...	...	...	73,656
Revenue.								
Ganjám Minor Rivers System	10,000	2,300	...	...	...	...	...	2,300
Cumbum Tank System	2,000	460	...	...	...	...	...	460
Thadapalli Channel System	4,896	1,126	80	8	...	...	...	1,134
Arkenkotta do.	1,902	438	...	...	...	...	...	438
Kalingaroyen do.	1,901	437	120	12	...	...	...	449
Pálár Anicut System	32,597	7,497	1,300	130	...	...	...	7,627
Poinery do.	10,000	2,300	500	50	...	...	...	2,350
Cheyáru do.	15,000	3,450	200	20	...	...	...	3,470
Chesambakam Tank System	— 2,175	— 500	140	14	...	...	...	— 486
Madras Water-supply and Irrigation Extension	— 1,301	— 299	12,500	1,250	...	...	...	951
Vallur Anicut System	3,201	737	20	2	...	...	...	739
Tirukkóvilúr do.	11,002	2,531	570	57	...	...	...	2,588
Mehamattur do.	1,500	345	50	5	...	...	...	350
Vridháchalam do.	2,996	689	50	5	...	...	...	694
Shatlatope do.	12,000	2,760	300	30	...	...	...	2,790
Pelandorai do.	3,380	777	250	25	...	...	...	802
Lower Coleroon do.	22,502	5,175	1,030	103	...	...	...	5,278
Nundiar Channel Extension	7,610	1,750	...	...	...	...	...	1,750
Maradur do.	13,993	3,218	290	29	...	...	...	3,247
Chilka Lake Canal	301	69	...	...	...	...	...	69
Buckingham Canal	56,366	12,964	1,11,400	11,140	...	...	...	24,104
Védáranniyam Canal	5,065	1,165	1,200	120	...	...	...	1,285
Total ...	2,14,736	49,389	1,30,000	13,000	...	...	...	62,389

IRRIGATION—MINOR WORKS
AND NAVIGATION.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Part IV-A—continued.

Detail of estimated charges for establishment by systems of canals for 1897-98—continued.

	PERCENTAGE ON THE GRANT FOR WORKS AND REPAIRS.		PERCENTAGE ON THE DIRECT REVENUE.		PERCENTAGE ON THE INDIRECT REVENUE.		Cost of Establish- ment actually employed.	Total Charges for Establish- ment.
	Grant for Works and Repairs.	23 per cent.	Direct Revenue.	10 per cent.	Indirect Revenue.	6 per cent.		
IRRIGATION—continued. 43. MINOR WORKS AND NAVIGATION—continued. Provincial—continued. Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Ordinary Works	5,58,838	1,28,533	10,000	1,000	...	...	...	1,29,533
Tank Restoration Works	3,91,968	90,153	...	...	...	...	...	90,153
Old Maintenance charges	1,53,231	35,243	...	...	39,29,900	2,35,794	...	2,71,037
Minor Works, Revenue Department...	28,112	6,466	...	...	...	...	...	6,466
Total ...	11,32,149	2,60,395	10,000	1,000	39,29,900	2,35,794	...	4,97,189
Agricultural Works. Works for which neither Capital nor Revenue Accounts are kept ...	4,43,333	1,01,967	25,000	2,500	...	...	...	1,04,467
Total, Provincial ...	21,10,463	4,85,407	1,65,000	10,500	39,29,900	2,35,794	...	7,37,701

IRRIGATION—MINOR WORKS
AND NAVIGATION.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Part V.

Detail of the Budget Estimate for Tools and Plant under Irrigation Minor Works in the Madras Presidency
for the year 1897-98.

	Special Tools and Plant.	General Tools and Plant.	Total.	Grant for Works and Repairs.
	Rs.	Rs.	Rs.	Rs.
IRRIGATION.				
43. MINOR WORKS AND NAVIGATION.				
Provincial.				
Minor Works for which Capital and Revenue Accounts are kept.				
Capital.				
Pálár Anicut System	6	...	6	...
Munneyeru project	400	...	400	...
Buckingham Canal	4,000	...	4,000	...
Total ...	4,406	...	4,406	...
Revenue.				
Pálár Anicut System	4	...	4	...
Deduct Old Maintenance charges ...	— 4	...	— 4	...
Net ...	— 4	...	— 4	...
Chembrambakam Tank System	109	...	109	...
Deduct Old Maintenance charges ...	— 109	...	— 109	...
Net ...	— 109	...	— 109	...
Madras Water-supply and Irrigation Extension ...	10	...	10	...
Deduct Old Maintenance charges ...	— 10	...	— 10	...
Net ...	— 10	...	— 10	...
Pelandorai Anicut System	2	...	2	...
Deduct Old Maintenance charges ...	— 2	...	— 2	...
Net ...	— 2	...	— 2	...
Buckingham Canal	3,000	...	3,000	...
Total ...	2,875	...	2,875	...
Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.				
Ordinary Works	...	8,383	8,383	5,58,838
Tank Restoration Scheme	...	5,879	5,879	3,91,968
Old Maintenance charges	1,868	...	1,868	1,53,231
Minor Works, Revenue Department ...	...	422	422	28,112
Agricultural Works. Works for which neither Capital nor Revenue Accounts are kept	...	6,650	6,650	4,43,333
Total ...	1,868	21,334	23,202	15,75,482
Total, Provincial ...	9,149	21,334	30,483	...

PROVINCIAL—MINOR WORKS
AND NAVIGATION.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Part VI.

