Public Works (1896) Department.

G.O., No. 3569

Dated 22/4/96

[Despatch Abstract.]

Main channel XI reach, Perijas
Project — Revised estimate
for excavating — Sanctioned

[P.W. 36.
1,000 23-10-96.]

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.

Govt. of {1896} Madras.

PUBLIC WORKS.

Dated April, 22nd.

Read. *Encl.*

G.O. No. 356 I., 22nd April 1896.

APRIL.

Periyar Main Channel

Revised estimate of Rs. 61,000 for excavating main channel, XI Reach, Periyár Project, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

READ—the following papers:—

From W. HUGHES, Esq., Superintending Engineer, VI Circle, to the Chief Engineer, Public Works Department, dated Trichinopoly, 30th October 1895, No. 673 M.D.

I have the honour to submit, for your approval and sanction, a revised estimate amounting to Rs. 61,000 for excavating the XI Reach of the Periyár main canal. The original estimate for this work was Rs. 30,650, which was increased to Rs. 39,512 in the revised estimate sanctioned in G.O., No. 97 I. of 3rd February 1894. It cannot be ascertained how the latter amount was arrived at, nor is there any record of authority for the diversion of the channel beyond the statement in the progress report for October 1891 (printed with G.O. No. 883 I., dated 16th November 1891) that the proposed diversion had been inspected and approved by the Chief Engineer.

2. The line has been taken much nearer the hills and its level at the end is 35½ feet higher in level than originally designed. It will therefore command more land, but this advantage has been gained at the expense of taking it through country where in places high-revetted embankments, rock-cutting and walling were unavoidable. The length of the reach is also increased about 7 furlongs and the bed width to 15 feet, while the masonry works are designed for the full ultimate discharge corresponding to a bed width of 18¾ feet.

The work is nearly completed and has been paid for at the same rates as work in other parts of the canal.

ENCLOSURE.

REPORT to accompany revised estimate for the XI Reach.

	RS.
Estimate	61,000

The original estimate for this reach was revised as per G.O. No. 97 I., dated 3rd February 1894—see paragraph 23 of Chief Engineer's note received with above. The sum of Rs 30,650 originally provided was raised to Rs. 39,512. How the latter figure was arrived is not known. It is therefore impossible to explain the excesses categorically.

2. The alignment of the XI Reach runs along the foot of the rocky hills where heavy embankments alternate with rocky cuttings. The soil for the former is bad and has had to be revetted in places. At the Kidari rock-cutting a masonry wall, 1,500 feet long, forms the lower or right bank of the canal. It is on this section (chain 170 to end) that the excess has occurred.

3. The new alignment commands more land, being 35½ feet higher at the end of the reach than the original line. It is also ⅛ mile longer. The excess amounts to Rs. 21,488. This will be met by savings on other sub-heads of the project estimates, notably land compensation and masonry works. The work is nearly completed, the outlay up to date being Rs. 54,914.

4. The Kidari rock wall, cutting and embankment, item Nos. 17, 20 and 25, alone amount to Rs. 16,298 for a length of 10 chains (170 to 180).

5. The channel has been cut with a bottom width of 15 feet, but the masonry works have been designed to carry the full ultimate discharge with a bottom width of 18·75—see statement E attached.

28th June 1895. (Signed) J. H. MEDLICOTT,
Executive Engineer, Madura Division.

To the Superintending Engineer, VI Circle, dated 27th November 1895, No. 3690 C.
From the „ „ VI „ „ 20th March 1896, No. 289 M.D.

No. 73 I.

Submitted to Government with a recommendation that the revised estimate forwarded by the Superintending Engineer, VI Circle, be sanctioned.

28th March 1896. (Signed) R. R. E. DRAKE-BROCKMAN, Col., R.E.,
Chief Engineer for Irrigation.

ORDER—No. 356 I., dated 22nd April 1896.

The following revised estimate is sanctioned in lieu of the provision of Rs. 39,512 made for item 210 of the revised estimate printed in Proceedings of Madras Government, No. 97 I., dated 3rd February 1894, the excess of Rs. 21,488 being met from the balance available for unforeseen works of the Periyar project, which will then be reduced to Rs. 38,621 :—

Capital expenditure not charged to Revenue.
49. Irrigation.
Periyár Project.
1. Works.
2. Main Canals and Branches.
12. Earthwork.

	RS.
Excavating main channel, XI Reach, estimate	61,000

2. This sanction is registered as No. 13 I. of 1896–97.

(True Extract.)

Under Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Chief Engineer for Irrigation.
„ Superintending Engineer, VI Circle, with eight enclosures.
„ Examiner, Public Works Accounts.
„ Revenue Department.

Exd. T. K. Narayana Aiyangar,
Spare Copies

A.

PUBLIC WORKS DEPARTMENT,
IRRIGATION BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the

READ the following

From Supt Engr, VI Circh. No. 673 M.D. & 30.10.95
Do. - 3690 C & 27.11.95
Do. - 289 M.D & 20.3.96
No. 73. I & 28.3.96

Submitted to Govt with a recommendation that the revised estimate forwarded by the Supt Engr, VI Circh, be sanctioned.

Order thereon
No. 356 I & 22 April 1896
The following revised estimate is sanctioned in lieu of the provision of Rs. 39,512 made for item 210 of the revised estimate printed in P.M.G No. 97. I., & 3. Feb/94,

the excess of Rs 21,488
being met from the
balance available
for unforeseen works
of the Perijn Project
which will then be
reduced to Rs. 38621
Capital Expenditure
not charged to Revs.

49. Irrigation
Perijn Project
I. Works.

2. Main Canals & Branches
12. Earthwork.

Excavating main channel
N Reach. Estimate Rs 6,000

2. This function
is registered as No.
13 I of 1896-97

JL
2/3.

Audit
28/3

DESPATCHED
4 MAY. 96

To
The Chief Engr for I.
Supdg Engr V Circle & enclosures.
Ex. I. 452
Rev Dept.

Rs 58,889

Revised Estimate
for Excavating
Channel, XI Reach,
Periyar Project

7.E.D. 22/4

Issue.

Rs. 61000-

Report

to accompany revised estimates for the XI Reach.

1. The original estimate for this reach was revised as per G.O. 971 dated 3rd February 1894. See para 23 of Chief Engineer's note received with above the Sum of Rs 30650 originally provided was raised to Rs 39512. How the latter figure was arrived is not known. It is, therefore, impossible to explain the excesses categorically.

2. The alignment of the XI Reach runs along the foot of the rocky hills where heavy embankments alternate with rocky cuttings. The soil for the former is bad and has had to be revetted in places. At the Kidari rock cutting, a masonry wall 1500 ft long forms the lower or right bank of the canal. It is, on this Section (chain 170 to end), that the excess has occurred.

3. The new alignment commands more land being 35½ ft higher at the end of the reach than the original line. It is also 7/8 mile longer. The excess amounts to Rs 21488- This will be met by savings on other Subheads of the Project estimates notably, land compensation and masonry works. The work is nearly completed, the outlay up to date being Rs 54914

4. The Kidari rock walls, cutting and embankment item Nos 17, 20 & 25 alone amount to Rs 16298 for a length

E. I. Form No. 1—500—14-5-95

M.E-31/3 RZZ/4

O.L.S. 16(1) 16.4.

length of 20 chains (170 to 180)

5. The channel has been cut with a bottom width of 16 ft, but the masonry works have been designed to carry the full ultimate discharge with a bottom width of 18·75. See statement E attached.

Executive Engineer 28/8/95
Madura Division

C.W. Lee 7/8408/95

OFFICE OF THE SUPERINTENDING ENGINEER,
6TH CIRCLE,

No. 673 md/ Trichinopoly, 30 October 1895.

FROM W. Hughes Esquire
THE SUPERINTENDING ENGINEER,
6th CIRCLE.

TO
THE CHIEF ENGINEER,

SIR,

ENCLOSURES. (3)

I have the honor to submit for your approval and sanction a revised estimate amounting to Rs 61,000 for excavating the XV Reach of the Periyar main canal. The original estimate for this work was Rs 30,650 which was increased to Rs 39512 in the revised estimate sanctioned in G.O. No: 97 I of 3rd February 1894. It cannot be ascertained how the latter amount was arrived at, nor is there any record of any authority for the diversion of the channel beyond the statement in the Progress Report for October 1894

500—13 11-93.

(printed with G.O. No: 883 I of 16 November 1891) that the proposed diversion had been inspected & approved by the Chief Engineer.

2. The line has been taken much nearer the hills and it's level at the end is 35½ ft. higher in level than originally designed. It will therefore command more land but this advantage has been gained at the expense of taking it through country where in places high revetted embankments, rock cutting & walling were unavoidable. The length of the reach is also increased about 7 furlongs and the bed width to 65 feet while the masonry works are designed for the full ultimate discharge corresponding to a bed width of 18 3/4 feet.

The work is nearly completed and has been paid for at the same rates as work in other parts of the canal.

I have the honour to be
Sir,
Your most obedient Servant

W. Hughes
Supg Engineer, W Circle

Enclosures:- 3
1. Detailed Estimate
1. abstract Estimate with a report & statements A, B & C.
1. Comparative Statt.

3

C.E. 29/12.

P. W. CURRENT No. 8408

P. W. D 6th CIRCLE.

FROM

THE SUPERINTENDING ENGINEER,
6TH CIRCLE.

TO

THE CHIEF ENGINEER,
P. W. D.

No. 673 md

Dated 30 October 1895.
Received 30

Enclosures. 3.

Recd. 31.10.95

Rec'd

11th Reach of the Periyar main Canal:—

Submits for sanction a revised estimate of Rs 61000 for excavating the ——

S.E.I.

The estimate has been checked

23-11-95.

27/11/95

for a

No. 3690 cd/20 - November 1895

Memo

With reference to letter no. 673 M.D., of 30th Oct 95, from the Supdg Engr, 6th Circle, the undersigned has the honor to request that he will be so good as to report at an early date the items of the sanctioned estimate printed in P.W.D. No 97. I. of 3rd Feb 1894. from which the anticipated excess of Rs 21488 on earthwork of the XI reach of the Periyar main channel should be met. It should also be stated how much of the excess should be provided from each item.

To the Supdg Engr VI

DESPATCHED
27 NOV. 95

26/11

26/11/95

OFFICE OF THE SUPERINTENDING ENGINEER,
6TH CIRCLE,

No. 209 md,

Trichinopoly, 20 March 1896.

FROM W. Hughes Esquire,
THE SUPERINTENDING ENGINEER,
6th CIRCLE.

TO
THE CHIEF ENGINEER,
P. W. D.

SIR,

ENCLOSURES.

In reference to your No: 3690 C dated 27 November 1895, I am not sure that there will be any savings to meet the anticipated excess of Rs 21,488 on the earthwork of the XI Reach of the Periyar Main Canal. There may possibly be some saving on the 11th & 12th Branches but nothing definite can be known about this until the estimates are completed which the Executive Engineer reports will not be until middle of May. The Executive Engineer expects a very large saving on the 12' Branch but I doubt whether he is right. The hydraulic details of the channel

a

originally
No designed ~~mean~~ velocity of 4 ft head:—

Bed ——————— 32 feet
Depth of water ——— 2
Fall per mile ——— 6 *
Discharge. ——————— 188 C ft.

* Intended to be 288 C.F.S. but the calculation made by absolute formula.

and as arrived by Inv: Irrigation:—

Bed ——————— 22
Depth of water ——— 4
Fall per mile ——— 3
Mean Velocity ——— 2·97
Discharge. ——————— 332.

I think a mean velocity of 3 ft per second is too much for sandy soil & have directed the Executive Engineer to reduce it to 2 feet where the soil is bad, by altering the gradient & bedwidth. So on the whole I see — scarcely any hope of effecting a saving on the original estimate.

I have the honor to be
Sir,
Your most obedt. Servant.

W. Hughes

Executive Engineer, 1st Circle

C.W. 19/3.

P. W. D. 6th CIRCLE.

CHIEF ENGINEER FOR IRRIGATION
24 MAR 96
No. 1898

P. W. CORR. No. 2883.

Ques: 24.3.96

FROM

THE SUPERINTENDING ENGINEER,

6TH CIRCLE.

TO

THE CHIEF ENGINEER,

P.W.D.

No. 209 md

No. 883-43 dy 16-11-91.
97-83-3-2-94.

Dated 20 } March 1896.
Received 20

Enclosures.

XI Reach of the Periyar main canal: —

Reporting on the anticipated savings in the —

FINAL ISSUE.

Public Works Department.

BUDGET ESTIMATE

OF

REVENUE AND EXPENDITURE

UNDER

IRRIGATION-MAJOR WORKS

IN THE

MADRAS PRESIDENCY

FOR THE YEAR

1896-97.

MADRAS,
24th April 1896.

(Signed) R. R. E. DRAKE-BROCKMAN, Colonel, R.E.,
Secretary to Govt., P.W.D.,
Irrigation Branch.

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ABSTRACT BUDGET ESTIMATE OF EXPENDITURE	6
DETAILS OF THE BUDGET ESTIMATE OF EXPENDITURE—	
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GOVERNMENT OF MADRAS.

REVENUE.

Abstract Budget Estimate of Revenue expected from Irrigation—Major Works in the Madras Presidency for the year from 1st April 1896 to 31st March 1897.

	Actual Realizations, 1894-95.	Budget Estimate, 1895-96.	Revised Estimate, 1895-96.	Budget Estimate, 1896-97.
IRRIGATION.	Rs.	Rs.	Rs.	Rs.
IMPERIAL.				
MAJOR PRODUCTIVE WORKS (DIRECT RECEIPTS).				
Gódávari Delta System, Collections in the Public Works Department.	1,25,418	1,20,000	1,20,000	1,20,000
Kistna Delta System do. do.	53,745	50,000	50,000	48,000
Pennéru Anicut System do. do.	397	600	600	400
Sangam Anicut System do. do.	536	700	700	600
Cauvery Delta System do. do.	3,569	2,500	2,500	3,500
Srívaikuntam Anicut System do. do.	1,566	1,500	1,500	1,000
Barur tank do. do.	26	...	...	...
Rushikulya do. do.	1,023	...	...	1,500
Kurnool-Cuddapah Canal. Collections in the Revenue Department ...	1,00,318	97,895	97,895	97,895
Kurnool-Cuddapah Canal. *Deduct* Collection Charges	5,225	4,895	4,895	4,895
Kurnool-Cuddapah Canal. Net Collections in the Revenue Department ...	95,093	93,000	93,000	93,000
Kurnool-Cuddapah Canal. Collections in the Public Works Department...	8,796	11,700	11,700	10,000
Total ...	1,03,889	1,04,700	1,04,700	1,03,000
Total ...	2,90,169	2,80,000	2,80,000	2,78,000

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, 1894-95.	Budget Estimate, 1895-96.	Revised Estimate, 1895-96.	Budget Estimate, 1896-97.
IRRIGATION.	Rs.	Rs.	Rs.	Rs.
XXIX. MAJOR WORKS—PORTION OF LAND REVENUE DUE TO IRRIGATION.				
Gódávari Delta—				
Irrigation Revenue	23,46,014	28,25,000	23,75,000	28,80,000
Deduct Revenue due to old Irrigation	1,24,000	1,24,000	1,24,000	1,24,000
Revenue due to the System	22,22,014	27,01,000	22,51,000	27,56,000
Share of enhanced Land Revenue	1,57,189	1,60,000	1,60,000	1,70,000
Total ...	23,79,203	28,61,000	24,11,000	29,26,000
Deduct Collection Charges in the Civil Department	1,18,960	1,43,050	1,20,550	1,46,300
Net Revenue ...	22,60,243	27,17,950	22,90,450	27,79,700
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	778	1,050	550	1,300
Total ...	22,61,021	27,19,000	22,91,000	27,81,000
Kistna Delta—				
Irrigation Revenue	18,64,067	24,50,000	22,50,000	24,30,000
Deduct Revenue due to old Irrigation	71,000	71,000	71,000	71,000
Revenue due to the System	17,93,067	23,79,000	21,79,000	23,59,000
Share of enhanced Land Revenue	1,69,333	1,70,000	1,70,000	1,80,000
Total ...	19,62,400	25,49,000	23,49,000	25,39,000
Deduct Collection Charges in the Civil Department	98,120	1,27,450	1,17,450	1,27,000
Net Revenue ...	18,64,280	24,21,550	22,31,550	24,12,000
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	2,616	10,450	3,450	10,000
Total ...	18,66,896	24,32,000	22,35,000	24,22,000
Pennéru Anicut—				
Irrigation Revenue	2,62,846	2,60,000	2,63,000	2,63,000
Deduct Revenue due to old Irrigation	1,17,000	1,17,000	1,17,000	1,17,000
Revenue due to the System	1,45,846	1,43,000	1,46,000	1,46,000
Share of enhanced Land Revenue	19,909	19,500	20,000	20,000
Total ...	1,65,755	1,62,500	1,66,000	1,66,000
Deduct Collection Charges in the Civil Department	8,288	8,125	8,300	8,300
Net Revenue ...	1,57,467	1,54,375	1,57,700	1,57,700
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	345	625	300	300
Total ...	1,57,812	1,55,000	1,58,000	1,58,000

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, 1894–95.	Budget Estimate, 1895–96.	Revised Estimate, 1895–96.	Budget Estimate, 1896–97.
	Rs.	Rs.	Rs.	Rs.
IRRIGATION—*continued.*				
XXIX. MAJOR WORKS—PORTION OF LAND REVENUE DUE TO IRRIGATION—continued.				
Sangam Anicut—				
Irrigation Revenue	3,02,603	3,84,000	3,84,000	4,01,000
Deduct Revenue due to old Irrigation	1,39,000	1,39,000	1,39,000	1,39,000
Revenue due to the System	1,63,603	2,45,000	2,45,000	2,62,000
Share of enhanced Land Revenue	15,925	21,500	21,500	22,000
Total	1,79,528	2,66,500	2,66,500	2,84,000
Deduct Collection Charges in the Civil Department	8,977	13,325	13,500	14,000
Net Revenue	1,70,551	2,53,175	2,53,000	2,70,000
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	5,664	4,825	6,000	6,000
Total	1,76,215	2,58,000	2,59,000	2,76,000
Cauvery Delta—				
Irrigation Revenue	37,78,719	38,10,000	40,80,000	41,50,000
Deduct Revenue due to old Irrigation	30,21,510	30,45,000	32,61,000	33,17,000
Revenue due to the System	7,57,209	7,65,000	8,19,000	8,33,000
Share of enhanced Land Revenue	1,09,404	1,25,000	1,16,000	1,17,000
Total	8,66,613	8,90,000	9,35,000	9,50,000
Deduct Collection Charges in the Civil Department	43,331	45,000	47,000	48,000
Net Revenue	8,23,282	8,45,000	8,88,000	9,02,000
Srivaikuntam Anicut—				
Irrigation Revenue	1,75,555	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	96,555	1,06,000	1,06,000	1,06,000
Share of enhanced Land Revenue	1,828	2,000	2,000	2,000
Total	98,383	1,08,000	1,08,000	1,08,000
Deduct Collection Charges in the Civil Department	4,919	5,000	5,000	5,000
Net Revenue	93,464	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, 1894–95.	Budget Estimate, 1895–96.	Revised Estimate, 1895–96.	Budget Estimate, 1896–97.
	Rs.	Rs.	Rs.	Rs.
IRRIGATION—*continued.*				
XXIX. MAJOR WORKS—PORTION OF LAND REVENUE DUE TO IRRIGATION—continued.				
Barur Tank—				
Irrigation Revenue	11,840	14,000	12,000	14,000
Deduct Revenue due to old Irrigation	2,000	2,000	2,000	2,000
Revenue due to the System	9,840	12,000	10,000	12,000
Share of enhanced Land Revenue	2	...	...	...
Total	9,842	12,000	10,000	12,000
Deduct Collection Charges in the Civil Department	492	1,000	1,000	1,000
Net Revenue	9,350	11,000	9,000	11,000
Kurnool-Cuddapah Canal—				
Share of enhanced Land Revenue under tanks owing to supply of canal water	4,455	8,000	8,400	8,400
Deduct Collection Charges in the Civil Department	223	1,000	400	400
Net Revenue	4,232	7,000	8,000	8,000
Rushikulya Project—				
Irrigation Revenue	47,154	91,000	91,000	1,00,000
Deduct Revenue due to old Irrigation	20,850	28,000	28,000	30,000
Revenue due to the System	26,304	63,000	63,000	70,000
Share of enhanced Land Revenue	6	150	150	150
Total	26,310	63,150	63,150	70,150
Deduct Collection Charges in the Civil Department	1,316	3,150	3,400	3,950
Net Revenue	24,994	60,000	59,750	66,200
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	...	...	250	800
Total	24,994	60,000	60,000	67,000
Total—				
Irrigation Revenue	87,88,798	1,00,19,000	96,40,000	1,04,23,000
Deduct Revenue due to old Irrigation	35,74,360	36,05,000	38,21,000	38,79,000
Revenue due to the System	52,14,438	64,14,000	58,19,000	65,44,000
Share of enhanced Land Revenue	4,78,051	5,06,150	4,98,050	5,19,550
Total	56,92,489	69,20,150	63,17,050	70,63,550
Deduct Collection Charges in the Civil Department	2,84,626	3,47,100	3,16,150	3,53,950
Net Revenue	54,07,863	65,73,050	60,00,900	67,09,600
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	9,403	16,950	10,100	18,400
Total	54,17,266	65,90,000	60,11,000	67,28,000

GOVERNMENT OF MADRAS.

CHARGES.

Abstract Budget Estimate of Expenditure on Irrigation—Major Works in the Madras Presidency for the year from 1st April 1896 to 31st March 1897.

		Reference to Detailed Estimate.	Actual Outlay, 1894-95.	Budget Estimate, 1895-96.	Revised Estimate, 1895-96.	Budget Estimate, 1896-97.
IMPERIAL.						
MAJOR (PROTECTIVE) WORKS.						
Famine Relief and Insurance.						
35. CONSTRUCTION OF PROTECTIVE IRRIGATION WORKS.		PAGES.	Rs.	Rs.	Rs.	Rs.
1. Works	In progress ... Rs. 63,500 / Not commenced. 90,146	8 & 9	2,46,199	2,46,577	1,89,667	1,53,646
2. Establishment		42	52,613	51,423	38,333	33,039
3. Tools and plant		43	11,366	2,000	...	2,315
5. Receipts on capital account		...	— 452	...	...	...
Total ...			3,09,726	3,00,000	2,28,000	1,89,000
42. (WORKING EXPENSES).						
1. Extensions and improvements.	In progress ... Rs. ... / Not commenced 57,712	8 to 11	51,046	48,392	54,026	57,712
2. Maintenance and repairs		35 to 39	5,16,590	5,01,564	6,04,151	5,71,224
3. Establishment		42	4,61,014	5,30,743	5,20,136	5,56,121
4. Tools and plant		43 to 45	82,488	1,11,301	1,06,687	94,943
5. Refunds of revenue		...	893	...	...	...
Total, Working Expenses ...			11,12,031	11,92,000	12,85,000	12,80,000
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.						
49. IRRIGATION.						
1. Works	In progress ... Rs. 2,82,342 / Not commenced ... 4,64,410	10 to 33	10,67,792	9,04,825	10,24,293	7,46,752
2. Establishment		42	2,38,689	1,99,675	2,27,207	1,62,518
3. Tools and plant		45	1,11,723	45,500	45,500	31,730
4. Suspense account		...	— 807	...	...	...
5. Receipts on capital account		...	— 2,992	...	...	...
Total, Capital Expenditure ..			14,14,405	11,50,000	12,97,000	9,41,000

GOVERNMENT OF MADRAS.

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Part I.

Details of the Budget Estimate of Expenditure on Irrigation—Major Works in the Madras Presidency for the year 1896-97, arranged by Projects and Objects of Work.