Abstract of the Probable Increase or Decrease in the Suspense Accounts of Irrigation Minor Works in the Madras Presidency for the year 1897-98—Nil.

All Suspense Accounts are included under Provincial, 45. Civil Works.

IRRIGATION—MINOR WORKS
AND NAVIGATION.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Schedule A—Showing the distribution of the grants for Minor Original Works and Repairs for 1897-98.

	Irrigation Revenue.	MINOR ORIGINAL WORKS (UNDER Rs. 2,500 EACH).	REPAIRS.
		1897-98.	1897-98.
	Rs.	Rs.	Rs.
Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept.			
Old Maintenance charges—		3,564	13,860
Pennér Anicut System	...	345	11,884
Sangam do. do.	...	...	1,05,634
Cauvery Delta do.	...	352	5,208
Srivaikuntam Anicut System	...	2,283	3,097
Chembrambakam Tank	...	178	2,909
Pálár Anicut System	...	59	58
Pelandorai Anicut System	...	3,600	200
Madras Water-supply and Irrigation Extension Project	...		
Total	...	10,381	1,42,850
Minor Works, Public Works Department, Ordinary—			
Divisions—			
Ganjám	98,948	5,000	12,000
Vizagapatam	1,62,862	6,000	9,500
Górávari Eastern	97,089	8,000	17,500
Do. Central		2,000	4,000
Do. Western			6,000
Kistna Eastern	54,271	1,500	4,000
Do. Northern			
Do. Western	2,96,364	15,500	26,000
Nellore	2,91,144	10,000	30,000
Cuddapah	84,959	3,000	10,000
Kurnool	3,74,831	5,000	30,000
Bellary			2,000
West Coast	3,23,203	6,000	12,000
Coimbatore	1,50,390	4,000	12,000
Salem	2,43,075	15,000	25,000
North Arcot	6,22,544	10,000	35,000
Chingleput	3,81,293	10,000	35,000
South Arcot	45,162	1,000	2,000
Tanjore			
Negapatam	4,43,278	10,000	25,000
Trichinopoly	3,50,035	6,000	37,000
Madura	7,60,651	6,000	36,000
Tinnevely			
Total	...	1,24,000	3,70,000
Reserve	...	5,296	...
Total	...	1,29,296	3,70,000
Minor Works, Revenue Department, Original Works—Reserve ...			
	...	28,112	...

IRRIGATION—MINOR WORKS
AND NAVIGATION.

MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Schedule A—Showing the distribution of the grants for Minor Original Works and Repairs
for 1897-98—continued.

								Irrigation Revenue.	MINOR ORIGINAL WORKS (UNDER Rs. 2,500 EACH).	REPAIRS.
									1897-98.	1897-98.
Tank Restoration Works.								Rs.	Rs.	Rs.
Execution—										
Divisions—										
Gó dávari Eastern	...	...	...	...	...	...	...	...	...	6,500
Kistna Northern	...	...	...	...	...	...	...	...	...	20,000
Salem	...	...	...	...	...	...	...	...	...	50,000
North Arcot	...	...	...	...	...	...	...	...	...	40,000
Chingleput	...	...	...	...	...	...	...	...	...	75,000
South Arcot	...	...	...	...	...	...	...	...	...	50,468
Negapatam	...	...	...	...	...	...	...	...	...	30,000
Madura	...	...	...	...	...	...	...	...	...	70,000
Tinnevelly	...	...	...	...	...	...	...	...	...	50,000
Total								...	...	3,91,968
Agricultural Works.										
Divisions—										
Ganjám	...	...	...	...	...	...	...	...	3,000	6,000
Vizagapatam	...	...	...	...	...	...	...	...	300	2,500
Gó dávari Eastern	...	...	...	...	...	...	...	...	...	20,000
Do. Central	...	...	...	...	...	...	...	...	1,000	65,000
Do. Western	...	...	...	...	...	...	...	...	3,000	16,000
Kistna Eastern	...	...	...	...	...	...	...	...	...	9,000
Do. Northern	...	...	...	...	...	...	...	...	...	11,588
Do. Western	...	...	...	...	...	...	...	...	...	1,00,000
Nellore	...	...	...	...	...	...	...	...	...	6,500
Buckingham Canal	...	...	...	...	...	...	...	...	...	7,000
Cuddapah	...	...	...	...	...	...	...	...	...	4,000
Coimbatore	...	...	...	...	...	...	...	...	3,500	6,500
Salem	...	...	...	...	...	...	...	...	...	625
Chingleput	...	...	...	...	...	...	...	...	500	1,500
South Arcot	...	...	...	...	...	...	...	...	400	6,000
Tanjore	...	...	...	...	...	...	...	...	2,000	60,000
Negapatam	...	...	...	...	...	...	...	...	2,000	20,000
Trichinopoly	...	...	...	...	...	...	...	...	2,000	25,000
Tinnevelly	...	...	...	...	...	...	...	...	...	10,000
Total								...	17,700	3,77,213

When given for copying
When copied
When examined
When signed

189

AGAIN G.O., No
189

DATED

URGENT N.

INCLOSURES TO G. No.

ORDER OF GOVERNMENT

A A A A A A A

LETTER OF GOVERNMENT.

STATEMENT WITH DITTO.

PAPERS NOT FILLED UP, BEING MEANT FOR DESPATCH
IN ORIGINAL.

E.F.—
A = Copy in full.
B = Not to be copied.
P = Copy abstract only.
Q = Copy heading only