	Amount of Sanctioned Estimate.	Actual Outlay to end of 1894-95.	Budget Estimate, 1895-96.	Probable Outlay during 1895-96 (Revised Estimate).	Budget Estimate, 1896-97.	Remarks and References.
IMPERIAL.	Rs.	Rs.	Rs.	Rs.	Rs.	
MAJOR (PROTECTIVE) WORKS.						
Famine Relief and Insurance.						
35. CONSTRUCTION OF PROTECTIVE IRRIGATION WORKS.						
Capital Account.						
Rushikulya Project	43,68,000	36,80,677	3,00,000	2,28,000	1,89,000	Government of India register No. 7 I. of 1894-95. Proceedings of Madras Govt. No. 846 I. of 7th November 1894.
42. (WORKING EXPENSES).						
Gódávari Delta	...	...	5,06,000	4,84,173	5,30,000	
Kistna do.	...	...	4,60,000	5,78,720	5,26,000	
Pennéru Anicut	...	...	19,000	18,113	19,000	
Sangam do.	...	...	42,000	41,990	43,000	
Kurnool-Cuddapah Canal ...	...	...	1,05,000	99,910	86,000	
Barur Tank Project	...	...	5,000	3,392	3,800	
Cauvery Delta	...	...	18,000	15,590	18,200	
Srívaikuntam Anicut ...	...	...	17,000	17,873	24,000	
Rushikulya Project	...	...	20,000	25,239	30,000	
Total ...	...	...	11,92,000	12,85,000	12,80,000	
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.						
49. IRRIGATION.						
Works in Progress.						
Gódávari Delta System ...	1,41,470	85,627	13,000	14,825	84,000	P.M.G. No. 393 I., dated 3rd May 1895, No. 890 I., dated 30th October 1895, and No. 919 I., dated 2nd November 1895. Estimates for other works under preparation.
Kistna Delta do. ...	1,39,19,784	1,08,33,853	4,48,000	5,38,000	5,75,000	Government of India register No. 8 I. of 1884-85. 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.
Pennéru Anicut do. ...	...	...	4,000	4,000	9,000	P.M.G. No. 181 I., dated 22nd Jan. 1896. Estimate for another work under preparation.
Sangam do. do. ...	16,000	...	17,000	17,000	19,000	Government of India register No. 21 I. of 1895-96. Estimate for another work under preparation.
Barur Project	4,200	...	2,460	3,038	1,700	P.M.G. No. 1050 I., dated 22nd Dec. 1894.
Cauvery Delta	60,581	7,145	20,000	22,497	76,100	P.M.G. No. 561 I., dated 31st July 1894, No. 853 I. of 7th Nov. 1894, No. 195 I. of 28th Feb. 1895, No. 467 I. of 1st June 1895, No. 485 I. of 15th June 1895, No. 599 I. of 31st July 1895, and No. 768 I. of 2nd Sept. 1895. Government of India letter No. 259 I. of 23rd Oct. 1895, P.M.G. No. 909 I. of 1st Nov. 1895, and No. 1022 I. of 26th Nov. 1895.
Srívaikuntam Anicut ...	3,200	...	1,540	1,540	13,100	P.M.G. No. 650 I., dated 12th August 1895. Estimates for other works under preparation.
Periyár Project	84,71,000	73,56,056	6,44,000	6,96,100	1,63,100	Government of India register No. 10 I. of 1894-95. P.M.G. No. 1057 I., dated 22nd December 1894.
Total ...	...	...	11,50,000	12,97,000	9,41,000	

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Part

II.

Details of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for the year 1896–97.

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894–95.	Outlay: Probable during 1895–96.	Grant for 1896–97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				IMPERIAL.						
				MAJOR (PROTECTIVE) WORKS.						
				Famine Relief and Insurance.						
				35. CONSTRUCTION OF PROTECTIVE IRRIGATION WORKS.						
				Capital Account.						
				RUSHIKULYA PROJECT.						
				(1) HEAD WORKS.						
				Mahánadi Section.						
Rushikulya division.	...	3. Works ...	1	Surplus channel of Russellkonda reservoir, drop and road dam combined for the proposed diversion of Russellkonda-Mujjagada road over the Russellkonda.	6,300	2,350	1,950	2,000	1	P.M.G. No. 155 I., dated 18th February 1895.
		Do. ...	2	Surplus channel	4,000	732	1,500	1,500	2	
		Do. ...	3	Diversion between 51st and 52nd miles of Russellkonda-Majjagada road.	2,400	...	1,000	1,000	3	
				(2) MAIN CANALS AND BRANCHES.						
				Rushikulya Canal						
		6. Other cross drainage works.	4	Tail race channel to Govia nallah under tunnel.	5,900	1	1,400	4,500	4	P.M.G. No. 182 I., dated 25th February 1895.
		Do.	5	Under tunnel at 29 7/16 miles, Rushikulya canal ...	5,720	796	2,000	1,200	5	
				(3) DISTRIBUTARIES.						
				Mahánadi Canal.						
		2. Land ...	6	Compensation for land	4,000	...	1,000	2,000	6	Government of India Register No. 7 I. of 1894–95. P.M.G. No. 846 I., dated 7th November 1894.
		3. Works ...	7	Irrigation sluices	3,000	...	...	3,000	7	
		Do. ...	8	Minor works	3,000	...	...	2,000	8	
		4. Earthwork ...	9	Irrigation channels	2,000	17	...	8,500	9	
				Rushikulya Canal.	9,500	...	1,000			
		2. Land ...	10	Compensation for land	60,000	25,444	15,000	8,000	10	
		3. Works ...	11	Irrigation sluices	16,148				11	
		Do. ...	12	Minor masonry works	61,602	...	...	1,19,946	12	
		4. Earthwork ...	13	Irrigation channels	1,50,000				13	
				Total, Rushikulya Project ...	...	...	...	1,53,646		
				IRRIGATION.						
				42. MAJOR WORKS (WORKING EXPENSES).						
				EXTENSIONS AND IMPROVEMENTS.						
				Gódávari Delta System.						
Gódávari Eastern division.	...	.....	14	Extensions and improvements	...	...	6,900	7,000	14	
Gódávari Central.	...	.....	15	Do. do.	...	...	1,012	1,500	15	
Gódávari Western division.	...	.....	16	Do. do.	...	...	8,438	10,000	16	
				Total ...	...	...	16,350	18,500		

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II—cont.

Details of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for the year 1896-97—continued.

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894-95.	Outlay: Probable during 1895-96.	Grant for 1896-97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				EXTENSIONS AND IMPROVEMNTS—*cont.*						
				Kistna Delta System.						
Kistna Eastern ...	...	.....	17	Extensions and improvements	...	...	10,240	11,000	17	
Kistna Western.	...	.....	18	Do. do.	...	...	4,750	3,000	18	
					...	...	14,990	14,000		
				Total ...						
				Pennéru Anicut System.						
Nellore ...	...	.....	19	Extensions and improvements	...	...	5,000	1,721	19	
				Deduct old maintenance charges	...	...	* 3,564	* 3,564		
					...	...	1,436	— 1,843		
				Net grant ...						
				Sangam Anicut System.						
Nellore ...	...	.....	20	Extensions and improvements	...	...	4,413	4,365	20	
				Deduct old maintenance charges	...	...	* 345	* 345		
					...	...	4,068	4,020		
				Net grant ...						
				Kurnool-Cuddapah Canal.						
Kurnool ...	...	.....	21	Extensions and improvements	...	...	7,000	6,000	21	
				Barur Tank Project.						
Salem ...	...	.....	22	Extensions and improvements	...	...	520	1,004	22	
				Cauvery Delta System.						
Tanjore ...	...	.....	23	Extensions and improvements	...	...	8,000	8,000	23	
Negapatam ...	...	.....	24	Do. do.	...	...	1,500	3,000	24	
Trichinopoly ...	...	.....	25	Do. do.	...	...	500	1,500	25	
				Total ...	...	...	10,000	12,500		
				Srivaikuntam Anicut System.						
Tinnevelly ...	...	.....	26	Extensions and improvements	...	...	14	3,883	26	
				Deduct old maintenance charges	...	...	* 352	* 352		
				Net grant ...			— 338	3,531		
				Total, Extensions and Improvements ...	...	...	...	57,712		
				CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.						
				49. IRRIGATION.						
				GODAVARI DELTA SYSTEM.						
				OPEN CAPITAL ACCOUNT.						
				Eastern Section.						
				(1) Head Works.						
Gódávari Eastern.	...	3. Works ...	27	Raising the crest of Gódávari anicut	1,08,000	...	...	40,000	27	Government of Register No. 25 I. of 1895-96. P.M.G. No. 114 I., dated 3rd February 1896.
			28	Reserve for works	...	...	...	4,000	28	
				Total, Eastern Section ...	...	...	...	44,000		

* These sums are provided in the budget estimates for Minor Works and Navigation for 1896-97.

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Details of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for the year 1896–97—continued.

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894–95.	Outlay: Probable during 1895–96.	Grant for 1896–97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				OPEN CAPITAL ACCOUNT—*cont.*						
				Central Section.						
				(3) Distributaries.						
				Neduvúr Channel.						
Gódávari Central.	...	4. Earthwork ...	29	Mukkamala east side channel	3,820	...	...	3,000	29	P.M.G. No. 393 I., dated 3rd May 1895.
			30	Reserve for works	...	...	...	5,500	30	
			31	Do. for land	...	...	..	1,500	31	
				Total, Central Section ...	...	...	...	10,000		
				Western Section.						
				(3) Distributaries.						
				Attili Canal.						
Gódávari Western.	...	4. Earthwork ...	32	Branches of Rámésvaram channel	...	...	...	3,000	32	Estimate under preparation.
			33	Reserve for works	...	...	...	9,000	33	
			34	Do. for land	...	...	...	3,000	34	
				Total, Western Section ...	...	...	...	15,000		
				Total, Gódávari Delta System ...	...	...	...	69,000		
				KISTNA DELTA SYSTEM.						
				EASTERN SECTION.						
				Works in Progress.						
				Western Delta Main Canal.						
				(2) Main Canals and Branches.						
Kistna Northern.	Sitanagaram.	3. Regulators ...	35	Constructing the proposed head sluice at Sitanagaram.	82,500	14,890	34,000	33,700	35	
				Major Works.						
				Masulipatam Canal.						
				(3) Distributaries.						
Kistna Eastern ...	...	4. Earthwork ...	36	Bheemanadi channel	10,300	105	100	10,000	36	
				Pulleru Canal.						
				(4) Drainage and Protective Works.						
		4. Earthwork ...	37	Widening Kaldindi drain	55,787	44,411	7,000	4,194	37	P.M.G. No. 34 I., dated 17th January 1894.
				Pedalanka Channel.						
				(3) Distributaries.						
		3. Works ...	38	Chivagonnur under tunnel	5,720	549	4,971	200	38	
		4. Earthwork ...	39	Excavating Pedalanka channel	61,300	15,944	34,000	5,000	39	
				Bantumilli Canal.						
				(3) Distributaries.						
		4. Earthwork ...	40	Excavating Kamalapuram north side channel ...	3,590	1,643	900	1,000	40	
				Total, Works in Progress, Kistna Eastern division	...	...	...	20,394		

Details of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for the year 1896-97—continued.

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894-95.	Outlay: Probable during 1895-96.	Grant for 1896-97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				Works not Commenced.						
				Major Works.						
				Masulipatam Canal.						
				(3) Distributaries.						
Kistna Eastern —*cont.*	...	4. Earthwork ...	41	Excavating Urutur channel	2,690	...	...	2,500	41	
		Do. ..	42	Do. Manginapudi canal	20,000	...	...	20,000	42	
		Do. ...	43	Do. Managercodu	5,000	...	...	5,000	43	
				Pulleru Canal.						
				(3) Distributaries.						
		4. Earthwork ...	44	Regulator with side sluices at 4 miles 5 furlongs of Gudivâda channel.	5,430	...	1,430	4,000	44	
				Pedalanka Channel.						
				(3) Distributaries.						
		4. Earthwork ...	45	Excavating Kottacodu	3,840	...	2,000	1,800	45	
		Do. ...	46	Do. Kaldindi channel	2,500	...	2,000	500	46	
		Do. ...	47	Do. Kondangi branch	2,600	...	1,600	1,000	47	
		Do. ...	48	Do. Mattagunta channel	3,000	...	...	2,500	48	
		Do. ...	49	Do. Tummacodu	3,000	...	...	2,000	49	
		Do. ...	50	Do. Vennarcodu	4,250	...	1,000	2,500	50	
		Do. ...	51	Pipe sluices along Peddalanka channel ...	7,500	...	...	4,000	51	
				(4) Drainage and Protective Works.						
		4. Earthwork ...	52	Widening Pedalanka drain	10,000	...	...	10,000	52	
		Do. ...	53	Excavating Kaldindi drain	4,520	...	...	4,520	53	P.M.G. No. 34 I., dated 17th January 1894.
				Bantumilli Canal.						
				(2) Main Canals and Branches.						
		11. Buildings ...	54	Rest-house at Lakshmipuram	2,590	...	1,000	1,000	54	
		15. Miscellaneous.	55	Seven ramps for the extension of Bantumilli canal.	2,720	...	...	1,000	55	
				Total, Works not commenced ...	...	...	...	62,320		
				MINOR WORKS ESTIMATED TO COST Rs. 2,500 EACH AND UNDER.						
				Works in Progress.						
				Ellore Canal.						
				(3) Distributaries.						
		3. Works ...	56	Minor works	2,360	410	850	855	56	
		4. Earthwork ...	57	Do.	4,137	1,795	740	1,280	57	
		5. Miscellaneous.	58	Do.	300	50	50	150	58	
				Ryves' Canal.						
				(3) Distributaries.						
		3. Works ...	59	Minor works	4,800	1,355	1,130	1,930	59	
		4. Earthwork ...	60	Do.	535	420	...	100	60	
		5. Miscellaneous.	61	Do.	2,800	585	300	1,280	61	

Details of the Budget Estimate for Original Works under Irrigation

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.
				Works not Commenced—*cont.*
				Works in Progress—cont.
				Pulleru Canal.
				(3) Distributaries.
Kistna Eastern —*cont.*	...	4. Earthwork ...	62	Minor works ... ...
				Polraz Canal.
				(3) Distributaries.
		3. Works ...	63	Minor works ... ...
		5. Miscellaneous .	64	Do. ... ...
				(2) Main Canals and Branches.
		11. Buildings ...	65	Minor works ... ...
				Pedalanka Channel.
				(3) Distributaries.
		3. Works ...	66	Minor works ... ...
		5. Miscellaneous.	67	Do. ... ...
				Bantumilli Canal.
				(3) Distributaries.
		4. Earthwork ...	68	Minor works ... ...
		5. Miscellaneous.	69	Do. ... ...
				Total, Works in Progress ...
				Works not Commenced.
				Masulipatam Canal.
				2. *Main Canals and Branches.*
		9. Navigation	70	Minor works ... ...
				(3) Distributaries.
		3. Works ...	71	Minor works ... ...
		4. Earthwork ...	72	Do. ... ...
				Ellore Canal.
				(3) Distributaries.
		3. Works ...	73	Minor works ... ...
		4. Earthwork ...	74	Do. ... ...
		5. Miscellaneous.	75	Do. ... ...
				Ryves' Canal.
				(2) Main Canals and Branches.
		6. Other cross drainage works.	76	Minor works ... ...
		11. Buildings ...	77	Do. ... ...
				(3) Distributaries.
		3. Works ...	78	Minor works ... ...
		4. Earthwork ...	79	Do. ... ...
		5. Miscellaneous.	80	Do. ... ...

Major Works in the Madras Presidency for the year 1896-97—continued.

Amount of estimate.	Outlay		Grant for 1896-97.	Item No.	Remarks and references.
	To end of 1894-95.	Probable during 1895-96.			
Rs.	Rs.	Rs.	Rs.		
2,300	331	256	1,300	62	
1,560	554	335	671	63	
90	46	40	4	64	
3,290	1,364	600	1,300	65	
2,480	272	1,300	900	66	
510	177	100	200	67	
7,271	2,571	2,600	2,100	68	
1,504	371	520	744	69	
			12,814		
...	...	...			P.M.G. No. 34 I., dated 17th January 1894.
500	...	...	500	70	
13,920	...	4,000	8,500	71	
15,898	...	...	9,000	72	
			3,000	73	
4,500	...	...	12,000	74	
12,780	...	500	355	75	
585	...	230			
1,000	...	...	1,000	76	
2,500	...	...	1,300	77	
			2,500	78	
2,920	...	...	3,310	79	
3,542	...	92	737	80	
1,047	...	80			

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II—cont.

Details of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for the year 1896-97—continued.

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894-95.	Outlay: Probable during 1895-96.	Grant for 1896-97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				Works not Commenced—cont.						
				Pullery Canal.						
Kistna Eastern —*cont.*	...			(3) Distributaries.						
		3. Works ...	81	Minor works	5,059	...	1,200	3,850	81	
		4. Earthwork ...	82	Do.	10,762	...	1,604	8,299	82	
				Polraz Canal.						
				(3) Distributaries.						
		3. Works ...	83	Minor works	170	...	100	70	83	
		4. Earthwork ...	84	Do.	4,410	...	1,560	2,600	84	
				Pedalanka channel.						
				(3) Distributaries.						
		3. Works ...	85	Minor works	7,900	...	2,310	5,410	85	
		4. Earthwork ...	86	Do.	15,380	...	650	13,050	86	
		5. Miscellaneous ...	87	Do.	1,170	...	50	1,080	87	
				Bantumilli Canal.						
				(2) Main Canals and Branches.						
		11. Buildings ...	88	Minor works	860	...	200	400	83	
				(3) Distributaries.						
		3. Works ...	89	Minor works	3,270	...	1,870	1,150	89	
		4. Earthwork ...	90	Do.	3,000	...	...	3,000	90	
		5. Miscellaneous ...	91	Do.	4,965	...	120	3,361	91	P.M.G. No. 34 I., dated 17th January 1894.
				Total, Works not commenced ...	...	...	...	84,472		
				Total grant for works ...	...	...	...	1,80,000		
		2. Land	92	Land compensation	...	...	...	20,000	92	
				Total, Eastern division ...	...	...	...	2,00,000		
				Total, Eastern section ...	...	...	...	2,33,700		
				WESTERN SECTION.						
				Works in Progress.						
				Main Canal.						
Kistna Western ...	...			(2) Main Canals and Branches.						
		2. Land	93	Compensation for land for widening Western Delta main canal.	4,080	996	500	500	93	
		12. Earthwork ...	94	Widening Western Delta main canal.	5,86,800	5,32,200	37,000	10,000	94	
		15. Miscellaneous ...	95	Constructing a wall on the right side of the lock channel in rear of Sitanagaram lock.	3,900	...	2,500	1,400	95	
		Do. ...	96	Constructing a wharf wall 700 feet long on right bank of main canal at Sitanagaram.	7,000	...	4,000	3,000	96	

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Details of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for the year 1896-97—continued.

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894-95.	Outlay: Probable during 1895-96.	Grant for 1896-97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				Works in Progress—cont.						
				Nizampatam Canal.						
				(3) Distributaries.						
Kistna Western —*cont.*	...	4. Earthwork ...	97	Improvements to west side channel	10,800	...	4,000	5,000	97	
				(4) *Drainage and Protective Works.*						
		2. Land	98	Compensation for land for Tenali drain ...	12,150	274	2,000	1,000	98	
		4. Earthwork ...	99	Excavating Tenali drain	56,658	43,336	8,000	5,000	99	
		5. Miscellaneous...	100	Fixing B. M. S. on Tenali drain	2,892	729	500	500	100	
				Bank Canal.						
				(2) Main Canals and Branches.						
		12. Earthwork ...	101	Improvements to Bank Canal	1,13,745	73,276	2,000	3,000	101	
				(3) Distributaries.						
		4. Earthwork ...	102	Improvements to Iskapalli channel	11,400	738	3,000	5,000	102	
		Do. ...	103	Excavating Varahapuram channel	9,680	...	500	6,000	103	
				(4) Drainage and Protective Works.						
		3. Works ...	104	Constructing aqueduct to carry Vellatúr channel across Repalle main drain straight cut.	14,200	...	100	5,000	104	
				Commamúr Canal.						
				(2) Main Canals and Branches.						P.M.G. No. 34 I., dated 17th January 1894.
		2. Land... ...	105	Compensation for land for improvements to Commamúr canal.	16,068	13,942	100	300	105	
		9. Navigation ...	106	Constructing side walls in rear channel of Commamúr lock.	6,150	2,171	3,000	1,000	106	
		12. Earthwork ...	107	Improvements to Commamúr canal	2,45,330	2,09,319	5,000	3,000	107	
				(4) Drainage and Protective Works.						
		3. Works ...	108	Constructing under tunnel at 8 miles 1½ furlongs of Commamúr canal.	37,000	23,192	12,000	2,000	108	
		4. Earthwork ...	109	Excavating Tungabhadra drain	2,01,111	1,37,175	20,000	20,000	109	
		5. Miscellaneous...	110	Tungabhadra drain ramps, &c	3,389	1,188	100	300	110	
				Total, Works in Progress ...	...	...	...	72,000		
				Works not Commenced.						
				Main Canal.						
				(2) Main Canals and Branches.						
		15. Miscellaneous...	111	Constructing cattle crossing at Tadepalli, 1 mile 4 furlongs.	3,790	...	...	2,500	111	
		Do. ...	112	Constructing cattle crossing at Kuchanapalli, 3 miles 1 furlong.	3,250	...	...	2,000	112	
		Do. ...	113	Constructing cattle crossing at Mallempudi, 5 miles 1 furlong.	3,190	...	...	2,000	113	
		Do. ...	114	Constructing cattle crossing at Vadheswaram, 3 miles 6 furlongs.	3,720	...	...	2,500	114	

Detail of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for the year 1896–97—continued.

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894–95.	Outlay: Probable during 1895–96.	Grant for 1896–97.	Item No.	Remarks and references.
				Works not Commenced—cont.	Rs.	Rs.	Rs.	Rs.		
				Main Canal—*cont.*						
Kistna Western —*cont.*	...	15. Miscellaneous ...	115	(2) Main Canals and Branches—*cont.* Constructing cattle crossing at Revendrapad, 7 miles 4 furlongs.	3,340	...	...	2,000	115	
		Do. ...	116	Constructing cattle crossing at Tummapudi, 9 miles 1 furlong.	3,440	...	...	2,000	116	
		Do. ...	117	Constructing cattle crossing at Morampudi, 10 miles 6 furlongs.	3,000	...	...	2,000	117	
				Nizampatam Canal.						
		3. Works ...	118	(3) Distributaries. Improvements to west side channel extension bridge at 14/3·210 miles.	3,430	...	...	3,000	118	
		Do. ...	119	Improvements to earthenware pipe sluices ...	2,650	...	...	2,000	119	
		Do. ...	120	Constructing an iron girder bridge on the Ponnur-Intur road at 6 miles 37 chains.	7,790	...	...	7,000	120	
		4. Earthwork ...	121	(4) Drainage and Protective Works. Improving Pedapalli drain	8,670	...	...	8,500	121	
				Bank Canal.						
		11. Buildings ...	122	(2) Main Canals and Branches. Constructing a rest-house at Sinangulapalem ...	3,620	...	2,000	1,500	122	
		Do. ...	123	Constructing a rest-house at Kollúr	2,610	...	1,500	1,000	123	
		2. Land ...	124	(3) Distributaries. Compensation for Varahapuram channel ...	12,000	...	...	1,000	124	P.M.G. No. 34 I., dated 17th January 1894.
		4. Earthwork ...	125	Excavating Vullipolem branch channel ...	3,710	...	...	3,500	125	
		Do. ...	126	Do. Allaparru branch channel	5,860	...	...	5,000	126	
		2. Land ...	127	(4) Drainage and Protective Works. Compensation for land for Repalle main drain straight cut.	12,400	...	500	1,000	127	
		4. Earthwork ...	128	Excavating the proposed straight cut for Repalle main drain.	39,760	...	...	20,000	128	
		5. Miscellaneous...	129	Constructing three cattle-crossings for Repalle main drain.	6,000	...	...	2,000	129	
		4. Earthwork ...	130	Excavating Allaparru drain	5,100	...	...	5,000	130	
		Do. ...	131	Do. Kuchenapudi drain	3,700	...	...	3,000	131	
		3. Works ...	132	Constructing an iron girder bridge at Chevalur over Repalle main drain.	10,160	...	...	5,000	132	
				Commamúr Canal.						
		11. Buildings ...	133	(2) Main Canals and Branches. Constructing a rest-house at Karlapalem ...	2,980	...	2,000	500	133	
		9. Navigation ...	134	Do. lock establishment sheds at Kollimerla	2,790	...	...	2,000	134	
		Do. ...	135	Do. do. at Peda Ganjám.	2,740	...	...	2,000	135	
		4. Earthwork ...	136	(3) Distributaries. Excavating Bápatla, 1st east branch	2,880	...	...	2,500	136	
		Do. ...	137	Do. 1st west branch	2,860	...	...	2,500	137	

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Details of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for 1896–97—continued.

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894–95.	Outlay: Probable during 1895–96.	Grant for 1896–97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				Works not Commenced—cont.						
				(4) Drainage and Protective Works.						
Kistna Western —*cont.*	...	3. Works ...	138	Combined bridge and aqueduct at 1 mile 7½ furlongs from head of Doppalapudi affluent.	...	...	...	8,000	138	
				Total, Works not commenced ...	...	...	...	1,01,000		
				MINOR WORKS COSTING Rs. 2,500 AND UNDER.						
				Main Canal.						
				(3) Distributaries.						
		5. Miscellaneous...	139	Fixing demarcation stones along the distributaries of Western delta main canal.	770	283	300	100	139	
		Do. ...	140	Demarcation stones for extending and improving No. 1 branch of main channel.	60	...	...	50	140	
		2. Land	141	Compensation for land required for extending No. 1 branch of main channel.	300	...	...	200	141	
		4. Earthwork ...	142	Improving and extending No. 1 branch of main channel.	400	...	...	300	142	
				Nizampatam Canal.						
				(2) Main Canals and Branches.						
		9. Navigation ...	143	Constructing lock establishment sheds at Intúr...	2,060	...	...	2,000	143	
		Do. ...	144	Constructing lock establishment sheds at Nallavada.	1,970	...	...	1,900	144	
		Do. ...	145	Constructing lock establishment sheds at Nizampatam tidal lock.	2,000	...	...	2,000	145	
		Do. ...	146	Constructing lock establishment sheds for 4th lascar at Kuchipudi lock.	350	...	...	340	146	P.M.G. No. 34 I., dated 17th January 1894.
				IMPROVEMENTS TO WEST SIDE CHANNEL.						
				(3) *Distributaries.*						
		2. Land ...	147	Compensation for land	600	...	...	200	147	
		3. Works ...	148	Regulator at 2/0 miles	1,680	...	...	1,000	148	
		Do. ...	149	Alterations to the existing Calingulah	60	...	...	60	149	
		Do. ...	150	Drop at 6/4 miles	650	...	...	600	150	
		Do. ...	151	Do. 8/0 miles	540	...	...	500	151	
		Do. ...	152	Alterations to the existing Calingulah at 19/1½ miles.	100	...	...	100	152	
		Do. ...	153	Weir in right bank at 19/4 miles	850	...	...	800	153	
		5. Miscellaneous.	154	Fixing demarcation stones for West side channel improvements.	760	...	...	500	154	
				BANK CANAL.						
				(2) *Main Canals and Branches.*						
		15. Miscellaneous.	155	Fixing demarcation stones on both sides of Bank canal.	2,200	1,301	500	400	155	
		9. Navigation ...	156	Constructing lock establishment sheds at Vellatúr.	2,340	...	...	2,000	156	

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Details of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for 1896–97—continued.

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894–95.	Outlay: Probable during 1895–96.	Grant for 1896–97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				BANK CANAL—*cont.*						
Kistna Western —*cont.*	...			(3) *Distributaries.*						
		3. Works ...	157	Constructing an under tunnel at 0/4 miles for Varahapuram channel.	1,105	...	...	500	157	
		Do. ...	158	Combined bridge and drop at 4 miles 5 furlongs for Varahapuram channel.	1,120	...	...	1,000	158	
		Do. ...	159	Tail escape and bridge	1,200	...	...	1,000	159	
		Do. ...	160	Earthenware pipe sluices	1,000	...	...	500	160	
		Do. ...	161	Isakapalli channel combined bridge and drop at 2 furlongs.	1,970	...	...	1,000	161	
		Do. ...	162	Sluice at 0/2 miles, left bank	470	...	...	200	162	
		Do. ...	163	Do. right bank	470	...	...	200	163	
		Do. ...	164	Small bridge at 2 miles 1 furlong 500 feet ...	1,710	...	...	500	164	
		Do. ...	165	Sluice at 2/2 miles	470	...	...	200	165	
		Do. ...	166	Small bridge 3 miles 410 feet	1,670	...	...	500	166	
		Do. ...	167	Sluice at 3/2 miles	470	...	...	200	167	
		Do. ...	168	Small bridge at 4/1½ miles	1,660	...	...	500	168	
		Do. ...	169	Sluice at 4/2½ miles	480	...	...	200	169	
		Do. ...	170	Small bridge at 5/0½ miles	1,650	...	...	500	170	
		Do. ...	171	Sluice at 6/0 miles	480	...	...	200	171	
		Do. ...	172	Small bridge at 7 miles 230 feet	1,650	...	...	500	172	
		Do. ...	173	Sluice at 7/4 miles, right bank	480	...	...	200	173	
		Do. ...	174	Do. do. left bank	480	...	...	200	174	
		Do. ...	175	Small bridge at 8 miles 5 furlongs 230 feet ...	1,530	...	...	500	175	
		Do. ...	176	Sluice at 8/4 miles on right bank	490	...	...	200	176	
		Do. ...	177	Do do. on left bank	490	...	...	200	177	P.M.G. No. 34 I., dated 17th January 1894.
				ARAVAPALLI CHANNEL.						
				(3) *Distributaries.*						
		3. Works ...	178	Drop at 0/6 miles				200	178	
		Do. ...	179	Do. 3/4 miles	410	...	...	200	179	
		Do. ...	180	Tail escape	440	...	...	200	180	
		Do. ...	181	Vullipolem channel, tail escape	220	...	...	200	181	
		Do. ...	182	Allaparru branch channel, tail escape	240	...	...	200	182	
		Do. ...	183	Kunchenapudi branch channel, tail escape ...	230	...	...	200	183	
		Do. ...	184	Constructing surplus sluice at 573 feet from head of proposed surplus channel at 45 miles 6 furlongs of Bank canal.	210	...	...	200	184	
		Do. ...	185	Constructing head sluice to Raju channel at 573 feet from head of proposed surplus channel.	2,090	...	1,000	1,000	185	
		Do. ...	186	Constructing a drop at 330 feet from head of proposed channel at 45 miles 2 furlongs 310 feet, Bank canal.	1,020	...	500	500	186	
		Do. ...	187	Constructing a drop at 330 feet from head of proposed channel at 44 miles 4 furlongs 330 feet.	540	...	200	300	187	
		Do. ...	188	Constructing a drop at 3½ furlongs from head of Venkanna channel.	470	...	100	100	188	
		4. Earthwork ...	189	Excavating Aravapalli branch channel	290	...	100	100	189	
		Do. ...	190	Do. Kuchenapudi branch channel ...	2,360	...	...	1,000	190	
		2. Land ...	191	Compensation for land for Vullipolem branch channel.	1,840	...	...	1,000	191	
		Do. ...	192	Compensation for land for Allapuram branch channel.	600	...	...	200	192	
					800	...	...	200		

Detail of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for 1896–97—continued.

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894–95.	Outlay: Probable during 1895–96.	Grant for 1896–97.	Item No.	Remarks and references.
				COMMAMUR CANAL—*cont.*	Rs.	Rs.	Rs.	Rs.		
				(4) *Drainage and Protective Works.*						
Kistna Western —*cont.*	...	5. Miscellaneous ...	222	Fixing B.M. stones for Romperu side drain ...	1,800	432	300	500	222	
		Do. ...	223	Two cattle ramps at Rs. 500 each	1,000	...	...	1,000	223	
				Total, Minor Works costing Rs. 2,500 and under ...	...	...	...	44,400		
				Grand total, Western Section ...	...	...	..	2,17,400		
				Total, Kistna Delta System ...	...	...	...	4,51,100		
				OPEN CAPITAL ACCOUNT.						
				PENNERU ANICUT SYSTEM.						
Nellore ...	Nellore ...	2. Works ...	224	(1) *Head Works.* Providing screw-gearings to auxiliary head sluice.	5,500	...	...	5,417	224	Estimate under preparation.
	Venkanapalem.	14. Tanks and Reservoirs.	225	(2) *Main Canals and Branches.* Venkammapalem tank surplus weir	1,940	...	...	1,900	225	P.M.G. No. 181 I., dated 22nd January 1896.
				Total, Penneru Anicut System ...	...	...	...	7,317		
				SANGAM ANICUT SYSTEM.						
	Kanigiri reservoir.	14. Tanks and weirs.	226	(2) *Main Canals and Branches.* Providing screw-gearing shutters for the Kanigiri reservoir.	13,000	...	...	11,407	226	P.M.G. No. 998 I., dated 20th November 1895.
	Duvúr ...	4. Earthwork ...	227	(3) *Distributaries.* Improvements to dasabandam channel from 5 miles 2,592, right bank, Duvúr branch channel.	4,040	...	...	4,040	227	Estimate under preparation.
				Total, Sangam Anicut System ...	...	...	...	15,447		
				BARUR TANK SYSTEM.						
Salem	...	3. Masonry works.	228	(2) *Main Canals and Branches.* Surplus sluices in the weir of Barur tank ...	3,400	...	2,000	1,382	228	P.M.G. No. 1050 I., dated 22nd December 1894.
				CAUVERY DELTA SYSTEM.						
Tanjore ...	...	3. Works ...	229	*I. Head Works.* Providing an experimental pair of shutters to replace the body wall in arch No. 8 from right south branch of the Upper Coleroon anicut.	2,850	...	2,000	850	229	P.M.G. No. 485 I., dated 15th June 1895.
		Do. ...	230	Providing additional sets of experimental shutters to replace the body wall in arch No. 8 from right south branch of the Upper Coleroon anicut.	...	...	...	4,500	230	Estimate under preparation.

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Details of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for 1896-97—continued.

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894-95.	Outlay: Probable during 1895-96.	Grant for 1896-97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				CAUVERY DELTA SYSTEM—*cont.*						
				(2) *Main Canals and Branches.*						
Tanjore—*cont.*	...	3. Regulators ...	231	Providing screw-gearing shutters for the three central arches of Kodamurty regulator.	2,730	1,609	478	660	231	P.M.G. No. 561 I., dated 31st July 1894.
		Do. ...	232	Improving Devanur dam across Veerasholan ...	1,270	...	...	1,270	232	,, ,, 768 I. ,, 20th September 1895.
Negapatam ...	...	Do. ...	233	Constructing a regulator of 9 vents across the Vettar just below the off take of Odemboghyar.	22,700	...	2,854	19,846	233	,, ,, 540 I. ,, 4th July 1895.
		Do. ...	234	Improvements to Nariangudy dam across Odemboghyar or Kodamurtyar.	1,670	...	870	800	234	,, ,, 195 I. ,, 28th February 1895.
Tanjore ...	...	Do. ...	235	Fitting new shutters with screw-gearing to both head sluices at Melattur anicut and fixing two experimental scouring sluice shutters in dam.	...	...	...	5,000	235	Estimates under preparation.
		Do. ...	236	Fixing new shutters to two head sluices of Katchamangalam anicut and two experimental shutters in body wall of dam.	...	...	...	5,000	236	Estimates under preparation.
				(3) *Distributaries.*						
		3. Works ...	237	Restoring old Irrigation channel of Sithanevelur with necessary masonry works on Vettar, left bank.	3,260	..	1,500	1,760	237	P.M.G. No. 467 I., dated 1st June 1895.
		Do. ...	238	Improving Vadakarai Kohoor channel, branching from Thirumalarajanar, left bank, miles 64.	1,320	...	...	1,320	238	P.M.G. No. 1022 I., dated 26th November 1895.
		2. Land ...	239	Do. do. ...	300	...	...	300	239	P.M.G. No. 1022 I., dated 26th November 1895.
		3. Works ...	240	Improving Maraneri Iyanar tank	3,920	..	...	3,920	240	P.M.G. No. 599 I., dated 31st July 1895.
		Do. ...	241	Do. Peramboor tank	6,030	...	...	6,030	241	Estimate under preparation.
				(4) *Drainage and Protective Works.*						
		3. Works ...	242	Reconstructing the old dam across the Iyavyanar.	3,800	...	150	1,750	242	P.M.G. No. 853 I., dated 7th November 1894.
		Do. ...	243	Constructing a syphon for Aiyapadi drainage under Thennangondayam drainage.	1,700	...	...	1,700	243	,, ,, 768 I. ,, 20th September 1895.
		Do. ...	244	Constructing a drainage sluice and foot bridge for Neikunnam and Vikramanar drainage channel.	2,670	...	...	2,670	244	,, ,, 909 I. ,, 1st November 1895.
		Do. ...	245	Reserve for Works	...	...	...	4,550	245	
				Total capital, Cauvery Delta System ...	...	...	...	61,926		
				SRIVAIKUNTAM ANICUT SYSTEM.						
				(2) *Main Canals and Branches.*						
Tinnevelly ...	...	14. Tanks and Reservoirs.	246	Palayakoyal tank improvements	2,580	...	...	2,580	246	P.M.G. No. 650 I., dated 12th August 1895.
			247	Reserve for works	...	...	...	8,000	247	
				Total, Srivaikuntam Anicut System ...	...	...	...	10,580		
				PERIYAR PROJECT.						
				(1) *Head Works.*						
Madura	Periyár ...	3. Works ...	248	Main dam	24,60,000	21,08,414	3,03,744	15,000	248	Government of India Register No. 10 1 of 1894-95.
		Do. ...	249	Left bank escape	79,885	11,036	60,000	5,000	249	P.M.G. No. 1057 I., dated 22nd December 1894.
				Total, Head works ...	...	...	...	20,000		

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Details of the Budget Estimate for Original Works under Irrigation

Division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894-95.	Outlay: Probable during 1895-96.	Grant for 1896-97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				PERIYAR PROJECT—*cont.*						
				(2) *Main Canals and Branches and* (3) *Distributaries.*						
Madura—*cont* ...	...	.....	250	Land	...	...	...	10,000	250	The distribution of these amounts by component works has not been reported by the Superintending Engineer, VI Circle.
			251	Works	...	...	...	1,00,000	251	
				Total, Main Canals and Branches and Distributaries ...	...	...	...	1,10,000		
				Total, Periyar Project ...	...	...	...	1,30,000		

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Major Works in the Madras Presidency for 1896-97—continued.

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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	1,53,646	...	1,53,646
IRRIGATION.			
42. MAJOR WORKS (WORKING EXPENSES).			
Gódávari Delta System	18,500	...	18,500
Kistna do.	14,000	...	14,000
Pennéru Anicut System	— 1,843	...	— 1,843
Sangam do.	4,020	...	4,020
Kurnool-Cuddapah Canal	6,000	...	6,000
Barur Tank Project	1,004	...	1,004
Cauvery Delta System	12,500	...	12,500
Srívaikuntam Anicut System	3,531	...	3,531
Total ...	57,712	...	57,712
CAPITAL EXPENDIITURE NOT CHARGED TO REVENUE.			
49. Irrigation.			
Gódávari Delta System	69,000	...	69,000
Kistna do.	4,51,100	...	4,51,100
Pennéru Anicut System	7,317	...	7,317
Sangam do.	15,447	...	15,447
Barur Tank Project	1,382	...	1,382
Cauvery Delta System	61,926	...	61,926
Srívaikuntam Anicut System	10,580	...	10,580
Periyár Project	1,30,000	...	1,30,000
Total ...	7,46,752	...	7,46,752

GOVERNMENT OF MADRAS.

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Part III.

Detail of the Budget Estimate for Maintenance and Repairs of Irrigation Major Works in the Madras Presidency for the year 1896–97.

Executive division.	—	Estimate, 1896–97. Amount.	Estimate, 1896–97. Total.	Estimate, 1895–96. Amount.	Estimate, 1895–96. Total.
		Rs.	Rs.	Rs.	Rs.
	IRRIGATION. **42. MAJOR WORKS (WORKING EXPENSES).** *Rushikulya Project.* Head Works.				
Rushikulya ...	Mahánadi section	6,000		6,000	
	Rushikulya do.	1,000		1,598	
	Do. canal	12,000		6,500	
	Mahánadi do.	5,106		2,000	
	TOTAL, RUSHIKULYA PROJECT ...	...	24,106	...	16,098
	Gódávari Delta System.				
Eastern Division.	Head works	25,000		18,000	
	Main canal	2,000		2,000	
	Bank do.	10,000		8,500	
	Cocanada canal	8,000		10,500	
	Sámalkót do.	8,000		9,200	
	Mundapetta do.	6,500		6,200	
	Coringa do.	5,000		7,400	
	Kovur-Manjair junction canal	500		500	
	Injeram canal	3,000		8,800	
	Tooliabhaga drain, 31 miles	500		700	
	Takee drain, 27 do.	4,000		600	
	Biccavole drain, 17 do.	500		600	
	Compensation	2,000		2,000	
			75,000		75,000
Central Division.	Head works	1,000		1,000	
	Main canal	6,000		5,000	
	Gunnaram canal	10,000		10,000	
	Bank canal	12,000		10,000	
	Amalápuram canal	7,000		7,000	
	Bendamurlanka canal	5,000		3,000	
	Billakurru canal	1,000		2,000	
	Drainages	17,000		2,000	
	Compensation	1,000		1,000	
			60,000		41,000
Western Division.	Head works	2,000		2,000	
	Main canal	6,000		5,000	
	Kakaraparu canal	3,000		3,000	
	Gostanadi and Velpur canal	10,000		10,000	
	Bank canal	7,000		6,000	
	Narsápur do.	13,000		12,000	
	Ellore do.	15,000		15,000	
	Attili do.	6,000		9,000	
	Junction do.	1,000		2,000	
	Venkiah and Weyeru canal	8,000		5,000	
	Undi canal	9,000		8,000	
	Nakkala drain, 25 miles				
	Kaza do. 16 do.				
	Mogultur do.	20,427		20,000	
	Gonter do.				
	Gostanadi do.				
	Yannamadurru drain, 32 miles				
	Compensation	2,000		2,000	
			1,02,427		99,000
	TOTAL, GODAVARI DELTA SYSTEM ...	...	2,37,427	...	2,15,000

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 1896–97—cont.

Executive division.	—	Estimate, 1896–97. Amount.	Estimate, 1896–97. Total.	Estimate, 1895–96. Amount.	Estimate, 1895–96. Total.
	IRRIGATION—continued.	Rs.	Rs.	Rs.	Rs.
	42. MAJOR WORKS (WORKING EXPENSES)—continued.				
	Kistna Delta System.				
	Eastern Section.				
Kistna Eastern Division.	Ellore canal	20,000		20,000	
	Masulipatam canal	24,000		24,000	
	Ryves' canal	16,500		16,000	
	Pulleru do.	21,301		18,000	
	Polraz do.	15,000		10,000	
	Bantumilli canal	15,000		7,000	
	Pamarru junction canal	12,000		1,000	
	Pedalanka channel			...	
			1,23,801		90,000
Kistna Northern Division.	Head works				
	Main canal	10,000			
	Ellore do.	5,000		20,000	
	Masulipatam canal	4,000		500	
	Ryves' canal	2,000		1,500	
		5,000		4,200	
				1,500	
			26,000		27,700
Kistna Western Division.	Main canal	5,000			
	Bank do.	30,000		15,000	
	Commamur canal	40,000		20,000	
	Nizampatam do.	24,500		30,000	
	Compensation	500		10,000	
				...	
			1,00,000		75,000
	TOTAL, KISTNA DELTA SYSTEM ...	...	2,49,801	...	1,92,700
	Pennéru Anicut System.				
Nellore Division.	Head works	5,000			
	Main canal	2,000		5,000	
	Jaffer Sahib's canal	2,500		2,000	
	Sarvapalle do.	1,500		2,500	
	Kistnapatam do.	3,000		1,500	
	Delta tanks and reservoirs	10,000		3,000	
				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 1896–97.

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 1896–97—cont.

Executive division.	—	Estimate, 1896–97. Amount.	Estimate, 1896–97. Total.	Estimate, 1895–96. Amount.	Estimate, 1895–96. Total.
	IRRIGATION—continued.	Rs.	Rs.	Rs.	Rs.
	42. MAJOR WORKS (WORKING EXPENSES)—continued.				
	Sangam Anicut System.				
Nellore Division—*cont.*	Head works	4,000		6,000	
	Kanigiri canal	23,000		20,000	
	Duvur do.	3,000		4,000	
	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		4,000	
	First section	5,800		8,500	
	Second do.	2,900		3,500	
	Third do.	5,500		8,500	
	Fourth do.	6,400		3,500	
	Fifth do.	5,300		6,500	
	Sixth do.	11,300		7,000	
	Distributaries	11,700		15,000	
	Drainages and Protective Works	900		1,500	
	Special Repairs	5,000		12,000	
	Reserve	1,000		2,000	
			57,000		72,000
	TOTAL, KURNOOL-CUDDAPAH CANAL ...	...	57,000	...	72,000
Salem Division.	Barur Tank Project	1,500	1,500	2,000	2,000
	Cauvery Delta System.				
Tanjore Division.	Upper Coleroon anicut	2,000		2,000	
	Grand anicut	3,000		3,000	
	Cauvery	5,800		4,800	
	Kodumurti and Puthaur	1,000		1,000	
	Arasillár	1,250		1,250	
	Trimulrajen	1,700		1,700	
	Mudicondanar	1,500		1,500	
	Nattar	300		300	
	Keerthemanar	200		200	
	Veerasholen	600		600	
	Solasudamaniar	700		700	
	Munjalaur	910		910	
	Vellapar	800		800	
	Vanjeaur	300		300	
	South Puthar	200		200	
	Vennár	2,000		2,000	
	Vettár	2,090		2,090	
	Odemboghy	100		100	
	Nundalar	1,200		1,200	

* These sums are provided in the budget estimates for Minor Works and Navigation for 1896–97.

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 1896–97—cont.

Executive division.		Estimate, 1896-97.		Estimate, 1895-96.	
		Amount.	Total.	Amount.	Total.
	IRRIGATION—continued.	Rs.	Rs.	Rs.	Rs.
	42. MAJOR WORKS (WORKING EXPENSES)—continued.				
	Cauvery Delta System—continued.				
Tanjore Division—*cont.*	Vicramanar	1,050		1,050	
	Kona voikal	600		600	
	Pudumaniar	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	
	Mainkarainar	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.	Vennáur	1,100	40,000	1,100	39,000
	Vettáur	1,400		1,400	
	Odemboghyar	1,500		2,500	
	Corayaur	2,500		2,500	
	Pamanayaur	3,500		4,500	
	Pandavyaur	1,000		1,000	
	Vellayaur	1,500		1,500	
	Athiveeraramanar	2,000		2,000	
	Harichendranady	800		800	
	Mullayaur	1,976		2,374	
	Iyanar	200		200	
	Drainage and protective works	4,500		4,500	
	Unforeseen and incomplete works	...		795	
Trichinopoly Division.	Annual maintenance—		21,976		25,169
	Punguni channel	840		840	
	Peruvalai do.	900		900	
	Iyen do.	1,200		1,200	
	Special Repairs—				
	Punguni channel	200		1,860	
	Peruvalai do.	1,000		2,500	
	Iyen do.	1,500		1,700	
	Compensation	360		1,000	
			6,000		10,000
	Total ...	...	67,976	...	74,169
	Deduct old maintenance charges ...	...	* 1,05,634	...	* 1,05,634
	NET TOTAL, CAUVERY DELTA SYSTEM ..	...	— 37,658	...	— 31,465

* These sums are provided in the budget estimates for Minor Works and Navigation for 1896-97.

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 1896–97—continued.

Executive division.		Estimate, 1896-97.		Estimate, 1895-96.	
		Amount.	Total.	Amount.	Total.
	IRRIGATION—continued.	Rs.	Rs.	Rs.	Rs.
	42. MAJOR WORKS (WORKING EXPENSES)—continued.				
	Srivaikuntam Anicut System.				
Tinnevelly Division.	Head works	500		400	
	North main channel	3,500		1,000	
	Tanks fed by the above channel	4,000		5,000	
	South main channel	3,000		1,000	
	Tanks fed by the above channel	5,000		4,783	
			16,000		12,183
	Deduct old maintenance charges ...	...	* 5,208	...	* 5,208
	NET TOTAL, SRIVAIKUNTAM ANICUT SYSTEM ...	...	10,792	...	6,975

* These sums are provided in the budget estimates for Minor Works and Navigation for 1896-97.

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	24,106	...	24,106
Gódávari Delta System	2,37,427	...	2,37,427
Kistna do. do.	2,49,801	...	2,49,801
Pennéru Anicut do.	10,140	...	10,140
Sangam Anicut Project	18,116	...	18,116
Kurnool-Cuddapah Canal	57,000	...	57,000
Barur Tank Project	1,500	...	1,500
Cauvery Delta System	— 37,658	...	— 37,658
Srívaikuntam Anicut System	10,792	...	10,792
Total ...	5,71,224	...	5,71,224

GOVERNMENT OF MADRAS.

CHARGES.

Part IV.

Detail of the Budget Estimate for Establishment of the Irrigation Branch in the Madras Presidency for the year 1896–97.

	Budget Estimate, 1896–97.	Revised Estimate, 1895–96.
IMPERIAL.	Rs.	Rs.
FAMINE RELIEF AND INSURANCE.		
35. Construction of Protective Irrigation Works.		
Grant for Works	1,53,646	1,89,667
Deduct item for which no charge for Establishment is admissible.		
Compensation for land	10,000	23,000
Net Grant ...	1,43,646	1,66,667
Contribution to Provincial Funds at 23 per cent. on the Net Grant ...	33,039	38,333
IRRIGATION.		
42. Major Works (Working Expenses).		
Grant for Works and Repairs	6,28,936	6,58,177
Deduct items for which no charge for Establishment is admissible.		
Compensation for land, Gódávari Delta System	5,000	4,124
Do. do. Kistna do.	500	...
Do. do. Cauvery do.	360	1,000
Total ..	5,860	5,124
Net Grant ..	6,23,076	6,53,053
A. 23 per cent. on the Net Grant	1,43,307	1,50,202
Direct Revenue	2,78,000	2,80,000
Deduct estimated collections in the Revenue Department of water-rates levied on lands irrigated under the Kurnool-Cuddapah Canal	93,000	93,000
Net Direct Revenue ...	1,85,000	1,87,000
B. 10 per cent. on Net Direct Revenue	18,500	18,700
Irrigation Revenue from Major (Productive) Works exclusive of enhanced share of Land Revenue	64,74,000	57,56,000
Add estimated collections in the Revenue Department of water-rates levied on land irrigated under the Kurnool-Cuddapah Canal	97,895	97,895
Total ...	65,71,895	58,53,895

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 1896–97—continued.

	Budget Estimate, 1896–97.	Revised Estimate, 1895–96.
	Rs.	Rs.
C. 6 per cent. on Irrigation Revenue	3,94,314	3,51,234
Total, A + B + C ...	5,56,121	5,20,136
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.		
49. Irrigation.		
Total Grant for Works	7,46,752	10,24,293
Deduct item for which no charge for Establishment is admissible.		
Land compensation	40,150	36,438
Net Grant ...	7,06,602	9,87,855
Contribution to Provincial Funds at 23 per cent. on Net Grant ...	1,62,518	2,27,207

GOVERNMENT OF MADRAS.

CHARGES.

Part IV-A.

Distribution of the Provision for Establishment by System of Canals for the year 1896–97.

—	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.	Percentage.	Estimated Revenue.	Percentage.	Estimated Revenue.	Percentage.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
IMPERIAL.							
FAMINE RELIEF AND INSURANCE.							
35. Construction of Protective Irrigation Works.							
Rushikulya Project	1,43,646	33,039	...	...	...	...	33,039
IRRIGATION.							
42. MAJOR WORKS (WORKING EXPENSES).							
Gódávari Delta System	2,50,927	57,713	1,20,000	12,000	27,56,000	1,65,360	2,35,073
Kistna do. do.	2,63,301	60,559	48,000	4,800	23,59,000	1,41,540	2,06,899
Pennéru Anicut System	8,297	1,908	400	40	1,46,000	8,760	10,708
Sangam Anicut Project	22,136	5,091	600	60	2,62,000	15,720	20,871
Kurnool-Cuddapah Canal	63,000	14,490	10,000	1,000	97,895	5,874	21,364
Barur Tank Project	2,504	576	...	...	12,000	720	1,296
Cauvery Delta System	—25,518	—5,869	3,500	350	8,33,000	49,980	44,461
Srivaikuntam Anicut System ...	14,323	3,295	1,000	100	1,06,000	6,360	9,755
Rushikulya Project	24,106	5,544	1,500	150	...	...	5,694
Total ..	6,23,076	1,43,307	1,85,000	18,500	65,71,895	3,94,314	5,56,121
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.							
49. IRRIGATION.							
Gódávari Delta System	64,500	14,835	...	...	...	...	14,835
Kistna Delta System	4,25,750	97,922	...	...	...	...	97,922
Pennéru Anicut System	7,317	1,683	...	...	...	...	1,683
Sangam Anicut Project	15,447	3,553	...	...	...	...	3,553
Barur Tank System	1,382	318	...	...	...	...	318
Cauvery Delta System	61,626	14,174	...	...	...	...	14,174
Srivaikuntam Aniut System	10,580	2,433	...	...	...	...	2,433
Periyár Project	1,20,000	27,600	...	...	...	...	27,600
Total ..	7,06,602	1,62,518	...	...	...	...	1,62,518
GRAND TOTAL ..	14,73,324	3,38,864	1,85,000	18,500	65,71,895	3,94,314	7,51,678

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 1896–97.

—	Budget Estimate, 1896–97.	Budget Estimate, 1895–96.
	Rs.	Rs.
IMPERIAL.		
FAMINE RELIEF AND INSURANCE.		
35. Construction of Protective Irrigation Works.		
Tools and Plant required for the Rushikulya Project	2,315	2,000
IRRIGATION.		
42. MAJOR WORKS (WORKING EXPENSES).		
Godavari Delta System.		
Eastern Division.		
8. Repairs and carriage—		
Maintenance of floating plant including existing ferries	20,500	20,830
Special repairs to do. do.	5,000	5,000
License fees of Government boats	...	6,500
Charges on account of steamers used by Public Works officers on duty ...	2,500	2,500
Machinery	2,000	400
Total ..	30,000	35,230
Central Division.		
8. Repairs and carriage, repairs to floating plant, tools and machinery	4,000	...
Western Division.		
2. Plant and machinery	1,500	7,000
3. Tools	500	500
8. Repairs and carriage—		
Repairs to floating plant	3,000	5,000
Tools		
Machinery		
Total ..	5,000	12,500
TOTAL, GODAVARI DELTA SYSTEM ..	39,000	47,730
Kistna Delta System.		
Eastern Division.		
1. Scientific instruments	...	500
8. Repairs and carriage—		
Annual maintenance of ferry boats	4,000	4,000
Special repairs to floating plant	...	1,000
Do. to ferry boats	1,000	...
Repairs and conveyance of tools, &c.	500	500
Total ..	5,500	6,000
Northern Division.		
1. Scientific instruments	500	500
2. Machinery (two Cockburn's dredgers)	...	10,000
3. Tools—New supply	500	1,200
Navigation Plant—		
2. Punts for maintaining two Cockburn's dredgers	8,000	...

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 1896–97—cont.

	Budget Estimate, 1896–97.	Budget Estimate, 1895–96.
	Rs.	Rs.
IRRIGATION—continued.		
42. MAJOR WORKS (WORKING EXPENSES)—continued.		
Kistna Northern Division—continued.		
8. Repairs and carriage—		
Annual repairs of floating plant	25,500	20,000
Special repairs of do.	9,300	6,000
Repairs to machinery	700	5,324
Charges on account of steamer used by Public Works officers	800	800
Licensing Government floating plant	...	5,500
Repairs and carriage of tools and plant	500	500
Reserve	...	2,500
Total ..	45,800	52,324
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 ..	55,300	62,324
Penneru 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	50	74
Deduct old maintenance charges	* 57	* 57
NET TOTAL, SANGAM ANICUT SYSTEM ..	— 7	17
Kurnool-Cuddapah Canal.		
1. Scientific and mathematical instruments	300	300
8. Repairs and carriage—		
Annual maintenance of floating plant	1,036	1,416
Miscellaneous and sundries	300	300
TOTAL, KURNOOL CANAL ..	1,636	2,016

* These sums are provided in the budget estimates for Minor Works and Navigation for 1896-97.

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 1896–97—cont.

	Budget Estimate, 1896–97.	Budget Estimate, 1895–96.
	Rs.	Rs.
IRRIGATION—continued.		
42. MAJOR WORKS (WORKING EXPENSES)—continued.		
Cauvery Delta.		
Tanjore division—		
8. Repairs and carriage	200	200
Negapatam division—		
1. Scientific instruments	200	400
8. Repairs and carriage	100	100
Total ...	300	500
TOTAL, CAUVERY DELTA SYSTEM ..	500	700
Deduct old maintenance charges ...	* 1,603	* 1,603
NET TOTAL, CAUVERY DELTA SYSTEM ..	— 1,103	— 903
Srivaikuntam Anicut System—		
8. Repairs and carriage ...	...	...
Deduct old maintenance charges ...	* 78	* 78
NET TOTAL, SRIVAIKUNTAM ANICUT SYSTEM ..	— 78	— 78
Rushikulya project system—		
8. Repairs and carriage	200	200
TOTAL, 42. MAJOR WORKS (WORKING EXPENSES) ..	94,943	1,11,301
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.		
49. Irrigation.		
Góddvari Delta System.		
Eastern division—		
3. Tools	165	...
Kistna Delta System.		
Eastern division—		
4. Navigation plant—		
Ferry boats	5,000	10,000
Northern division—		
4. Navigation plant—		
Two double trap punts	8,900	...
Western division—		
Tramway from Kolanukoduru quarry	10,000	...
4. Navigation plant—		
Ferry ballacuts	2,078	5,000
TOTAL, KISTNA DELTA SYSTEM ..	25,978	15,000
Srivaikuntam Anicut System.		
3. Tools and Plant—Tinnevelly division	87	...
Periyár Project.		
Tools and Plant ... No. I division	5,000	30,000
Madura do.	500	500
TOTAL, PERIYAR PROJECT ..	5,500	30,500
TOTAL, CAPITAL ACCOUNT ..	31,730	45,500

* These sums are provided in the budget estimates for Minor Works and Navigation for 1896 97.

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 1896–97—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

1896-97.

MADRAS,
24th April 1896.

(Signed) R. R. E. DRAKE-BROCKMAN, Colonel, R.E.,
Secretary to Govt., P.W.D.,
Irrigation Branch.

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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 1896 to 31st March 1897.

	Actual Realizations, 1894-95.	Budget Estimate, 1895-96.	Revised Estimate, 1895-96.	Budget Estimate, 1896-97.
PROVINCIAL.	Rs.	Rs.	Rs.	Rs.
IRRIGATION AND NAVIGATION WORKS.				
Works for which Capital and Revenue Accounts are kept.				
Thadapalli Channel System	80	60	80	80
Kalingaroyen Channel System	...	600	420	420
Pálár Anicut System	1,079	2,300	1,540	1,540
Poiney Anicut System	689	740	600	600
Cheyáru Anicut System	129	130	200	200
Chembrambakam Tank System	50	10	30	30
Madras Water-supply and Irrigation Extension	13,462	12,400	13,380	13,380
Valluru Anicut System	4	...	...	...
Tirukkóyilúr Anicut System	491	600	570	570
Mehamattur Anicut System	20	10	30	30
Vriddhachalam Anicut System	55	50	50	50
Shatiatope Anicut System	315	250	300	300
Pelandorai Anicut System	273	300	250	250
Lower Coleroon Anicut System	1,619	1,100	1,000	1,000
Maradur Anicut System	192	250	350	350
Buckingham Canal	1,09,498	1,08,000	1,10,000	1,10,000
Védáranniyam Canal	1,136	1,200	1,200	1,200
Total ..	1,29,095	1,28,000	1,30,000	1,30,000
Works for which neither Capital nor Revenue Accounts are kept, P.W.D.	9,693	8,000	10,000	10,000
AGRICULTURAL WORKS.				
Works for which neither Capital nor Revenue Accounts are kept ...	27,096	43,000	30,000	30,000
TOTAL ..	1,65,884	1,79,000	1,70,000	1,70,000

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 1896 to 31st March 1897.

	Reference to Detailed Estimate.	Actual Outlay, 1894-95.	Budget Estimate, 1895-96.	Revised Estimate, 1895-96.	Budget Estimate, 1896-97.
PROVINCIAL.	Pages.	Rs.	Rs.	Rs.	Rs.
MINOR WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.					
CAPITAL.					
1. Works ... In progress ... ... Rs. 3,07,323; Not commenced ... Rs. 6,15,535	8 to 19	3,26,430	6,16,455	5,25,968	9,22,858
2. Establishment	31	73,392	1,11,745	1,12,786	1,78,019
3. Tools and Plant	33	11,191	21,300	51,100	21,733
Total, Capital ...		4,11,013	7,49,500	6,89,854	11,22,610
REVENUE.					
1. Extensions and Improvements. In progress ... ... Rs. ...; Not commenced Rs. 22,659	20 to 23	21,974	38,560	25,086	22,659
2. Maintenance and Repairs	28 & 29	2,05,427	1,72,013	1,88,740	1,72 209
3. Establishment	31	64,027	61,232	62,168	57,819
4. Tools and Plant	33	4,223	3,875	3,875	3,875
Refunds of Revenue	...	73	...	...	...
Total, Revenue ...		2,95,724	2,75,680	2,79,819	2,56,562
Total Minor Works for which Capital and Revenue Accounts are kept		7,06,737	10,25,180	9,69,673	13,79,172
MINOR WORKS FOR WHICH NEITHER CAPITAL NOR REVENUE ACCOUNTS ARE KEPT.					
1. Works— Major ... In progress ... ... Rs. 85,200; Not commenced ... Rs. 23,800	22 & 23	1,97,896	1,28,200	1,23,808	1,09,000
Minor	22 & 23	3,72,433	1,91,510	1,32,871	2,13,857
2. Repairs	29	6,83,497	9,78,946	9,55,551	10,34,051
3. Establishment	32	5,92,409	5,71,626	5,32,420	5,42,994
4. Tools and Plant	33	18,756	19,538	18,654	19,856
Refunds of Revenue	...	53	...	...	...
Total Minor Works for which neither Capital nor Revenue Accounts are kept		18,65,044	18,89,820	17,63,304	19,19,758
AGRICULTURAL WORKS.					
Works for which neither Capital nor Revenue Accounts are kept.					
1. Works— Major ... In progress ... ... Rs. 92,500; Not commenced	24 & 25	64,916	91,532	1,03,725	92,500
Minor	24 & 25	18,953	18,230	12,448	13,900
2. Repairs	29	2,13,265	2,43,692	3,00,560	3,74,389
3. Establishment	32	64,423	78,694	91,949	1,08,407
4. Tools and Plant	33	4,032	4,852	6,341	6,874
Refunds of Revenue	...	117	...	...	...
Total, Agricultural Works ...		3,65,706	4,37,000	5,15,023	5,96,070
Total, Provincial ...		29,37,487	33,52,000	32,48,000	38,95,000

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 1896 to 31st March 1897—continued.

	Reference to Detailed Estimate.	Actual Outlay, 1894–95.	Budget Estimate, 1895–96.	Revised Estimate, 1895–96.	Budget Estimate, 1896–97.
	Pages.	Rs.	Rs.	Rs.	Rs.
GRAND TOTAL, PROVINCIAL 43. MINOR WORKS AND NAVIGATION.					
Works ... In progress ... ... Rs. 4,85,023					
Works ... Not commenced 8,89,751		10,02,602	10,84,487	9,23,856	13,74,774
Repairs		11,02,189	13,94,651	14,44,851	15,80,649
Establishment		7,94,251	8,23,297	7,99,323	8,87,239
Tools and Plant		38,202	49,565	79,970	52,338
Refunds of Revenue		243	...	...	...
Total, Provincial ...		29,37,487	33,52,000	32,48,000	38,95,000
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		9,721	6,000	8,000	3,000
II. Repairs		763	2,000	16,000	5,000
Total ...		10,484	8,000	24,000	8,000

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 1896–97, arranged by Projects and Objects of Work.

PROVINCIAL.	Amount of Sanctioned Estimate.	Actual Outlay to end of 1894–95.	Budget Estimate, 1895–96.	Probable Outlay during 1895–96 (Revised Estimate).	Budget Estimate, 1896–97.	Remarks and References.
43. Minor Works and Navigation.	Rs.	Rs.	Rs.	Rs.	Rs.	
Minor Works for which Capital and Revenue Accounts are kept.						
Capital.						
Works in Progress.						
Kurnool-Cuddapah Canal ...	19,350	...	...	6,150	18,450	Government of India Register No. 24 I. of 1895–96 and P.M.G. No. 766 I., dated 20th September 1895. Estimates for other works under preparation.
Munnyeru Project	3,68,000	25,535	1,23,000	1,17,759	1,23,000	P.M.G. No. 1089 I., dated 17th December 1893.
Dondapad Tank Project ...	1,27,193	93,315	27,100	37,165	10,850	P.M.G. No. 191 I., dated 25th Feb. 1892; No. 376 I., dated 9th May 1894; No. 530 I., dated 16th July 1894, and No. 615 I., dated 29th August 1894.
Sagiléru Project	3,61,000	1,40,253	98,400	1,27,980	1,10,700	P.M.G. No. 10 I., dated 9th January 1894 and No. 915 I., dated 21st November 1894.
Thadapalli Channel System ...	26,600	3,962	12,900	12,900	8,610	P.M.G. No. 957 I., dated 6th Nov. 1893.
Pálár Anicut System	20,06,798	19,35,314	9,000	16,735	12,300	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 24th January 1896 and No. 303 I., dated 31st March 1896.
Cheyáru Anicut System ...	1,62,050	1,42,644	8,400	14,000	3,690	P.M.G. No. 855 I., dated 6th October 1893; No. 328 I., dated 9th April 1895; No. 822 I., dated 7th October 1895; No. 945 I., dated 11th November 1895; No. 991 I., dated 19th November 1895, and No. 1055 I., dated 5th December 1895.
Lower Coleroon Anicut System.	2,20,050	9,261	66,300	48,596	78,720	P.M.G. No. 835 I., dated 8th October 1892; No. 960 I., dated 6th November 1893; No. 372 I., dated 5th May 1894, and No. 181 I., dated 25th Feb. 1895.
Maradur Anicut System ...	3,600	...	...	2,475	6,150	P.M.G. No. 1006 I., dated 14th December 1894; Estimate for another work under preparation.
Buckingham Canal	86,14,000	80,05,611	1,67,900	1,95,895	1,50,140	Government of India Register No. 15 I. of 1883–84; P.M.G. No. 3 I., dated 8th January 1895.
Canal from the Madras Harbour to the Buckingham Canal.	9,50,000	...	2,00,000	50,000	6,00,000	P.M.G. No. $\frac{1084}{A}$ I., dated 14th December 1895.
Other Projects	...	...	36,500	60,199	...	
Total, Capital ..	...	...	7,49,500	6,89,854	11,22,610	
Revenue.						
Ganjám Minor Rivers System ...	...	...	...	1,245	3,690	
Cumbum Tank System ...	...	...	2,460	676	2,460	
Thadapalli Channel System ...	...	...	3,000	2,756	4,300	
Arkenkotta do. do. ...	...	...	1,800	1,677	1,840	
Kalingaroyen do. do. ...	...	...	1,300	3,609	2,500	
Pálár Anicut System	...	...	47,010	42,105	43,602	
Poiney do. do.	...	...	13,600	22,196	12,360	
Cheyáru do. do.	...	...	21,000	27,772	16,010	
Chembrambakam Tank System.	...	...	— 3,000	— 2,998	— 2,040	
Madras Water-supply and Irrigation Extension.	...	...	1,340	1,438	— 270	
Valluru Anicut System ...	...	...	600	600	900	
Tirukkóyilúr Anicut System ...	...	...	17,000	19,457	12,350	

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 1896–97, *arranged by Projects and Objects of Work*—continued.

	Amount of Sanctioned Estimate.	Actual Outlay to end of 1894–95.	Budget Estimate, 1895–96.	Probable Outlay during 1895–96 (Revised Estimate).	Budget Estimate, 1896–97.	Remarks and References.
PROVINCIAL—*continued.*	Rs.	Rs.	Rs.	Rs.	Rs.	
43. MINOR WORKS AND NAVIGATION—*continued.*						
Minor Works for which Capital and Revenue Accounts are kept—continued.						
REVENUE—*cont.*						
Mehamattur Anicut System ...	...	...	2,500	4,118	1,850	
Vriddhachalam Anicut System...	...	...	4,300	5,724	3,700	
Shatiatope Anicut System ...	...	...	17,200	10,944	14,660	
Pelandorai do. do. ...	...	...	6,000	4,430	4,190	
Lower Coleroon Anicut System.	...	...	29,630	18,881	28,390	
Nandyar Channel	...	...	...	2,534	5,050	
Maradur Anicut System ...	...	...	14,000	16,515	11,110	
Chilka Lake Canal	...	...	370	370	370	
Buckingham Canal	...	...	91,700	91,900	85,110	
Védáranniyam Canal	...	...	3,870	3,870	4,430	
Total, Revenue ..	...	...	2,75,680	2,79,819	2,56,562	
Total, Minor Works for which Capital and Revenue Accounts are kept	...	...	10,25,180	9,69,673	13,79,172	
Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.						
Old maintenance charges ...	...	...	4,04,662	4,17,922	4,21,282	
Ordinary Minor Works ...	...	...	8,43,758	7,51,890	7,90,946	
Tank Restoration Works—						
Investigation	...	...	58,200	26,125	...	
Execution	...	...	5,52,900	5,32,367	6,77,530	
Minor Works, Revenue Department.	...	...	30,000	35,000	30,000	
Total ...	...	...	18,89,820	17,63,304	19,19,758	
Total, Irrigation and Navigation Works	...	...	29,15,000	27,32,977	32,98,920	
AGRICULTURAL WORKS.						
Works for which neither Capital nor Revenue Accounts are kept.						
MAJOR ORIGINAL WORKS.						
In Progress.						
Constructing left flood bank of the Nagavalli river between Annavaram and Ampli villages.	5,730	...	5,032	2,030	3,000	P.M.G. No. 681 I., dated 10th August 1892.
Raising the Vasista Gódávari right bank from anicut to Chinchinada ferry.	72,800	1,785	10,000	10,000	30,000	P.M.G. No. 56 I., dated 19th Jan. 1893.

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 1896–97, *arranged by Projects and Objects of Work*—continued.

	Amount of Sanctioned Estimate.	Actual Outlay to end of 1894–95.	Budget Estimate, 1895–96.	Probable Outlay during 1895–96 (Revised Estimate).	Budget Estimate, 1896–97.	Remarks and References.
PROVINCIAL—*continued.*	Rs.	Rs.	Rs.	Rs.	Rs.	
AGRICULTURAL WORKS—*continued.*						
Works for which neither Capital nor Revenue Accounts are kept—continued.						
MAJOR ORIGINAL WORKS—*cont.*						
In Progress—cont.						
Raising Vasista Gódávari right bank from Chinchinada ferry to Narsapur.	8,300	1,924	1,000	4,000	3,000	P.M.G. No. 431 I., dated 16th May 1893.
Raising the Vasista left bank from head to junction of Gunnavaram canal.	33,500	10,992	6,000	6,000	10,000	P.M.G. No. 101 I., dated 4th Feb. 1893.
Diverting Vinctyam right bank along Pasarlapudi channel left bank.	16,000	2,417	5,000	5,000	11,000	P.M.G. No. 1043 I., dated 10th Dec. 1893.
Raising the Kistna river left bank.	78,300	14,527	10,000	10,000	10,000	P.M.G. No. 278 I., dated 28th March 1893.
Rest-house at Avanigedda ...	3,120	...	3,000	3,000	500	P.M.G. No. 366 I., dated 1st May 1894.
Raising the flood embankment of the Kistna river on right side from 44 to 55½ miles.	33,000	1,285	...	17,000	15,000	P.M.G. No. 248 I., dated 13th March 1895.
Raising the Cauvery both banks from road No. 4 to Kumbakónam bridge.	25,900	9,664	6,000	6,000	10,000	P.M.G. No. 500 I., dated 11th September 1890.
Total, Major Original Works ...	...	...	...	...	92,500	
Minor Original Works	...	...	...	...	13,900	
Repairs	...	...	...	...	3,74,389	
Establishment	...	...	...	...	1,08,407	
Tools and Plant	...	...	...	...	6,874	
Total, Agricultural Works ...	...	...	...	...	5,96,070	
Total, Provincial ...	...	...	...	...	38,95,000	
LOCAL IRRIGATION CESS FUND.						
43. MINOR WORKS AND NAVIGATION.						
Minor Works for which neither Capital nor Revenue Accounts are kept.	...	...	8,000	24,000	8,000	
Total ...	...	...	8,000	24,000	8,000	

GOVERNMENT OF MADRAS.

CHARGES.

Part II.

Detail of the Budget Estimate for Original Works under Irrigation

Minor Works in the Madras Presidency for the year 1896–97.

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	MLS.	CHS.	Amount of estimate.	Outlay: To end of 1894–95.	Outlay: Probable during 1895–96.	Grant, 1896–97.	Item No.	Remarks and references.
							Rs.	Rs.	Rs.	Rs.		
				KURNOOL-CUDDAPAH CANAL.								
				OPEN CAPITAL ACCOUNT.								
				2. *Main Canals and Branches.*								
Kurnool ...	...	14. Miscellaneous.	1	Demarcating land under the canal			13,360	...	5,000	6,000	1	P.M.G. No. 1098 I., dated 19th December 1895.
				3. *Distributaries.*								
		3. Works ...	2	Improving Rampalli channel culvert	0	1·27	199	...	...	199	2	
		Do. ...	3	Road dam	0	74	45	...	...	45	3	
		Do. ...	4	Drop No. 1	1	15	107	...	...	107	4	
		Do. ...	5	Road dam	1	38	45	...	...	45	5	
		Do. ...	6	Drop No. 2	2	10	85	...	...	85	6	
		Do. ...	7	Road dam	2	41	45	...	...	45	7	
		Do. ...	8	Drop No. 3 with side sluice ...	2	44	170	...	...	170	8	
		Do. ...	9	Do. No. 4	2	70	93	...	...	93	9	
		Do. ...	10	Road dam	2	75	45	...	...	45	10	
		Do. ...	11	Drop No. 1 with side sluice ...	2	65	132	...	...	132	11	P.M.G. No. 766 I., dated 20th September 1895.
		Do. ...	12	Road dam	2	76	45	...	...	45	12	
		Do. ...	13	Drop No. 2	3	5	75	...	...	75	13	
		Do. ...	14	Road dam	3	10	45	...	...	45	14	
		4. Earthwork ...	15	Do.	3	52	45	...	...	45	15	
		Do. ...	16	Deepening main channel			528	...	...	528	16	
		Do. ...	17	Do. branch channel No. 1			123	...	...	123	17	
		Do. ...	18	Do. do. No. 2			51	...	...	51	18	
		Do. ...	19	Banking main channel			108	...	...	108	19	
		Do. ...	20	Do. branch channel No. 1			236	...	...	236	20	
		Do. ...	21	Do. do. No. 2			78	...	...	78	21	
		Do. ...	22	Reserve for works			...	...	...	6,700	22	Estimates under preparation.
				Total, Kurnool-Cuddapah Canal ...			...	...	...	15,000		
				CAPITAL ACCOUNT.								
				Munnyeru Project.								
				1. *Head Works.*								
Kistna Northern. ...		3. Works ...	23	Anicut			31,300	19,486	17,975	6,000	23	P.M.G. No. 1089 I., dated 12th December 1893.
		Do. ...	24	Under-sluice			8,480	...	5,000	500	24	
		4. Buildings ...	25	Rest-house at Muchintala			1,650	...	...	300	25	P.M.G. No. 20 I., dated 9th January 1896.
				2. *Main Canals and Branches.*								
		3. Regulators ...	26	Head sluice			10,700	...	7,700	1,000	26	
		4. Falls and weirs.	27	Drop at 15 miles 2 furlongs			750	...	...	339	27	
		Do.	28	Do. at 22 do. 4 do.			620	...	...	281	28	
		5. River and hill torrent works.	29	Outlet at 4 do. 6/624 furlongs			1,260	...	250	1,010	29	
		Do.	30	Do. at 10 do. 4 do.			1,680	...	275	1,405	30	
		6. Other cross drainage works.	31	Under-tunnel at 2 miles 3½ furlongs			7,920	...	4,770	1,500	31	
		Do.	32	Do. at 2 do. 7 do.								P.M.G. No. 1089 I., dated 12th December 1893.
		Do.	33	Do. at 3 do. 3 do.			2,380	...	1,435	945	32	
		Do.	34	Do. at 6 do. 6 do.			3,900	...	2,350	1,550	33	
		Do.	35	Do. at 7 do. 6 do.			7,860	...	4,735	3,125	34	
		Do.	36	Do. at 9 do. 1 do.			7,860	...	4,735	3,125	35	
		Do.	37	Do. at 11 do. 2 do.			2,540	...	1,530	1,010	36	
		Do.	38	Do. at 12 do.			1,680	...	1,010	670	37	
							2,280	...	1,375	905	38	

Detail of the Budget Estimate for Original Works under Irrigation

Minor Works in the Madras Presidency for the year 1896-97—continued.

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894-95.	Outlay: Probable during 1895-96.	Grant, 1896-97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				2. *Main Canal and Branches*—cont.						
Kistna Northern —*cont.*	...	6. Other cross drainage works.	39	Under-tunnel at 12 miles 7 furlongs	7,500	...	...	7,500	39	
		Do.	40	Do. at 14 do. 4 do.	2,300	...	...	2,300	40	
		Do.	41	Do. at 15 do. 3½ do.	2,240	...	...	1,014	41	
		Do.	42	Do. at 16 do. 2 do.	2,210	...	...	1,001	42	
		Do.	43	Do. at 16 do. 7 do.	5,760	...	...	2,609	43	
		Do.	44	Do. at 18 do. 6 do.	3,600	...	...	1,630	44	
		Do.	45	Do. at 19 do. 4 do.	2,210	...	...	1,001	45	
		Do.	46	Do. at 20 do. 3 do.	1,600	...	...	724	46	
		Do.	47	Do. at 21 do. 2 do.	3,500	...	...	1,585	47	
		Do.	48	Do. at 22 do. 0 do.	2,180	...	...	987	48	
		Do.	49	Do. at 23 do. 3 do.	2,260	...	...	1,024	49	
		Do.	50	Do. at 25 do. 2 do.	2,220	..	..	1,005	50	
		7. Bridges ...	51	Bridge at 1 mile	2,110	...	1,270	840	51	
		Do. ...	52	Do. at 2 miles 0/528 furlongs	1,500	...	905	595	52	
		Do. ...	53	Do. at 3 do. 6/264 do.	1,500	...	905	595	53	
		Do. ...	54	Do at 4 do. 3/198 do.	1,500	...	905	595	54	
		Do. ...	55	Do. at 5 do. 3/132 do.	1,500	...	905	595	55	
		Do. ...	56	Do. at 7 do. 2 furlongs	1,500	...	905	595	56	P.M.G. No. 1089 I., dated 12th December 1893.
		Do. ...	57	Do. at 9 do. 3/396 furlongs	1,910	...	1,145	765	57	
		Do. ...	58	Do. at 10 do. 4/264 do.	1,350	...	815	535	58	
		Do. ...	59	Do. at 11 do. 2 furlongs	1,350	...	815	535	59	
		Do. ...	60	Do. at 12 do. 5/330 furlongs	1,350	...	...	1,350	60	
		Do. ...	61	Do. at 14 do. 4 furlongs	1,350	...	...	1,350	61	
		Do. ...	62	Do. at 16 do. 2 do.	1,350	...	...	611	62	
		Do. ...	63	Do. at 17 do. 7 do.	1,350	...	...	611	63	
		Do. ...	64	Do. at 19 do. 7 do.	1,350	...	...	611	64	
		Do. ...	65	Do. at 23 do. 3 do.	1,230	...	...	557	65	
		12. Earthwork ...	66	Do. at 24 do. 0 do.	1,230	...	...	557	66	
		15. Miscellaneous.	67	Excavating channel	1,13,400	...	35,790	35,122	67	
			68	Demarcation stones	2,000	964	500	536	68	
				3. *Distributaries.*						
		3. Works ...	69	Sluices for branch channels	8,380	...	...	2,600	69	
		4. Earthwork ...	70	Excavating branch channels	11,000	...	...	4,000	70	
		5. Miscellaneous.	71	Demarcation stones for branch channels ...	1,000	...	...	400	71	
				Total, Munnyeru Project ...	...	...	...	1,00,000		
				Dondapad Tank Project.						
				2. *Main Canals and Branches.*						
		2. Land ...	72	Compensation for Dondapad tank bund ...	6,840	11	...	6,302	72	P.M.G. No. 191 I., dated 25th February 1892.
		3. Regulators ...	73	Surplus weir and head sluice to east side channel.	29,700	23,822	5,605	273	73	
		12. Earthwork ...	74	Tank bund	29,800	26,162	5,419	1,000	74	
				3. *Distributaries.*						P.M.G. No. 191 I., dated 25th February 1892; P.M.G. No. 376 I., dated 9th May 1894; P.M.G. No. 530 I., dated 16th July 1894, and P.M.G. No. 615 I., dated 29th August 1894.
		3. Works ...	75	Constructing sluice No. II of Nadigedda tank...	1,500	1,428	26	46	75	
		Do. ...	76	Excavating the east side channel	7,680	3,236	1,152	292	76	
		Do. ...	77	Nadigedda tank bund	21,680	15,171	5,213	1,296	77	
		Do. ...	78	Excavating the distributary to Nadigedda tank.	2,200	450	959	791	78	
				Total, Dondapad Tank Project ...	...	...	...	10,000		

Detail of the Budget Estimate for Original Works under Irrigation Minor Works in the Madras Presidency for the year 1896-97—continued.

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894-95.	Outlay: Probable during 1895-96.	Grant, 1896-97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				SAGILERU PROJECT.						
				I. Works.						
				I. Head Works.						
Cuddapah ...	...	1. Preliminary expenses.	79	1. Preliminary expenses	* 6,000	1,916	1,000	1,000	79	
		3. Works ...	80	Constructing an anicut	50,400	11,509	18,700	16,000	80	
		Do. ...	81	Scouring sluice	14,800	2,436	6,000	5,000	81	
		4. Buildings ...	82	Inspection bungalow with out-houses at Pormamilla.	3,200	...	...	3,000	82	
				2. *Main Canals and Branches.*						
		2. Land	83	Land compensation	6,456	1,037	1,000	1,000	83	
		3. Regulator ...	84	Constructing head sluice	16,500	3,336	10,000	3,000	84	
		Do. ...	85	Regulator at 2 miles 1,340 feet	5,800	...	3,000	2,000	85	
		6. Other cross drainage works.	86	Sluice at 3¼ miles	995	117	100	500	86	
		Do.	87	Inlet at 1¼ miles	3,480	...	1,500	1,500	87	
		Do.	88	Pipe aqueduct, 1 mile 153 feet	1,390	...	1,000	500	88	
		Do.	89	Do. 1 „ 52 chains...	1,680	...	500	1,000	89	
		Do.	90	Inlet at 750 feet	980	...	500	500	90	
		Do.	91	Do. at 5 miles 76·53 chains	720	...	500	500	91	
		7. Bridges ...	92	Bridge No. 1 at 1 mile	3,560	951	500	1,500	92	
		Do. ...	93	Do. „ 2 at 1½ miles	5,800	1,542	1,500	2,000	93	
		Do. ...	94	Diversion of Cumbum road	4,890	1,413	2,000	1,500	94	
		Do. ...	95	Bridge on do.	3,720	977	1,500	1,000	95	
		Do. ...	96	Bridge at 5 miles 1,363 feet	2,540	...	1,500	1,000	96	
		8. Escapes ...	97	Escapes across Pulivagu	19,700	6,664	11,000	2,000	97	
		Do. ...	98	Do. at 6 miles 10·81 chains	1,260	...	200	1,000	98	
		Do. ...	99	Do. at 5 „ 76·53 „	1,540	...	200	1,000	99	
		Do. ...	100	Do. at 6 „ 23·80 „	940	...	100	500	100	
		12. Earthwork ...	101	Excavating channel	1,16,300	52,813	30,000	35,000	101	
		14. Tank and reservoir.	102	Raising and strengthening the bund of Chintalapalli tank.	...	3,793	11,000	6,000	102	
		Do.	103	Weir and right flank of Chintalapalli tank ...	770	122	100	500	103	
		Do.	104	Sluice No 1 right flank of do. ...	1,180	...	100	1,000	104	
		Do.	105	Do. „ 2 do. of do. ...	1,180	...	500	500	105	
				Total ...	...	...	...	90,000		
				THADAPALLI CHANNEL SYSTEM.						
				OPEN CAPITAL ACCOUNT.						
				3. *Distributaries.*						
Coimbatore ...	Satyamangalam.	4. Earthwork ...	106	Cutting side channel	7,000	3,219	3,000	1,400	106	
		3. Works ...	107	22 foot-bridges	5,280	...	2,600	2,600	107	
		2. Land ...	108	Compensation for land	7,530	...	...	3,000	108	
				Total ...	...	...	...	7,000		

* The amounts entered in this column are those which will be included in the revised estimate for the project now under preparation.

PROVINCIAL—MINOR WORKS AND NAVIGATION.

GOVERNMENT OF MADRAS.

CHARGES—cont.

Part II—cont.

Detail of Budget Estimate for Original Works under Irrigation Minor Works in the Madras Presidency for the year 1896-97—continued.

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay. To end of 1894-95.	Outlay. Probable during 1895-96.	Grant, 1896-97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				PALAR ANICUT SYSTEM.						
				KAVERIPAUK MAIN SURPLUS CHANNEL.						
				Kalapalampattu Branch Channel.						
North Arcot ...	...	4. Earthwork ...	109	Improvements to channel to Torayur tank ...	2,000	...	...	2,000	109	
				REDDIVALAM-NEDUMPALLI CONDAM DISTRIBUTARIES.						
				Reddivalam Branch Channel.						
		3. Works ...	110	Proposed under tunnel at 4,710 feet, below Tennal tank.	700	...	...	700	110	
		4. Earthwork ...	111	Deepening and widening Reddivalam channel from Reddivalam tank to Nelvoy tank.	2,300	645	...	1,655	111	
				3. *Distributaries.*						
				Karivedu-Kolathur and Damal, &c., Project.						
				Kolathur Branch.						
		4. Earthwork ...	112	Cutting Karivedu-Kolathur proposed extension from a point 700 feet below the existing head sluice in Govindavady channel.	1,430	...	...	1,430	112	
		3. Works ...	113	Proposed improvements to the existing head sluice of Karivedu-Kolathur channel above drop No. 7 in the Govindavady channel.	170	...	...	170	113	
		Do. ...	114	Proposed drop at 5,000 feet below head in Karivedu and Kolathur channel.	280	...	...	280	114	
		Do. ...	115	Proposed regulators in Kolathur and Damal branch channels below Karivedu tank weir.	570	...	...	570	115	
		Do. ...	116	Constructing the proposed regulating weir at the crossing of the Avalur supply with the Damal channel at 1 mile 7 furlongs below Karivedu tank weir.	280	...	...	280	116	
				Damal Branch.						
		4. Earthwork ...	117	Improving and strengthening the Avalur channel to supply Damal, &c., tanks.	1,250	...	...	1,250	117	
		3. Works ...	118	Improvements to the Avalur channel head sluice.	650	...	...	650	118	
			119	Unforeseen works	...	...	...	1,015	119	
				Total, Pálár Anicut System ...	...	...	...	10,000		
				Cheyáru Anicut System.						
		2. Land ...	120	Compensation for land taken up for Cheyáru main channel.	1,660	304	...	1,360	120	
			121	Unforeseen works	...	...	...	1,640	121	
				Total, Cheyáru Anicut System ...	...	...	...	3,000		

Detail of the Budget Estimate for Original Works under Irrigation

Minor Works in the Madras Presidency for the year 1896–97—continued.

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894–95.	Outlay: Probable during 1895–96.	Grant, 1896–97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				LOWER COLEROON ANICUT SYSTEM.						
				I. Head Works.						
Tanjore	...	3. Works ...	122	Fitting a second pair of experimental shutters to the Lower Coleroon anicut.	4,200	...	...	4,200	122	Estimate under preparation.
				3. *Distributaries.*						
				South Rajen Voikal.						
		4. Earthwork ...	123	Improvements to Oosi voikal	2,534	...	1,862	700	123	P.M.G. No. 372 I., dated 5th May 1894.
				2. *Main Canals and Branches.*						
				Khan Sahib's Canal.						
South Arcot ...	...	3. Regulators ...	124	Regulator across the canal	10,540	3,174	6,540	826	124	P.M.G. No. 1053 I., dated 22nd December 1894.
		12. Earthwork ...	125	Widening the canal	9,600	...	4,600	5,000	125	,, ,, 835 I. ,, 8th October 1892.
				4. *Drainages and Protective Works.*						
				Old Coleroon Drain.						
		3. Works ...	126	Aqueduct and bridge extension	25,240	...	6,612	18,628	126	P.M.G. No. 835 I., dated 8th October 1892.
		4. Earthwork ...	127	Old Coleroon drain clearing, widening and forming banks.	89,600	240	...	34,646	127	,, ,, ,, ,, ,, ,,
				Total, Lower Coleroon Anicut System ...	...	...	...	64,000		
				MARADUR ANICUT SYSTEM.						
				OPEN CAPITAL ACCOUNT.						
				2. *Main Canals and Branches.*						
Tinnevelly ...	...	14. Tanks and reservoirs.	128	Improving Butterkulam	2,920	...	2,012	900	128	P.M.G. No. 1006 I., dated 14th December 1894.
		3. Regulators ...	129	Do. Maradur Melakal	...	...	...	4,100	129	Estimate under preparation.
				Total, Maradur Anicut System ...	...	...	...	5,000		
				BUCKINGHAM CANAL.						
				2. *Main Canals and Branches.*						
Buckingham Canal.	...	9. Navigation ...	130	Constructing a tidal lock at the Pálár south flood gate.	12,800	...	6,000	6,000	130	P.M.G. No. 659 I., dated 16th August 1895.
			131	Constructing a tidal lock at the Mannyeru north flood gate.	15,500	...	6,000	9,500	131	,, ,, 563 I. ,, 15th July 1895.
			132	Converting Swarnamukhi north flood gate into lock.	14,520	...	5,000	9,240	132	,, ,, 17 I. ,, 6th January 1896.

Detail of the Budget Estimate for Original Works under Irrigation

Minor Works in the Madras Presidency for the year 1896–97—continued.

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894–95.	Outlay: Probable during 1895–96.	Grant, 1896–97.	Item No.	Remarks and references.
				BUCKINGHAM CANAL—*cont.*						
				2. *Main Canals and Branches*—cont.						
Buckingham Canal —*cont.*	...	9. Navigation ...	133	Constructing a tidal lock at Pambli	Rs. 12,500	Rs. ...	Rs. 10,880	Rs. 1,620	133	P.M.G. No. 489 I., dated 15th June 1895.
		.....	134	Do. a tidal lock at Pálár south bank ...	12,710	...	4,000	8,710	134	,, ,, 17 I. ,, 16th January 1896.
		.....	135	Do. a flood gate across Vayalur salt channel.	12,600	...	5,000	7,600	135	,, ,, 1099 I. ,, 19th December 1895.
		.....	136	Making the Ottary nulla navigable	10,120	...	...	10,120	136	Estimate submitted to Government.
		6. Other cross drainage works.	137	Improvements to canal from Pálár to Merkanam. Pipe inlet at 49/1 miles	590	...	...	590	137	P.M.G. No. 199 I., dated 22nd February 1896.
		.....	138	Inlet at ramp 46/3 miles	150	...	...	150	138	
		.....	139	Inlet at 51/3 miles	290	...	...	290	139	
		12. Earthwork ...	140	Earthwork clearance	15,100	...	...	15,000	140	
		.....	141	Improvements to banks and berms	4,870	...	...	4,870	141	
		.....	142	Cutting basin	100	...	...	100	142	
		.....	143	Improvements to canal from 65/3 to 75/2 miles.	12,700	...	...	12,500	143	,, ,, 956 I., ,, 12th November 1895.
		9. Navigation ...	144	Constructing a lock at Mannyeru south flood gate at 158/111 miles.	20,000	...	...	12,710	144	Estimates submitted to Government.
		.....	145	Constructing a lock at Chippaleru north flood gate.	12,000	...	...	12,000	145	
		.....	146	Incomplete works	...	...	...	7,000	146	
				Total, Buckingham Canal ...	...	...	...	1,18,000		
				Canal from the Madras Harbour to the Buckingham Canal.						
		3. Works	147	Combined bridge and regulator at the mouth of river Cooum.	1,73,700	...	...	80,000	147	P.M.G. No. $\frac{1084}{A}$ I., dated 14th December 1895.
		.....	148	Improvements to road culvert under Marina for drainage channel at 3rd mile of junction canal.	1,700	...	...	1,700	148	
		.....	149	Excavating a drainage channel from 3rd mile of junction canal.	2,825	...	...	2,800	149	
		.....	150	Diversion of road from Ennore road to Tiruvattore road.	2,300	...	...	2,300	150	
		.....	151	Road from Monegar Choultry road to eastern end of cemetery.	1,510	...	...	1,510	151	
		.....	152	Bridge under Tiruvattore road at 0 mile 52·57 chains of Harbour canal.	46,960	...	...	46,960	152	
		.....	153	Bridge under Basin road at 0 mile 5 chains of Harbour canal.	47,740	...	...	47,740	153	
		.....	154	Tunnel under over bridge approach for Messrs. Best and Company.	1,290	...	...	1,290	154	
		.....	155	Lock at Basin in Buckingham canal	29,110	...	...	29,110	155	
		.....	156	Excavating Harbour canal	1,53,070	...	...	80,000	156	
		.....	157	Skew bridge under Monegar Choultry road at 1 mile 11·50 chains of Harbour canal.	49,800	...	...	15,000	157	
		.....	158	Skew bridge under beach road at 1 mile 57·50 chains of Harbour canal.	47,990	...	...	15,000	158	
		.....	159	Royapuram lock at 1 mile 35 chains of Harbour canal.	75,736	...	...	20,248	159	
		.....	160	Retaining wall and wharf steps	1,30,600	...	...	20,000	160	
		.....	161	Compensation for land and buildings	1,37,200	...	...	1,37,200	161	
				Total, Canal from the Madras Harbour to the Buckingham Canal	...	...	...	5,00,858		
				Total, Capital ...	...	...	...	9,22,858		

Detail of the Budget Estimate for Original Works under Irrigation

Minor Works in the Madras Presidency for the year 1896–97—continued.

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894–95.	Outlay: Probable during 1895–96.	Grant, 1896–97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				REVENUE ACCOUNT.						
				Extensions and Improvements.						
Kurnool ...	...	.....	162	Cumbum tank system	...	...	6	500	162	
Coimbatore ...	...	.....	163	Thadapalli channel system	...	...	300	500	163	
			164	Arkenkota channel system	...	...	363	500	164	
North Arcot ...	...	.....	165	Pálár anicut system	...	...	9,038	5,014	165	
				Deduct Old Maintenance Charges ...	...	...	* 178	* 178		
				Net ...	...	...	8,860	4,836		
Chingleput ...	...	.....	166	Pálár anicut system	...	...	659	200	166	
				Total, Pálár Anicut System ...	...	...	9,519	5,036		
North Arcot ...	...	.....	167	Poiney anicut system	...	...	3,297	2,000	167	
			168	Cheyáru anicut system	...	...	4,563	3,000	168	
Chingleput ...	...	.....	169	Chembrambakam tank	...	...	1,000	808	169	
				Deduct Old Maintenance Charges ...	...	...	* 2,283	* 2,283		
				Net ...	...	...	— 1,283	— 1,475		
			170	Madras Water-supply and Irrigation extension...	...	...	889	...	170	
				Deduct Old Maintenance Charges ...	...	...	* 3,600	* 3,600		
				Net ...	...	...	— 2,711	— 3,600		
			171	Valluru anicut system	...	...	138	232	171	
South Arcot ...	...	.....	172	Tirukkóyilúr anicut system	...	...	3,500	2,000	172	
			173	Mehamattur anicut system	...	...	987	502	173	
			174	Vriddhachalam anicut system	...	...	150	504	174	
			175	Shatiatope anicut system	...	...	1,363	1,894	175	
			176	Pelandorai anicut system	...	...	...	505	176	
				Deduct Old Maintenance Charges ...	...	...	* 59	* 59		
				Net ...	...	...	— 59	446		
Tanjore ...	...	.....	177	Lower Coleroon anicut system	...	...	788	2,000	177	
			178	Do. do.	...	...	1,700	2,000	178	
				Total, Lower Coleroon Anicut System ...	...	...	2,488	4,000		

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

Detail of the Budget Estimate for Original Works under Irrigation

Minor Works in the Madras Presidency for the year 1896-97—continued.

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894-95.	Outlay: Probable during 1895-96.	Grant, 1896-97.	Item No.	Remarks and References.
				REVENUE ACCOUNT—*cont.*	Rs.	Rs.	Rs.	Rs.		
				Extensions and Improvements—cont.						
Trichinopoly ...	...	.....	179	Nandyar channel	...	...	1,450	3,500	179	
Tinnevelly ...	...	.....	180	Maradur anicut system	...	...	215	1,000	180	
Buckinghan Canal.	...	.....	181	Buckingham canal	...	...	750	2,120	181	
				Total, Extensions and Improvements ...	...	...	...	22,659		
				Minor Works for which neither Capital nor Revenue Accounts are kept, P. W.D.						
				Ordinary Major Original Works.						
Gódávari Western.	...	.....	182	Diversion of Yerracalva and construction of masonry dams across it and Gundapalli channel.	8,210	195	3,000	5,000	182	P.M.G. No. 13 I., dated 10th January 1895.
Kistna Northern.	...	.....	183	Macherla tank	26,900	...	10,000	12,000	183	,, ,, 964 I. ,, 6th November 1893.
Kistna Eastern ...	...	.....	184	Ipur do.	31,000	...	...	8,000	184	,, ,, 1031 I. ,, 23rd November 1893.
			185	Jonapad do.	26,630	...	...	5,000	185	,, ,, 148 I. ,, 16th February 1895.
Nellore ...	...	.....	186	Excavating a navigable canal to the Pandraka Salt Factory.	...	...	...	5,000	186	,, ,, 320 I. ,, 2nd April 1896.
		.....	187	Mannangidinni tank improvements	4,740	...	3,000	1,700	187	,, ,, 607 I. ,, 4th August 1891.
			188	Mopad do.	23,800	...	16,000	14,000	188	,, ,, 57 I. ,, 18th January 1896.
Bellary	...	.....	189	Maripad do.	5,590	...	...	5,500	189	,, ,, 638 I. ,, 10th August 1895.
			190	Gundavole do.	5,480	...	...	5,000	190	,, ,, 481 I. ,, 11th June 1895.
			191	Rampur channel improvements	21,488	29	10,000	12,000	191	,, ,, 505 I. ,, 21st ,, 1894, P.M.G. No. 1127 I., dated 22nd December 1893 and P.M.G., No. 601 I., dated 31st July 1895.
			192	Dasanur do. do.	18,200	1,152	10,000	7,000	192	P.M.G. No. 665 I., dated 12th September 1894.
Kurnool ...	...	.....	193	Maravapalli agraharam tank	5,900	...	1,000	4,900	193	,, ,, 676 I. ,, 22nd August 1895.
			194	Royalcheruvu old tank	10,300	...	1,500	4,000	194	,, ,, 224 I. ,, 4th March 1896.
			195	Pedda and Chinna Mallalammah tank of Ramapuram.	4,000	...	2,000	1,000	195	,, ,, 5 I. ,, 3rd January 1896.
Chingleput ...	...	.....	196	Macha Veerappah tank of Indresweram ...	6,480	...	1,700	2,600	196	,, ,, 175 I. ,, 21st February 1895.
			197	Tirumeshi tank head-sluice and new supply channel.	3,520	...	...	3,500	197	,, ,, 706 I. ,, 30th August 1895.
South Arcot ...	...	.....	198	Kumaravadi tank improvements	4,740	...	...	2,800	198	,, ,, 1064 I. ,, 11th December 1895.
Tinnevelly ...	...	.....	199	Cutting a channel from Ponniar river to irrigate lands in Tirukondesweram and other villages.	14,730	...	7,000	2,000	199	,, ,, 232 I. ,, 9th March 1895.
			200	Puliyur-Periyakulam	5,160	...	2,000	3,000	200	,, ,, 660 I. ,, 13th September 1894.
			201	Sivalaperi channel	6,700	...	3,000	3,000	201	,, ,, 311 I. ,, 2nd April 1895.
			202	Vadukachimathel tank and channel	3,820	...	1,000	2,000	202	,, ,, 615 I. ,, 3rd August 1895.
				Total ...	...	...	...	1,09,000		
			203	Minor Original Works	...	...	...	1,79,380	203	
			204	Old maintenance charges for works for which Capital and Revenue Accounts are kept.	...	...	...	10,381	204	
				Total, Ordinary Works ...	...	...	...	2,98,761		

Detail of the Budget Estimate for Original Works under Irrigation

Minor Works in the Madras Presidency for the year 1896–97—continued.

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894–95.	Outlay: Probable during 1895–96.	Grant, 1896–97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.—cont.						
				Minor Original Works—*cont.*						
Tinnevelly—*cont.*	...	.....	205	Minor Works, Revenue Department, Minor Original works.	...	...	...	24,096	205	
				Agricultural Works.						
				Major Original Works.						
Vizagapatam ...	...	.....	206	Constructing left flood bank of the Nagavalli river between Annaveram and Ampli villages.	5,730	...	2,030	3,000	206	P.M.G. No. 681 I., dated 10th August 1892.
Gódávari Central.	...	.....	207	Raising the Vasista left bank from head to junction of Gunnaram canal.	33,500	10,992	6,000	10,000	207	,, ,, 101 I. ,, 4th February 1893.
			208	Diverting Vinatyam right bank along Pasarlapudi channel left bank.	16,000	2,417	5,000	11,000	208	,, ,, 1043 I. ,, 10th December 1893.
Gódávari Western.	...	.....	209	Raising the Vasista right bank from head to Chinchinada.	72,800	1,785	15,000	30,000	209	,, ,, 56 I. ,, 19th January 1893.
			210	Raising the Vasista Gódávari right bank from Chinchinada ferry to Narsapur.	8,300	1,924	4,000	3,000	210	,, ,, 431 I. ,, 16th May 1893.
Kistna Eastern ...	...	.....	211	Raising the Kistna left bank	78,300	14,527	10,000	10,000	211	,, ,, 278 I. ,, 28th March 1893.
			212	Rest-house at Avanigedda	3,120	...	3,000	500	212	,, ,, 366 I. ,, 1st May 1894.
Kistna Western.	...	.....	213	Raising the flood embankment of the Kistna river on right side from 44 to 55½ miles.	33,000	1,285	17,000	15,000	213	,, ,, 248 I. ,, 13th March 1895.
Tanjore ...	...	.....	214	Raising the Cauvery both banks from road No. 4 to Kumbakónam bridge.	25,900	9,664	6,000	10,000	214	,, ,, 500 I. ,, 11th September 1890.
				Total ...	...	...	...	92,500		
			215	Minor original works	...	...	...	13,900	215	
				Total, Agricultural Works ...	...	...	...	1,06,400		
				LOCAL IRRIGATION CESS FUND.						
				43. MINOR WORKS AND NAVIGATION.						
				Minor Works for which neither Capital nor Revenue Accounts are kept.						
Salem ...	...	.....	216	Minor original works	...	...	...	3,000	216	

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	...	15,000	15,000
Munnyeru Project	...	1,00,000	1,00,000
Dondapad Tank System	...	10,000	10,000
Sagiléru Project	...	90,000	90,000
Thadapalli Channel System	...	7,000	7,000
Pálár Anicut System	...	10,000	10,000
Cheyáru do.	...	3,000	3,000
Lower Coleroon Anicut System	...	64,000	64,000
Maradur Anicut System	...	5,000	5,000
Buckingham Canal	...	1,18,000	1,18,000
Canal from the Madras Harbour to the Buckingham Canal	...	5,00,858	5,00,858
Total ...	...	9,22,858	9,22,858
Revenue.			
Cumbum Tank System	...	500	500
Thadapalli Channel System	...	500	500
Arkenkotta do.	...	500	500
Pálár Anicut System	...	5,036	5,036
Poiney do.	...	2,000	2,000
Cheyáru do.	...	3,000	3,000
Chembrambakam Tank	...	— 1,475	— 1,475
Madras Water-supply and Irrigation Extension	...	— 3,600	— 3,600
Valluru Anicut	...	232	232
Tirukkóyilúr Anicut System	...	2,000	2,000
Mehamattur do.	...	502	502
Vriddháchalam do.	...	504	504
Shatiatope do.	...	1,894	1,894
Pelandorai do.	...	446	446
Lower Coleroon do.	...	4,000	4,000
Nundiyar Channel	...	3,500	3,500
Marudur Anicut System	...	1,000	1,000
Buckingham Canal	...	2,120	2,120
Total ...	...	22,659	22,659
Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept, P.W.D.—			
Major	...	1,09,000	1,09,000
Minor	...	1,79,380	1,79,380
Old Maintenance charges for works for which Capital and Revenue Accounts are kept	...	10,381	10,381
"Minor Works, Revenue Department," Minor Original Works ...	...	24,096	24,096
Total ...	...	3,22,857	3,22,857

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	...	92,500	92,500
Minor works	...	13,900	13,900
Total ...	...	1,06,400	1,06,400
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	3,000	...	3,000
Total ...	3,000	...	3,000

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 1896–97.

Executive division.	—	Estimate, 1896–97.		Estimate, 1895–96.	
		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	3,000		...	
			3,000		
Kurnool ...	Cumbum Tank System	1,500		1,500	
			1,500		1,500
Coimbatore ...	Thadapalli Channel System	2,989		1,934	
			2,989		1,934
Do. ...	Arkenkotta Channel System	996		1,000	
			996		1,000
Do. ...	Kalingaroyen Channel System	1,998		...	
			1,998		...
North Arcot ...	Pálár Anicut System—				
	Head works			...	
	Kávéripak channel			14,000	
	Govindavádi channel			...	
	Mahendravadi channel			2,000	
	Dusi channel	24,800		...	
	Tennampettu channel			7,000	
	Chuckramallur channel			2,000	
	Reserve for incomplete works			...	
Chingleput ...	Kambakal channel	8,400		2,500	
	Total ...	33,200		27,500	
	Deduct Old Maintenance Charges ...	2,909		* 2,909	
			30,291		24,591
North Arcot ...	Poiney Anicut System	8,000		8,000	
			8,000		8,000
Do. ...	Cheyáru Anicut System	10,000		10,000	
			10,000		10,000
Chingleput ...	Chembrambakam Tank System	3,000		3,029	
	Deduct Old Maintenance Charges ...	3,097		* 3,097	
Do. ...	Madras Water-supply and Irrigation Extension...	2,501	— 97	3,000	— 68
	Deduct Old Maintenance Charges ...	200		200	
			2,301		2,800
Do. ...	Vallur Anicut System	500		488	
			500		488
South Arcot ...	Shatiatope Anicut System	10,000		12,000	
Do. ...	Pelandorai Anicut System	3,000	10,000	3,672	12,000
	Deduct Old Maintenance Charges ...	58		* 58	
			2,942		3,614

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

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 1896–97—continued.

Executive division.	—	Estimate, 1896–97.		Estimate, 1895–96.	
		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 ...	Vriddháchalam Anicut System	2,500		2,000	
			2,500		2,000
Do. ...	Mehamattur Anicut System	1,000		1,032	
			1,000		1,032
Do. ...	Tirukkóyilúr Anicut System	7,994		10,772	
			7,994		10,772
Do. ...	Lower Coleroon Anicut System	16,000		16,000	
Tanjore ...	Do. do.	3,000		3,000	
			19,000		19,000
Trichinopoly ...	Nandiar channel	606		...	
			606		...
Tinnevelly ...	Maradur Anicut System	8,004		10,000	
			8,004		10,000
Ganjám ...	Chilka Lake Canal	301		301	
			301		301
Negapatam ...	Védáranniyam Canal	3,504		3,049	
			3,504		3,049
Buckingham Canal.	Buckingham Canal—				
	262 miles	35,370		39,300	
	M. Maintenance establishment	6,000		6,000	
	Repairs to masonry works	8,000		8,000	
	Unforeseen and sundry items	3,910		5,100	
	Payment to the Madras Municipality being the amount of lease for Trevelyan wharf ...	1,600		1,600	
			54,880		60,000
	Total ...	...	1,72,209	...	1,72,013
	Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D., Ordinary works	3,47,000		3,92,000	
	Old Maintenance charges	1,42,850		1,42,850	
	Tank Restoration works to be executed by ordinary divisions	5,44,201		4,44,096	
			10,34,051		9,78,946
	Agricultural Works—				
	Repairs	3,74,389		2,43,692	
			3,74,389		2,43,692
	Total ...	...	15,80,649	...	13,94,651
	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 ...	...	5,000	...	2,000

GOVERNMENT OF MADRAS.

CHARGES.

Part IV.

Detail of the Budget Estimate for Establishment of the Irrigation Branch in the Madras Presidency for the year 1896–97.

Particulars.	Budget Estimate for 1896–97. Per mensem.	Per annum.	Total.	Revised Estimate for 1895–96.
	Rs.	Rs.	Rs.	Rs.
IRRIGATION.				
43. Minor Works and Navigation.				
PROVINCIAL.				
Grant for works and repairs	...	...	29,55,423	23,68,707
Deduct items on which no charge for establishment is admissible—				
Grant for land compensation	...	...	1,75,862	66,395
Net Grant for Works and Repairs ...	...	...	27,79,561	23,02,312
A. Share of the Public Works establishment charges at 23 per cent. on the net grant for works and repairs.	...	...	6,39,299	5,29,531
Estimate of Direct Revenue	...	...	1,70,000	1,70,000
B. Share of the Public Works establishment charges at 10 per cent. on Direct Revenue.	...	...	17,000	17,000
Revenue due to old Irrigation under Major Productive Works.	...	...	38,49,000	37,93,000
C. Share of the Public Works establishment at 6 per cent. on Revenue.	...	...	2,30,940	2,27,580
Total, A + B + C ...	...	...	8,87,239	7,74,111
Special establishment for investigating requirements of tanks systematically	...	...	...	25,212
Total, Establishment Charges ..	...	...	8,87,239	7,99,323

GOVERNMENT OF MADRAS.

CHARGES.

Part IV-A.

Detail of estimated charges for establishment by systems of canals for 1896–97.

—	Percentage on the Grant for Works and Repairs. Grant for Works and Repairs.	23 per cent.	Percentage on the Direct Revenue. Direct Revenue.	10 per cent.	Percentage on the Indirect Revenue. Indirect Revenue.	6 per cent.	Cost of Establishment actually employed.	Total Charges for Establishment.
	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	15,000	3,450	...	...	...	...	...	3,450
Munnyeru Project	1,00,000	23,000	...	...	...	...	...	23,000
Dondapad Tank Project	3,698	850	...	...	...	...	...	850
Sagiléru Project	89,000	20,470	...	...	...	...	...	20,470
Thadapalli Channel System	4,000	920	...	...	...	...	...	920
Pálár Anicut System	10,000	2,300	...	...	...	...	...	2,300
Cheyáru do.	1,640	377	...	...	...	...	...	377
Lower Coleroon Anicut System ...	64,000	14,720	...	...	...	...	...	14,720
Maradur Anicut System ...	5,000	1,150	...	...	...	...	...	1,150
Buckingham Canal	1,18,000	27,140	...	...	...	...	...	27,140
Canal from the north side of the Madras Harbour to the basin in the Buckingham Canal	3,63,658	83,642	...	...	...	...	...	83,642
Total ...	7,73,996	1,78,019	...	...	...	...	...	1,78,019
Revenue.								
Ganjám Minor Rivers System ...	3,000	690	...	...	...	...	...	690
Cumbum Tank System	2,000	460	...	...	...	...	...	460
Thadapalli Channel System	3,489	803	80	8	...	...	...	811
Arkenkotta do.	1,496	344	...	...	...	...	...	344
Kalingaroyen do.	1,998	460	420	42	...	...	...	502
Pálár Anicut System	35,327	8,125	1,540	154	...	...	...	8,279
Poiney do.	10,000	2,300	600	60	...	...	...	2,360
Cheyáru do.	13,000	2,990	200	20	...	...	...	3,010
Chembrambakam Tank System ...	— 1,572	— 362	30	3	...	...	...	— 359
Madras Water-supply and Irrigation Extension	— 1,299	— 299	13,380	1,338	...	...	...	1,039
Vallur Anicut System	732	168	...	...	...	...	...	168
Tirukkóyilúr do.	9,994	2,299	570	57	...	...	...	2,356
Mehamattur do.	1,502	345	30	3	..	...	...	348
Vriddháchalam do.	3,004	691	50	5	...	...	...	696
Shatiatope do.	11,894	2,736	300	30	...	...	...	2,766
Pelandorai do.	3,388	779	250	25	...	...	...	804
Lower Coleroon do.	23,000	5,290	1,000	100	...	...	...	5,390
Nundiar Channel Extension ...	4,106	944	...	...	...	...	...	944
Maradur do.	9,004	2,071	350	35	...	...	...	2,106
Chilka Lake Canal	301	69	...	...	...	...	...	69
Buckingham Canal	57,000	13,110	1,10,000	11,000	...	...	...	24,110
Védáranniyam Canal	3,504	806	1,200	120	...	...	...	926
Total ...	1,94,868	44,819	1,30,000	13,000	...	...	...	57,819

GOVERNMENT OF MADRAS.

CHARGES.

Part IV-A—continued.

Detail of estimated charges for establishment by systems of canals for 1896–97—continued.

—	Percentage on the Grant for Works and Repairs.		Percentage on the Direct Revenue.		Percentage on the Indirect Revenue.		Cost of Establishment actually employed.	Total Charges for Establishment.
	Grant for Works and Repairs.	23 per cent.	Direct Revenue.	10 per cent.	Indirect Revenue.	6 per cent.		
IRRIGATION—continued.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
43. MINOR WORKS AND NAVIGATION—continued.								
Provincial—continued.								
Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.								
Ordinary Works	6,30,880	1,45,103	10,000	1,000	...	...	...	1,46,103
Tank Restoration Works	5,44,201	1,25,166	...	...	...	...	...	1,25,166
Old Maintenance charges	1,53,231	35,243	...	...	38,49,000	2,30,940	...	2,66,183
Minor Works, Revenue Department...	24,096	5,542	...	...	...	...	...	5,542
Total ...	13,52,408	3,11,054	10,000	1,000	38,49,000	2,30,940	...	5,42,994
Agricultural Works.								
Works for which neither Capital nor Revenue Accounts are kept ...	4,58,289	1,05,407	30,000	3,000	...	...	...	1,08,407
Total, Provincial ...	27,79,561	6,39,299	1,70,000	17,000	38,49,000	2,30,940	...	8,87,239

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 1896–97.

—	Special Tools and Plant.	General Tools and Plant.	Total.	Grant for Works and Repairs.
IRRIGATION.	Rs.	Rs.	Rs.	Rs.
43. MINOR WORKS AND NAVIGATION.				
Provincial.				
Minor Works for which Capital and Revenue Accounts are kept.				
Capital.				
Thadapalli channel system	690	...	690	...
Sagiléru project	230	...	230	...
Buckingham Canal	5,000	...	5,000	...
Canal from the Madras Harbour to the Buckingham Canal.	15,500	...	15,500	...
Cheyárn anicut system	313	...	313	...
Total ...	21,733	...	21,733	...
Revenue.				
Pálár Anicut System	...	...	...	...
Deduct Old Maintenance charges ...	4	...	4	...
Net ...	— 4	...	— 4	...
Chembrambakam Tank System	...	...	...	...
Deduct Old Maintenance charges ...	109	...	109	...
Net ...	— 109	...	— 109	...
Madras Water-supply and Irrigation Extension	...	...	...	...
Deduct Old Maintenance charges ...	10	...	10	...
Net ...	— 10	...	— 10	...
Pelandorai Anicut System	...	...	...	...
Deduct Old Maintenance charges ...	2	...	2	...
Net ...	— 2	...	— 2	...
Buckingham Canal	4,000	...	4,000	...
Total ...	3,875	...	3,875	...
Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.				
Ordinary Works	...	9,463	9,463	6,30,880
Tank Restoration Scheme	...	8,163	8,163	5,44,201
Old Maintenance charges	1,868	...	1,868	1,53,231
Minor Works, Revenue Department	...	362	362	24,096
Agricultural Works.				
Works for which neither Capital nor Revenue Accounts are kept	...	6,874	6,874	4,58,289
Total ...	1,868	24,862	26,730	18,10,697
Total, Provincial ..	27,476	24,862	52,338	...

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 1896–97—Nil.

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

GOVERNMENT OF MADRAS.

CHARGES.

Schedule A—Showing the distribution of the grants for Minor Original Works and Repairs for 1896–97.

	Irrigation Revenue.	Minor Original Works (under Rs. 2,500 each).	Repairs.
		1896–97.	1896–97.
Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept.	Rs.	Rs.	Rs.
Old Maintenance charges—			
Pennéru Anicut System	...	3,564	13,860
Sangam do. do.	...	345	11,884
Cauvery Delta do.	...	...	1,05,634
Srivaikuntam Anicut System	...	352	5,208
Chembrambakam Tank	...	2,283	3,097
Pálár Anicut System	...	178	2,909
Pelandorai Anicut System	...	59	58
Madras Water-supply and Irrigation Extension Project ...	...	3,600	200
Total ...	...	10,381	1,42,850
Minor Works, Public Works Department, Ordinary—			
Divisions—			
Ganjám	74,218	7,000	17,000
Vizagapatam	61,053	16,000	17,000
Gódávari Eastern	47,321	3,000	15,000
Do. Western		2,000	4,000
Kistna Eastern	18,400	...	6,000
Do. Northern		1,000	8,000
Nellore	92,634	10,000	25,000
Bellary	80,730	5,000	30,000
Cuddapah	84,455	5,000	25,000
Kurnool	29,229	3,000	10,000
West Coast	...	...	2,000
Coimbatore	44,038	6,000	12,000
Salem	58,146	4,000	12,000
North Arcot	76,557	10,000	25,000
Chingleput	2,60,717	10,000	35,000
South Arcot	93,874	10,000	35,000
Tanjore	18,975	1,000	2,000
Trichinopoly	1,22,946	15,000	25,000
Madura	99,422	9,000	12,000
Tinnevelly	65,338	10,000	30,000
Total ...	...	1,27,000	3,47,000
Reserve ...	...	52,380	...
Total ...	...	1,79,380	3,47,000
Minor Works, Revenue Department, Original Works—Reserve ...	...	24,096	...

GOVERNMENT OF MADRAS.

CHARGES.

Schedule A—Showing the distribution of the grants for Minor Original Works and Repairs for 1896–97—continued.

	Irrigation Revenue.	Minor Original Works (under Rs. 2,500 each).	Repairs.
		1896–97.	1896–97.
Tank Restoration Works.	Rs.	Rs.	Rs.
Execution—			
Divisions—			
Vizagapatam	...	...	45,000
Gódávari Eastern	...	...	6,000
Do. Western	...	...	4,000
Kistna Northern	...	...	24,000
Salem	...	...	50,000
Chingleput	...	...	75,201
North Arcot	...	...	50,000
South Arcot	...	...	50,000
Negapatam	...	...	75,000
Madura	...	...	1,00,000
Tinnevelly	...	...	65,000
Total ...	...	...	5,44,201
Agricultural Works.			
Divisions—			
Rushikulya	...	1,000	1,000
Ganjám	...	2,000	3,000
Vizagapatam	...	500	3,800
Gódávari Eastern	...	...	30,000
Do. Central	...	1,000	65,000
Do. Western	...	...	16,000
Kistna Eastern	...	...	9,000
Do. Northern	...	...	1,300
Do. Western	...	...	1,00,000
Nellore	...	1,000	7,000
Cuddapah	...	...	4,000
Coimbatore	...	3,500	6,500
Salem	...	...	589
North Arcot	...	...	1,000
Chingleput	...	500	4,000
South Arcot	...	400	8,700
Tanjore	...	2,000	60,000
Negapatam	...	...	20,000
Trichinopoly	...	2,000	25,000
Tinnevelly	...	...	1,500
Buckingham Canal	...	...	7,000
Total ...	...	13,900	3,74,389

No. 357 I., 24th April 1896.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation, Account.

Read—the following paper :—

Note by the Chief Engineer for Irrigation.

No. 94 I.

The accompanying final issue of the budget estimates of the Irrigation Branch for 1896–97, which have been prepared to work up to the following grants approved by the Government of India in its Orders, No. $\frac{4}{B.O.}$ A.I., dated 20th March 1896, printed in Proceedings of Madras Government No. 318 I., dated 2nd April 1896, are submitted to Government :—

35. *Construction of Protective Irrigation Works.*

	Rs.
Imperial	1,89,000
42. Major Works (Working Expenses)—	
Imperial	12,80,000
43. Minor Works and Navigation—	
Provincial	38,95,000
Incorporated Local	8,000
49. Capital Expenditure not charged to Revenue—	
Imperial	9,41,000

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. Under "49. Capital Expenditure not charged to Revenue" the Government of India having increased the total provisional assignment of Rs. 8,88,500 by Rs. 52,500, the preliminary grant of Rs. 5,22,500 proposed for the Kistna delta system has been increased to that extent in the final budget in accordance with G.O. No. 318 I., dated 2nd April 1896.

Provincial.

4. The revised estimate under this head adopted by the Government of India excludes the reduction intimated in the telegram printed in Proceedings of Madras Government No. 296 I., dated 26th March 1896.

5. The distribution by departmental heads of the preliminary budget grants for the Sagiléru project, the Thadapalli channel and Cheyar anicut systems has been slightly modified, with reference to the schedules submitted with letters Nos. 2 and 68 I., dated 1st and 2nd April 1896, from the Superintending Engineers, III and IV Circles, respectively.

6. The Superintending Engineer, III Circle, should expedite the submission, for the sanction of Government, of the revised estimates now under preparation for the Sagiléru project.

7. Subsequent to the issue of G.O. No. $\frac{1084}{A}$ I., dated 14th December 1895, it having been found that the estimates for the Cooum Improvements Scheme should be submitted for the sanction of the Government of India, the commencement of the

work was ordered to be deferred in G.O. No. 190 I., dated 21st February 1896, and no liabilities incurred till further orders. For effecting the object for which this scheme was designed, a less expensive alternative arrangement has been submitted for the consideration of Government.

8. The grant for extensions and improvements, Buckingham canal, has been increased by Rs. 1,120 by transfer of that amount from the grant under maintenance and repairs to the canal, the Superintending Engineer, II Circle, having reported in his endorsement No. 485 B.C., dated 18th March 1896, that the preliminary grant of Rs. 1,000 under the former head was inadequate.

9. The grant for maintenance and repairs for the Pálár anicut system in the Chingleput division has been increased from Rs. 5,000 to Rs. 8,400, the Superintending Engineer, V Circle, having in his endorsement No. 73 E.I., dated 20th March 1896, represented that the additional amount of Rs. 3,400 was required for the execution of sanctioned works, for starting which arrangements have already been made.

10. An allotment of Rs. 5,000 has been provided for excavating a navigable canal to the Pandraka salt factory in the Kistna Eastern division in accordance with G.O. No. 320 I., dated 2nd April 1896.

11. To admit of the restoration of tanks in the Bezwada taluk damaged last year by floods being proceeded with, the grant for the Kistna Northern division under repairs to ordinary minor works for which neither Capital nor Revenue Accounts are kept, P.W.D., has been increased from Rs. 2,000 to Rs. 8,000, the additional grant being provided by reducing the grant for that division under tank restoration repairs by Rs. 6,000, as desired by the Superintending Engineer, II Circle, in his endorsement No. 2591 K.S., dated 8th March 1896.

12. In his letter No. 37, dated 10th February 1896, the Superintending Engineer on Special Duty, Cauvery Completion Estimates, having suggested that a special grant may be allotted for the conservancy of the Coleroon with a view to prepare it for the flood discharge at 250,000 to 300,000 cubic feet per second which it must eventually take, the grant for the Tanjore division under repairs to Agricultural works has been increased from Rs. 45,000 to Rs. 60,000 in accordance with endorsement No. 61 E.I., dated 17th March 1896, of the Superintending Engineer, V Circle. The Superintending Engineer, VI Circle, has not yet replied to the reference made to him as to the extent to which the preliminary grant for the Trichinopoly division under this head should be augmented to admit of work of a similar kind required to be done in that division being proceeded with. On the receipt of his reply the necessary funds will be appropriated from the reserve. An additional grant of Rs. 3,000 has been provided for the Chingleput division with reference to endorsement No. 73 E.I., dated 20th March 1896, of the Superintending Engineer, V Circle.

13. In the preliminary budget funds were provided for the following major original works:—

Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.

	Amount provided.
	RS.
Nellore division—Idumapalli tank improvements	9,000
Kurnool division—Yerragundampolliem tank improvements ...	2,000
Salem division—Excavating a new supply channel to Pennagoondapuram tank	6,000

Agricultural Works.

Tanjore division—Improving Moodicondanar both banks below road No. 15	2,000
South Arcot division—Raising and strengthening the Coleroon left flood bank and restoring sluices	10,000

As the estimates for the above works have not yet been sanctioned, no provision has been made for them in the final budget, and the amounts thus set free have been credited to the reserve, from which any funds required for expenditure on the works may be appropriated later on in the year when the estimates are sanctioned.

(Signed) R. R. E. DRAKE-BROCKMAN, Col., R.E.,
Chief Engineer for Irrigation.

ORDER—No. 357 I., dated 24th April 1896.

The final issue of the Irrigation budget estimates for 1896–97 as drawn up by the Chief Engineer for Irrigation is approved, and fifty * printed copies thereof will be forwarded to the Government of India.

* Fifteen to Simla and the remainder to Calcutta.

[Here enter No. 358 I., dated 24th April 1896.]

(True Extract.)

(Signed) R. R. E. DRAKE-BROCKMAN, Colonel, R.E.,
Secretary to Govt., P.W.D.,
Irrigation Branch.

To the Chief Engineer for Irrigation.
" the Chief Engineer, Tank Restoration Scheme.
" Superintending Engineers.
" the Superintending Engineer, Special Duty, Cauvery Completion Estimates.
" the Examiner, Public Works Accounts.
" the Revenue Department.
" the Financial "

ENDORSEMENT—No. 358 I., dated 24th April 1896.

Forwarded.

(By order.)

(Signed) R. R. E. DRAKE-BROCKMAN, Colonel, R.E.,
Secretary to Govt., P.W.D.,
Irrigation Branch.

Exd. T. K. Narayana Aiyangar.

Spare Copies

IRRIGATION.
ACCOUNT.

Govt. of {1896} Madras.

PUBLIC WORKS.

Dated April, 24th.

Recd. *Encl.*

G.O. Nos. 357, 358 I., 24th April 1896.

APRIL.

Budget Estimates

Forwarding proceedings embodying the final issue of the Irrigation — for 1896-97.

IMPERIAL—MAJOR WORKS. **MADRAS PRESIDENCY.**

Please Correct & Strike off 50 Copies in Govt Press as per in pencil 23/4

FINAL ISSUE.

Public Works Department.

BUDGET ESTIMATE

OF

REVENUE AND EXPENDITURE

UNDER

IRRIGATION-MAJOR WORKS

IN THE

MADRAS PRESIDENCY

FOR THE YEAR

1896-97.

MADRAS,
24th April 1896.

(Signed) R. R. E. DRAKE-BROCKMAN, Colonel, R.E.,
Secretary to Govt., P.W.D.,
Irrigation Branch.

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GOVERNMENT OF MADRAS.

REVENUE.

Abstract Budget Estimate of Revenue expected from Irrigation—Major Works in the Madras Presidency for the year from 1st April 1896 to 31st March 1897.

IRRIGATION.	Actual Realizations, 1894–95.	Budget Estimate, 1895–96.	Revised Estimate, 1895–96.	Budget Estimate, 1896–97.
	Rs.	Rs.	Rs.	Rs.
IMPERIAL.				
MAJOR PRODUCTIVE WORKS (DIRECT RECEIPTS).				
Gódávari Delta System, Collections in the Public Works Department.	1,25,418	1,20,000	1,20,000	1,20,000
Kistna Delta System do. do.	53,745	50,000	50,000	48,000
Pennéru Anicut System do. do.	397	600	600	400
Sangam Anicut System do. do.	536	700	700	600
Cauvery Delta System do. do.	3,569	2,500	2,500	3,500
Srívaikuntam Anicut System do. do.	1,566	1,500	1,500	1,000
Barur tank do. do.	26	...	...	...
Rushikulya do. do.	1,023	...	...	1,500
Kurnool-Cuddapah Canal. Collections in the Revenue Department ...	1,00,318	97,895	97,895	97,895
Kurnool-Cuddapah Canal. *Deduct* Collection Charges	5,225	4,895	4,895	4,895
Kurnool-Cuddapah Canal. Net Collections in the Revenue Department ...	95,093	93,000	93,000	93,000
Kurnool-Cuddapah Canal. Collections in the Public Works Department...	8,796	11,700	11,700	10,000
Total ...	1,03,889	1,04,700	1,04,700	1,03,000
Total ...	2,90,169	2,80,000	2,80,000	2,78,000

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.

IRRIGATION.	Actual Realizations, 1894–95.	Budget Estimate, 1895–96.	Revised Estimate, 1895–96.	Budget Estimate, 1896–97.
	Rs.	Rs.	Rs.	Rs.
XXIX. MAJOR WORKS—PORTION OF LAND REVENUE DUE TO IRRIGATION.				
Gódávari Delta—				
Irrigation Revenue	23,46,014	28,25,000	23,75,000	28,80,000
Deduct Revenue due to old Irrigation	1,24,000	1,24,000	1,24,000	1,24,000
Revenue due to the System	22,22,014	27,01,000	22,51,000	27,56,000
Share of enhanced Land Revenue	1,57,189	1,60,000	1,60,000	1,70,000
Total ...	23,79,203	28,61,000	24,11,000	29,26,000
Deduct Collection Charges in the Civil Department	1,18,960	1,43,050	1,20,550	1,46,300
Net Revenue ...	22,60,243	27,17,950	22,90,450	27,79,700
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	778	1,050	550	1,300
Total ...	22,61,021	27,19,000	22,91,000	27,81,000
Kistna Delta—				
Irrigation Revenue	18,64,067	24,50,000	22,50,000	24,30,000
Deduct Revenue due to old Irrigation	71,000	71,000	71,000	71,000
Revenue due to the System	17,93,067	23,79,000	21,79,000	23,59,000
Share of enhanced Land Revenue	1,69,333	1,70,000	1,70,000	1,80,000
Total ...	19,62,400	25,49,000	23,49,000	25,39,000
Deduct Collection Charges in the Civil Department	98,120	1,27,450	1,17,450	1,27,000
Net Revenue ...	18,64,280	24,21,550	22,31,550	24,12,000
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	2,616	10,450	3,450	10,000
Total ...	18,66,896	24,32,000	22,35,000	24,22,000
Pennéru Anicut—				
Irrigation Revenue	2,62,846	2,60,000	2,63,000	2,63,000
Deduct Revenue due to old Irrigation	1,17,000	1,17,000	1,17,000	1,17,000
Revenue due to the System	1,45,846	1,43,000	1,46,000	1,46,000
Share of enhanced Land Revenue	19,909	19,500	20,000	20,000
Total ...	1,65,755	1,62,500	1,66,000	1,66,000
Deduct Collection Charges in the Civil Department	8,288	8,125	8,300	8,300
Net Revenue ...	1,57,467	1,54,375	1,57,700	1,57,700
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	345	625	300	300
Total ...	1,57,812	1,55,000	1,58,000	1,58,000

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, 1894-95.	Budget Estimate, 1895-96.	Revised Estimate, 1895-96.	Budget Estimate, 1896-97.
	Rs.	Rs.	Rs.	Rs.
IRRIGATION—*continued.*				
XXIX. MAJOR WORKS—PORTION OF LAND REVENUE DUE TO IRRIGATION—continued.				
Sangam Anicut—				
Irrigation Revenue	3,02,603	3,84,000	3,84,000	4,01,000
Deduct Revenue due to old Irrigation	1,39,000	1,39,000	1,39,000	1,39,000
Revenue due to the System	1,63,603	2,45,000	2,45,000	2,62,000
Share of enhanced Land Revenue	15,925	21,500	21,500	22,000
Total	1,79,528	2,66,500	2,66,500	2,84,000
Deduct Collection Charges in the Civil Department	8,977	13,325	13,500	14,000
Net Revenue	1,70,551	2,53,175	2,53,000	2,70,000
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	5,664	4,825	6,000	6,000
Total	1,76,215	2,58,000	2,59,000	2,76,000
Cauvery Delta—				
Irrigation Revenue	37,78,719	38,10,000	40,80,000	41,50,000
Deduct Revenue due to old Irrigation	30,21,510	30,45,000	32,61,000	33,17,000
Revenue due to the System	7,57,209	7,65,000	8,19,000	8,33,000
Share of enhanced Land Revenue	1,09,404	1,25,000	1,16,000	1,17,000
Total	8,66,613	8,90,000	9,35,000	9,50,000
Deduct Collection Charges in the Civil Department	43,331	45,000	47,000	48,000
Net Revenue	8,23,282	8,45,000	8,88,000	9,02,000
Srivaikuntam Anicut—				
Irrigation Revenue	1,75,555	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	96,555	1,06,000	1,06,000	1,06,000
Share of enhanced Land Revenue	1,828	2,000	2,000	2,000
Total	98,383	1,08,000	1,08,000	1,08,000
Deduct Collection Charges in the Civil Department	4,919	5,000	5,000	5,000
Net Revenue	93,464	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, 1894-95.	Budget Estimate, 1895-96.	Revised Estimate, 1895-96.	Budget Estimate, 1896-97.
	Rs.	Rs.	Rs.	Rs.
IRRIGATION—*continued.*				
XXIX. MAJOR WORKS—PORTION OF LAND REVENUE DUE TO IRRIGATION—continued.				
Barur Tank—				
Irrigation Revenue	11,840	14,000	12,000	14,000
Deduct Revenue due to old Irrigation	2,000	2,000	2,000	2,000
Revenue due to the System	9,840	12,000	10,000	12,000
Share of enhanced Land Revenue	2	...	...	...
Total	9,842	12,000	10,000	12,000
Deduct Collection Charges in the Civil Department	492	1,000	1,000	1,000
Net Revenue	9,350	11,000	9,000	11,000
Kurnool-Cuddapah Canal—				
Share of enhanced Land Revenue under tanks owing to supply of canal water	4,455	8,000	8,400	8,400
Deduct Collection Charges in the Civil Department	223	1,000	400	400
Net Revenue	4,232	7,000	8,000	8,000
Rushikulya Project—				
Irrigation Revenue	47,154	91,000	91,000	1,00,000
Deduct Revenue due to old Irrigation	20,850	28,000	28,000	30,000
Revenue due to the System	26,304	63,000	63,000	70,000
Share of enhanced Land Revenue	6	150	150	150
Total	26,310	63,150	63,150	70,150
Deduct Collection Charges in the Civil Department	1,316	3,150	3,400	3,950
Net Revenue	24,994	60,000	59,750	66,200
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	...	...	250	800
Total	24,994	60,000	60,000	67,000
Total—				
Irrigation Revenue	87,88,798	1,00,19,000	96,40,000	1,04,23,000
Deduct Revenue due to old Irrigation	35,74,360	36,05,000	38,21,000	38,79,000
Revenue due to the System	52,14,438	64,14,000	58,19,000	65,44,000
Share of enhanced Land Revenue	4,78,051	5,06,150	4,98,050	5,19,550
Total	56,92,489	69,20,150	63,17,050	70,63,550
Deduct Collection Charges in the Civil Department	2,84,626	3,47,100	3,16,150	3,53,950
Net Revenue	54,07,863	65,73,050	60,00,900	67,09,600
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	9,403	16,950	10,100	18,400
Total	54,17,266	65,90,000	60,11,000	67,28,000

GOVERNMENT OF MADRAS.

CHARGES.

Abstract Budget Estimate of Expenditure on Irrigation—Major Works in the Madras Presidency for the year from 1st April 1896 to 31st March 1897.

	Reference to Detailed Estimate.	Actual Outlay, 1894–95.	Budget Estimate, 1895–96.	Revised Estimate, 1895–96.	Budget Estimate, 1896–97.
IMPERIAL.	Pages.	Rs.	Rs.	Rs.	Rs.
MAJOR (PROTECTIVE) WORKS.					
Famine Relief and Insurance.					
35. CONSTRUCTION OF PROTECTIVE IRRIGATION WORKS.					
1. Works ... ... In progress ... Rs. 63,500	8 & 9	2,46,199	2,46,577	1,89,667	1,53,646
Not commenced. 90,146					
2. Establishment	42	52,613	51,423	38,333	33,039
3. Tools and plant	43	11,366	2,000	...	2,315
5. Receipts on capital account	...	— 452	...	...	...
Total ...		3,09,726	3,00,000	2,28,000	1,89,000
42. (WORKING EXPENSES).					
1. Extensions and improvements. In progress ... ... Not commenced 57,712	8 to 11	51,046	48,392	54,026	57,712
2. Maintenance and repairs	35 to 39	5,16,590	5,01,564	6,04,151	5,71,224
3. Establishment	42	4,61,014	5,30,743	5,20,136	5,56,121
4. Tools and plant	43 to 45	82,488	1,11,301	1,06,687	94,943
5. Refunds of revenue	...	893	...	...	...
Total, Working Expenses ...		11,12,031	11,92,000	12,85,000	12,80,000
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.					
49. IRRIGATION.					
1. Works ... ... In progress ... Rs. 2,82,342	10 to 33	10,67,792	9,04,825	10,24,293	7,46,752
Not commenced ... 4,64,410					
2. Establishment	42	2,38,689	1,99,675	2,27,207	1,62,518
3. Tools and plant	45	1,11,723	45,500	45,500	31,730
4. Suspense account	...	— 807	...	...	...
5. Receipts on capital account	...	— 2,992	...	...	...
Total, Capital Expenditure ..		14,14,405	11,50,000	12,97,000	9,41,000

GOVERNMENT OF MADRAS.

CHARGES.

Part I.

Details of the Budget Estimate of Expenditure on Irrigation—Major Works in the Madras Presidency for the year 1896–97, arranged by Projects and Objects of Work.

	Amount of Sanctioned Estimate.	Actual Outlay to end of 1894–95.	Budget Estimate, 1895–96.	Probable Outlay during 1895–96 (Revised Estimate).	Budget Estimate, 1896–97.	Remarks and References.
IMPERIAL.	Rs.	Rs.	Rs.	Rs.	Rs.	
MAJOR (PROTECTIVE) WORKS.						
Famine Relief and Insurance.						
35. CONSTRUCTION OF PROTECTIVE IRRIGATION WORKS.						
Capital Account.						
Rushikulya Project	43,68,000	36,80,677	3,00,000	2,28,000	1,89,000	Government of India register No. 7 I. of 1894–95. Proceedings of Madras Govt. No. 846 I. of 7th November 1894.
42. (WORKING EXPENSES).						
Gódávari Delta	...	...	5,06,000	4,84,173	5,30,000	
Kistna do.	...	...	4,60,000	5,78,720	5,26,000	
Pennéru Anicut	...	...	19,000	18,113	19,000	
Sangam do.	...	...	42,000	41,990	43,000	
Kurnool-Cuddapah Canal ...	...	...	1,05,000	99,910	86,000	
Barur Tank Project	...	...	5,000	3,392	3,800	
Cauvery Delta	...	...	18,000	15,590	18,200	
Srívaikuntam Anicut ...	...	...	17,000	17,873	24,000	
Rushikulya Project	...	...	20,000	25,239	30,000	
Total ...	...	...	11,92,000	12,85,000	12,80,000	
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.						
49. IRRIGATION.						
Works in Progress.						
Gódávari Delta System ...	1,41,470	85,627	13,000	14,825	84,000	P.M.G. No. 393 I., dated 3rd May 1895, No. 890 I., dated 30th October 1895, and No. 919 I., dated 2nd November 1895. Estimates for other works under preparation.
Kistna Delta do. ...	1,39,19,784	1,08,33,538	4,48,000	5,38,000	5,75,000	Government of India register No. 8 I. of 1884–85. 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.
Pennéru Anicut do. ...	...	...	4,000	4,000	9,000	P.M.G. No. 181 I., dated 22nd Jan. 1896. Estimate for another work under preparation.
Sangam do. do. ...	16,000	...	17,000	17,000	19,000	Government of India register No. 21 I. of 1895–96. Estimate for another work under preparation.
Barur Project	4,200	...	2,460	3,038	1,700	P.M.G. No. 1050 I., dated 22nd Dec. 1894.
Cauvery Delta	60,581	7,145	20,000	22,497	76,100	P.M.G. No. 561 I., dated 31st July 1894, No. 853 I. of 7th Nov. 1894, No. 195 I. of 28th Feb. 1895, No. 467 I. of 1st June 1895, No. 485 I. of 15th June 1895, No. 599 I. of 31st July 1895, and No. 768 I. of 2nd Sept. 1895. Government of India letter No. 259 I. of 23rd Oct. 1895, P.M.G. No. 909 I. of 1st Nov. 1895, and No. 1022 I. of 26th Nov. 1895.
Srívaikuntam Anicut ...	3,200	...	1,540	1,540	13,100	P.M.G. No. 650 I., dated 12th August 1895. Estimates for other works under preparation.
Periyár Project	84,71,000	73,56,056	6,44,000	6,96,100	1,63,100	Government of India register No. 10 I. of 1894–95. P.M.G. No. 1057 I., dated 22nd December 1894.
Total ...	...	...	11,50,000	12,97,000	9,41,000	

GOVERNMENT OF MADRAS.

CHARGES.

Part IV.

Detail of the Budget Estimate for Establishment of the Irrigation Branch in the Madras Presidency for the year 1896–97.

	Budget Estimate, 1896–97.	Revised Estimate, 1895–96.
	Rs.	Rs.
IMPERIAL.		
FAMINE RELIEF AND INSURANCE.		
35. Construction of Protective Irrigation Works.		
Grant for Works	1,53,646	1,89,667
Deduct item for which no charge for Establishment is admissible.		
Compensation for land	10,000	23,000
Net Grant ...	1,43,646	1,66,667
Contribution to Provincial Funds at 23 per cent. on the Net Grant ...	33,039	38,333
IRRIGATION.		
42. Major Works (Working Expenses).		
Grant for Works and Repairs	6,28,936	6,58,177
Deduct items for which no charge for Establishment is admissible.		
Compensation for land, Gódávari Delta System	5,000	4,124
Do. do. Kistna do.	500	...
Do. do. Cauvery do.	360	1,000
Total ..	5,860	5,124
Net Grant ..	6,23,076	6,53,053
A. 23 per cent. on the Net Grant	1,43,307	1,50,202
Direct Revenue	2,78,000	2,80,000
Deduct estimated collections in the Revenue Department of water-rates levied on lands irrigated under the Kurnool-Cuddapah Canal	93,000	93,000
Net Direct Revenue ...	1,85,000	1,87,000
B. 10 per cent. on Net Direct Revenue	18,500	18,700
Irrigation Revenue from Major (Productive) Works exclusive of enhanced share of Land Revenue	64,74,000	57,56,000
Add estimated collections in the Revenue Department of water-rates levied on land irrigated under the Kurnool-Cuddapah Canal	97,895	97,895
Total ...	65,71,895	58,53,895

GOVERNMENT OF MADRAS.

CHARGES.

Part IV—continued.

Detail of the Budget Estimate for Establishment of the Irrigation Branch in the Madras Presidency for the year 1896–97—continued.

	Budget Estimate, 1896–97.	Revised Estimate, 1895–96.
	Rs.	Rs.
C. 6 per cent. on Irrigation Revenue	3,94,314	3,51,234
Total, A + B + C ...	5,56,121	5,20,136
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.		
49. Irrigation.		
Total Grant for Works	7,46,752	10,24,293
Deduct item for which no charge for Establishment is admissible.		
Land compensation	40,150	36,438
Net Grant ...	7,06,602	9,87,855
Contribution to Provincial Funds at 23 per cent. on Net Grant ...	1,62,518	2,27,207

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 1896-97—Nil.

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

MINOR WORKS AND NAVIGATION.

52 cbs 2

FINAL ISSUE.

Public Works Department.

BUDGET ESTIMATE

OF

REVENUE AND EXPENDITURE

UNDER

IRRIGATION MINOR WORKS AND NAVIGATION

IN THE

MADRAS PRESIDENCY

FOR THE YEAR

1896-97.

MADRAS,
24 April 1896.

(Signed) R. R. E. DRAKE-BROCKMAN, Colonel, R.E.,
Secretary to Govt., P.W.D.,
Irrigation Branch.

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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 1896 to 31st March 1897.

	Actual Realizations, 1894–95.	Budget Estimate, 1895–96.	Revised Estimate, 1895–96.	Budget Estimate, 1896–97.
PROVINCIAL.	Rs.	Rs.	Rs.	Rs.
IRRIGATION AND NAVIGATION WORKS.				
Works for which Capital and Revenue Accounts are kept.				
Thadapalli Channel System	80	60	80	80
Kalingaroyen Channel System	...	600	420	420
Pálár Anicut System	1,079	2,300	1,540	1,540
Poiney Anicut System	689	740	600	600
Cheyáru Anicut System	129	130	200	200
Chembrambakam Tank System	50	10	30	30
Madras Water-supply and Irrigation Extension	13,462	12,400	13,380	13,380
Valluru Anicut System	4	...	...	...
Tirukkóyilúr Anicut System	491	600	570	570
Mehamattur Anicut System	20	10	30	30
Vriddhachalam Anicut System	55	50	50	50
Shatiatope Anicut System	315	250	300	300
Pelandorai Anicut System	273	300	250	250
Lower Coleroon Anicut System	1,619	1,100	1,000	1,000
Maradur Anicut System	192	250	350	350
Buckingham Canal	1,09,498	1,08,000	1,10,000	1,10,000
Védáranniyam Canal	1,136	1,200	1,200	1,200
Total ..	1,29,095	1,28,000	1,30,000	1,30,000
Works for which neither Capital nor Revenue Accounts are kept, P.W.D.	9,693	8,000	10,000	10,000
AGRICULTURAL WORKS.				
Works for which neither Capital nor Revenue Accounts are kept	27,096	43,000	30,000	30,000
TOTAL ..	1,65,884	1,79,000	1,70,000	1,70,000

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 1896 to 31st March 1897.

	Reference to Detailed Estimate.	Actual Outlay, 1894–95.	Budget Estimate, 1895–96.	Revised Estimate, 1895–96.	Budget Estimate, 1896–97.
PROVINCIAL.					
MINOR WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.	PAGES.	Rs.	Rs.	Rs.	Rs.
CAPITAL.					
1. Works ... In progress ... ... Rs. 3,07,323; Not commenced ... Rs. 6,15,535	8 to 19	3,26,430	6,16,455	5,25,968	9,22,858
2. Establishment	31	73,392	1,11,745	1,12,786	1,78,019
3. Tools and Plant	33	11,191	21,300	51,100	21,733
Total, Capital ...		4,11,013	7,49,500	6,89,854	11,22,610
REVENUE.					
1. Extensions and Improvements. In progress ... ...; Not commenced Rs. 22,659	20 to 23	21,974	38,560	25,036	22,659
2. Maintenance and Repairs	28 & 29	2,05,427	1,72,013	1,88,740	1,72,209
3. Establishment	31	64,027	61,232	62,168	57,819
4. Tools and Plant	33	4,223	3,875	3,875	3,875
Refunds of Revenue	...	73	...	...	...
Total, Revenue ...		2,95,724	2,75,680	2,79,819	2,56,562
Total Minor Works for which Capital and Revenue Accounts are kept ...		7,06,737	10,25,180	9,69,673	13,79,172
MINOR WORKS FOR WHICH NEITHER CAPITAL NOR REVENUE ACCOUNTS ARE KEPT.					
1. Works— Major ... In progress ... ... Rs. 85,200; Not commenced ... Rs. 23,800	22 & 23	1,97,896	1,28,200	1,23,808	1,09,000
Minor	22 & 23	3,72,433	1,91,510	1,32,871	2,13,857
2. Repairs	29	6,83,497	9,78,946	9,55,551	10,34,051
3. Establishment	32	5,92,409	5,71,626	5,32,420	5,42,994
4. Tools and Plant	33	18,756	19,538	18,654	19,856
Refunds of Revenue	...	53	...	...	...
Total Minor Works for which neither Capital nor Revenue Accounts are kept ...		18,65,044	18,89,820	17,63,304	19,19,758
AGRICULTURAL WORKS.					
Works for which neither Capital nor Revenue Accounts are kept.					
1. Works— Major ... In progress ... ...; Not commenced ... Rs. 92,500	24 & 25	64,916	91,532	1,03,725	92,500
Minor	24 & 25	18,953	18,230	12,448	13,900
2. Repairs	29	2,13,265	2,43,692	3,00,560	3,74,389
3. Establishment	32	64,423	78,694	91,949	1,08,407
4. Tools and Plant	33	4,032	4,852	6,341	6,874
Refunds of Revenue	...	117	...	...	...
Total, Agricultural Works ...		3,65,706	4,37,000	5,15,023	5,96,070
Total, Provincial ...		29,37,487	33,52,000	32,48,000	38,95,000

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 1896 to 31st March 1897—continued.

	Reference to Detailed Estimate.	Actual Outlay, 1894-95.	Budget Estimate, 1895-96.	Revised Estimate, 1895-96.	Budget Estimate, 1896-97.
	PAGES.	Rs.	Rs.	Rs.	Rs.
GRAND TOTAL, PROVINCIAL 43. MINOR WORKS AND NAVIGATION.					
Works ... In progress ... ... Rs. 4,85,023					
Works ... Not commenced 8,89,751		10,02,602	10,84,487	9,23,856	13,74,774
Repairs		11,02,189	13,94,651	14,44,851	15,80,649
Establishment		7,94,251	8,23,297	7,99,323	8,87,239
Tools and Plant		38,202	49,565	79,970	52,338
Refunds of Revenue		243	...	...	...
Total, Provincial ...		29,37,487	33,52,000	32,48,000	38,95,000
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		9,721	6,000	8,000	3,000
II. Repairs		763	2,000	16,000	5,000
Total ...		10,484	8,000	24,000	8,000

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 1896-97, arranged by Projects and Objects of Work.

PROVINCIAL.	Amount of Sanctioned Estimate.	Actual Outlay to end of 1894-95.	Budget Estimate, 1895-96.	Probable Outlay during 1895-96 (Revised Estimate).	Budget Estimate, 1896-97.	Remarks and References.
43. MINOR WORKS AND NAVIGATION.	Rs.	Rs.	Rs.	Rs.	Rs.	
Minor Works for which Capital and Revenue Accounts are kept.						
CAPITAL.						
Works in Progress.						
Kurnool-Cuddapah Canal ...	19,350	...	...	6,150	18,450	Government of India Register No. 24 I. of 1895-96 and P.M.G. No. 766 I., dated 20th September 1895. Estimates for other works under preparation.
Munnyeru Project	3,68,000	25,535	1,23,000	1,17,759	1,23,000	P.M.G. No. 1089 I., dated 17th December 1893.
Dondapad Tank Project ...	1,27,193	93,315	27,100	37,165	10,850	P.M.G. No. 191 I., dated 25th Feb. 1892; No. 376 I., dated 9th May 1894; No. 530 I., dated 16th July 1894, and No. 615 I., dated 29th August 1894.
Sagiléru Project	3,61,000	1,40,253	98,400	1,27,980	1,10,700	P.M.G. No. 10 I., dated 9th January 1894 and No. 915 I., dated 21st November 1894.
Thadapalli Channel System ...	26,600	3,962	12,900	12,900	8,610	P.M.G. No. 957 I., dated 6th Nov. 1893.
Pálár Anicut System	20,06,798	19,35,314	9,000	16,735	12,300	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 24th January 1896 and No. 303 I., dated 31st March 1896.
Cheyáru Anicut System ...	1,62,050	1,42,644	8,400	14,000	3,690	P.M.G. No. 855 I., dated 6th October 1893; No. 328 I., dated 9th April 1895; No. 822 I., dated 7th October 1895; No. 945 I., dated 11th November 1895; No. 991 I., dated 19th November 1895, and No. 1055 I., dated 5th December 1895.
Lower Coleroon Anicut System.	2,20,050	9,261	66,300	48,596	78,720	P.M.G. No. 835 I., dated 8th October 1892; No. 960 I., dated 6th November 1893; No. 372 I., dated 5th May 1894, and No. 181 I., dated 25th Feb. 1895.
Maradur Anicut System ...	3,600	...	...	2,475	6,150	P.M.G. No. 1006 I., dated 14th December 1894; Estimate for another work under preparation.
Buckingham Canal	86,14,000	80,05,611	1,67,900	1,95,895	1,50,140	Government of India Register No. 15 I. of 1883-84; P.M.G. No. 3 I., dated 8th January 1895.
Canal from the Madras Harbour to the Buckingham Canal.	9,50,000	...	2,00,000	50,000	6,00,000	P.M.G. No. $\frac{1084}{A}$ I., dated 14th December 1895.
Other Projects	...	...	36,500	60,199	...	
Total, Capital ..	...	...	7,49,500	6,89,854	11,22,610	
REVENUE.						
Ganjám Minor Rivers System ...	...	...	..	1,245	3,690	
Cumbum Tank System ...	...	...	2,460	676	2,460	
Thadapalli Channel System ...	...	...	3,000	2,756	4,300	
Arkenkotta do. do. ...	...	...	1,800	1,677	1,840	
Kalingaroyen do. do. ...	...	...	1,300	3,609	2,500	
Pálár Anicut System	...	...	47,010	42,105	43,602	
Poiney do. do.	...	...	13,600	22,196	12,360	
Cheyáru do. do.	...	...	21,000	27,772	16,010	
Chembrambakam Tank System.	...	...	— 3,000	— 2,998	— 2,040	
Madras Water-supply and Irrigation Extension.	...	...	1,340	1,438	— 270	
Valluru Anicut System ...	...	...	600	600	900	
Tirukkóyilúr Anicut System ...	...	...	17,000	19,457	12,350	

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 1896–97, *arranged by Projects and Objects of Work*—continued.

	Amount of Sanctioned Estimate.	Actual Outlay to end of 1894–95.	Budget Estimate, 1895–96.	Probable Outlay during 1895–96 (Revised Estimate).	Budget Estimate, 1896–97.	Remarks and References.
PROVINCIAL—*continued.*	Rs.	Rs.	Rs.	Rs.	Rs.	
43. MINOR WORKS AND NAVIGATION—*continued.*						
Minor Works for which Capital and Revenue Accounts are kept—continued.						
REVENUE—*cont.*						
Mehamattur Anicut System ...	...	...	2,500	4,118	1,850	
Vriddhachalam Anicut System...	...	...	4,300	5,724	3,700	
Shatiatope Anicut System ...	...	...	17,200	10,944	14,660	
Pelandorai do. do. ...	...	...	6,000	4,430	4,190	
Lower Coleroon Anicut System.	...	...	29,630	18,881	28,390	
Nandyar Channel	...	...	...	2,534	5,050	
Maradur Anicut System ...	...	...	14,000	16,515	11,110	
Chilka Lake Canal	...	...	370	370	370	
Buckingham Canal	...	...	91,700	91,900	85,110	
Védáranniyam Canal	...	...	3,870	3,870	4,430	
Total, Revenue ..	...	...	2,75,680	2,79,819	2,56,562	
Total, Minor Works for which Capital and Revenue Accounts are kept	...	...	10,25,180	9,69,673	13,79,172	
Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.						
Old maintenance charges ...	...	...	4,04,662	4,17,922	4,21,282	
Ordinary Minor Works ...	...	...	8,43,758	7,51,890	7,90,946	
Tank Restoration Works—						
Investigation	...	...	58,200	26,125	...	
Execution	...	...	5,52,900	5,32,367	6,77,530	
Minor Works, Revenue Department.	...	...	30,000	35,000	30,000	
Total ...	...	...	18,89,820	17,63,304	19,19,758	
Total, Irrigation and Navigation Works	...	...	29,15,000	27,32,977	32,98,930	
AGRICULTURAL WORKS.						
Works for which neither Capital nor Revenue Accounts are kept.						
MAJOR ORIGINAL WORKS.						
In Progress.						
Constructing le[illegible] flood bank of the Nagavali river between Annavaram an[illegible] Ampli villages.	5,730	...	5,032	2,030	3,000	P.M.G. No. 681 I., dated 10th August 1892.
Raising the Vasista Gódávari right bank from anicut to Chinchinada ferry.	72,800	1,785	10,000	10,000	30,000	P.M.G. No. 56 I., dated 19th Jan. 1893.

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 1896–97, *arranged by Projects and Objects of Work*—continued.

	Amount of Sanctioned Estimate.	Actual Outlay to end of 1894–95.	Budget Estimate, 1895–96.	Probable Outlay during 1895–96 (Revised Estimate).	Budget Estimate, 1896–97.	Remarks and References.
PROVINCIAL—*continued.*	Rs.	Rs.	Rs.	Rs.	Rs.	
AGRICULTURAL WORKS —*continued.*						
Works for which neither Capital nor Revenue Accounts are kept —continued.						
MAJOR ORIGINAL WORKS—*cont.*						
In Progress—cont.						
Raising Vasista Gódávari right bank from Chinchinada ferry to Narsapur.	8,300	1,924	1,000	4,000	3,000	P.M.G. No. 431 I., dated 16th May 1893.
Raising the Vasista left bank from head to junction of Gunnavaram canal.	33,500	10,992	6,000	6,000	10,000	P.M.G. No. 101 I., dated 4th Feb. 1893.
Diverting Vinetyam right bank along Pasarlapudi channel left bank.	16,000	2,417	5,000	5,000	11,000	P.M.G. No. 1043 I., dated 10th Dec. 1893.
Raising the Kistna river left bank.	78,300	14,527	10,000	10,000	10,000	P.M.G. No. 278 I., dated 28th March 1893.
Rest-house at Avanigedda ...	3,120	...	3,000	3,000	500	P.M.G. No. 366 I., dated 1st May 1894.
Raising the flood embankment of the Kistna river on right side from 44 to 55½ miles	33,000	1,285	...	17,000	15,000	P.M.G. No. 248 I., dated 13th March 1895.
Raising the Cauvery both banks from road No. 4 to Kumbakónam bridge.	25,900	9,664	6,000	6,000	10,000	P.M.G. No. 500 I., dated 11th September 1890.
Total, Major Original Works ...	...	...	...	...	92,500	
Minor Original Works	...	...	...	...	13,900	
Repairs	...	...	...	...	3,74,389	
Establishment	...	...	...	...	1,08,407	
Tools and Plant	...	...	...	...	6,874	
Total, Agricultural Works ...	...	...	...	...	5,96,070	
Total, Provincial ...	...	...	...	...	38,95,000	
LOCAL IRRIGATION CESS FUND.						
43. MINOR WORKS AND NAVIGATION.						
Minor Works for which neither Capital nor Revenue Accounts are kept.	...	...	8,000	24,000	8,000	
Total ...	...	...	8,000	24,000	8,000	

GOVERNMENT OF MADRAS.

CHARGES.

Part IV.

Detail of the Budget Estimate for Establishment of the Irrigation Branch in the Madras Presidency for the year 1896–97.

Particulars.	Budget Estimate for 1896–97. Per mensem.	Per annum.	Total.	Revised Estimate for 1895–96.
	Rs.	Rs.	Rs.	Rs.
IRRIGATION.				
43. Minor Works and Navigation.				
PROVINCIAL.				
Grant for works and repairs	...	...	29,55,423	23,68,707
Deduct items on which no charge for establishment is admissible—				
Grant for land compensation	...	...	1,75,862	66,395
Net Grant for Works and Repairs ...	...	...	27,79,561	23,02,312
A. Share of the Public Works establishment charges at 23 per cent. on the net grant for works and repairs.	...	...	6,39,299	5,29,531
Estimate of Direct Revenue	...	...	1,70,000	1,70,000
B. Share of the Public Works establishment charges at 10 per cent. on Direct Revenue.	...	...	17,000	17,000
Revenue due to old Irrigation under Major Productive Works.	...	...	38,49,000	37,93,000
C. Share of the Public Works establishment at 6 per cent. on Revenue.	...	...	2,30,940	2,27,580
Total, A + B + C ...	...	...	8,87,239	7,74,111
Special establishment for investigating requirements of tanks systematically	...	...	...	25,212
Total, Establishment Charges ...	...	...	8,87,239	7,99,323

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 1896–97—Nil.

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

IMPERIAL—MAJOR WORKS. MADRAS PRESIDENCY.

Please correct & return Hello. Secretariat for Location 1895-97

FINAL ISSUE.

Public Works Department.

BUDGET ESTIMATE

OF

REVENUE AND EXPENDITURE

UNDER

IRRIGATION-MAJOR WORKS

IN THE

MADRAS PRESIDENCY

FOR THE YEAR

1896-97.

MADRAS,
April 1896.

(Signed) R. R. E. DRAKE-BROCKMAN, Colonel, R.E.,
Secretary to Govt., P.W.D.,
Irrigation Branch.

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GOVERNMENT OF MADRAS.

REVENUE.

Abstract Budget Estimate of Revenue expected from Irrigation—Major Works in the Madras Presidency for the year from 1st April 1896 to 31st March 1897.

	Actual Realizations, 1894-95.	Budget Estimate, 1895-96.	Revised Estimate, 1895-96.	Budget Estimate, 1896-97.
IRRIGATION.	Rs.	Rs.	Rs.	Rs.
IMPERIAL.				
MAJOR PRODUCTIVE WORKS (DIRECT RECEIPTS).				
Gódávari Delta System, Collections in the Public Works Department.	1,25,418	1,20,000	1,20,000	1,20,000
Kistna Delta System do. do.	53,745	50,000	50,000	48,000
Pennéru Anicut System do. do.	397	600	600	400
Sangam Anicut System do. do.	536	700	700	600
Cauvery Delta System do. do.	3,569	2,500	2,500	3,500
Srívaikuntam Anicut System do. do.	1,566	1,500	1,500	1,000
Barur tank do. do.	26	...	...	...
Rushikulya do. do.	1,023	...	...	1,500
Kurnool-Cuddapah Canal. Collections in the Revenue Department ...	1,00,318	97,895	97,895	97,895
Kurnool-Cuddapah Canal. *Deduct* Collection Charges	5,225	4,895	4,895	4,895
Kurnool-Cuddapah Canal. Net Collections in the Revenue Department ...	95,093	93,000	93,000	93,000
Kurnool-Cuddapah Canal. Collections in the Public Works Department...	8,796	11,700	11,700	10,000
Total ...	1,03,889	1,04,700	1,04,700	1,03,000
Total ...	2,90,169	2,80,000	2,80,000	2,78,000

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, 1894-95.	Budget Estimate, 1895-96.	Revised Estimate, 1895-96.	Budget Estimate, 1896-97.
IRRIGATION.	Rs.	Rs.	Rs.	Rs.
XXIX. MAJOR WORKS—PORTION OF LAND REVENUE DUE TO IRRIGATION.				
Gódávari Delta—				
Irrigation Revenue	23,46,014	28,25,000	23,75,000	28,80,000
Deduct Revenue due to old Irrigation	1,24,000	1,24,000	1,24,000	1,24,000
Revenue due to the System	22,22,014	27,01,000	22,51,000	27,56,000
Share of enhanced Land Revenue	1,57,189	1,60,000	1,60,000	1,70,000
Total ...	23,79,203	28,61,000	24,11,000	29,26,000
Deduct Collection Charges in the Civil Department	1,18,960	1,43,050	1,20,550	1,46,300
Net Revenue ...	22,60,243	27,17,950	22,90,450	27,79,700
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	778	1,050	550	1,300
Total ...	22,61,021	27,19,000	22,91,000	27,81,000
Kistna Delta—				
Irrigation Revenue	18,64,067	24,50,000	22,50,000	24,30,000
Deduct Revenue due to old Irrigation	71,000	71,000	71,000	71,000
Revenue due to the System	17,93,067	23,79,000	21,79,000	23,59,000
Share of enhanced Land Revenue	1,69,333	1,70,000	1,70,000	1,80,000
Total ...	19,62,400	25,49,000	23,49,000	25,39,000
Deduct Collection Charges in the Civil Department	98,120	1,27,450	1,17,450	1,27,000
Net Revenue ...	18,64,280	24,21,550	22,31,550	24,12,000
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	2,616	10,450	3,450	10,000
Total ...	18,66,896	24,32,000	22,35,000	24,22,000
Pennéru Anicut—				
Irrigation Revenue	2,62,846	2,60,000	2,63,000	2,63,000
Deduct Revenue due to old Irrigation	1,17,000	1,17,000	1,17,000	1,17,000
Revenue due to the System	1,45,846	1,43,000	1,46,000	1,46,000
Share of enhanced Land Revenue	19,909	19,500	20,000	20,000
Total ...	1,65,755	1,62,500	1,66,000	1,66,000
Deduct Collection Charges in the Civil Department	8,288	8,125	8,300	8,300
Net Revenue ...	1,57,467	1,54,375	1,57,700	1,57,700
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	345	625	300	300
Total ...	1,57,812	1,55,000	1,58,000	1,58,000

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, 1894–95.	Budget Estimate, 1895–96.	Revised Estimate, 1895–96.	Budget Estimate, 1896–97.
	Rs.	Rs.	Rs.	Rs.
IRRIGATION—*continued.*				
XXIX. MAJOR WORKS—PORTION OF LAND REVENUE DUE TO IRRIGATION—continued.				
Sangam Anicut—				
Irrigation Revenue	3,02,603	3,84,000	3,84,000	4,01,000
Deduct Revenue due to old Irrigation	1,39,000	1,39,000	1,39,000	1,39,000
Revenue due to the System	1,63,603	2,45,000	2,45,000	2,62,000
Share of enhanced Land Revenue	15,925	21,500	21,500	22,000
Total	1,79,528	2,66,500	2,66,500	2,84,000
Deduct Collection Charges in the Civil Department	8,977	13,325	13,500	14,000
Net Revenue	1,70,551	2,53,175	2,53,000	2,70,000
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	5,664	4,825	6,000	6,000
Total	1,76,215	2,58,000	2,59,000	2,76,000
Cauvery Delta—				
Irrigation Revenue	37,78,719	38,10,000	40,80,000	41,50,000
Deduct Revenue due to old Irrigation	30,21,510	30,45,000	32,61,000	33,17,000
Revenue due to the System	7,57,209	7,65,000	8,19,000	8,33,000
Share of enhanced Land Revenue	1,09,404	1,25,000	1,16,000	1,17,000
Total	8,66,613	8,90,000	9,35,000	9,50,000
Deduct Collection Charges in the Civil Department	43,331	45,000	47,000	48,000
Net Revenue	~~8,23,282~~	8,45,000	8,88,000	9,02,000
Srivaikuntam Anicut—				
Irrigation Revenue	1,75,555	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	96,555	1,06,000	1,06,000	1,06,000
Share of enhanced Land Revenue	1,828	2,000	2,000	2,000
Total	98,383	1,08,000	1,08,000	1,08,000
Deduct Collection Charges in the Civil Department	4,919	5,000	5,000	5,000
Net Revenue	93,464	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, 1894–95.	Budget Estimate, 1895–96.	Revised Estimate, 1895–96.	Budget Estimate, 1896–97.
	Rs.	Rs.	Rs.	Rs.
IRRIGATION—*continued.*				
XXIX. MAJOR WORKS—PORTION OF LAND REVENUE DUE TO IRRIGATION—continued.				
Barur Tank—				
Irrigation Revenue	11,840	14,000	12,000	14,000
Deduct Revenue due to old Irrigation	2,000	2,000	2,000	2,000
Revenue due to the System	9,840	12,000	10,000	12,000
Share of enhanced Land Revenue	2	...	...	...
Total	9,842	12,000	10,000	12,000
Deduct Collection Charges in the Civil Department	492	1,000	1,000	1,000
Net Revenue	9,350	11,000	9,000	11,000
Kurnool-Cuddapah Canal—				
Share of enhanced Land Revenue under tanks owing to supply of canal water	4,455	8,000	8,400	8,400
Deduct Collection Charges in the Civil Department	223	1,000	400	400
Net Revenue	4,232	7,000	8,000	8,000
Rushikulya Project—				
Irrigation Revenue	47,154	91,000	91,000	1,00,000
Deduct Revenue due to old Irrigation	20,850	28,000	28,000	30,000
Revenue due to the System	26,304	63,000	63,000	70,000
Share of enhanced Land Revenue	6	150	150	150
Total	26,310	63,150	63,150	70,150
Deduct Collection Charges in the Civil Department	1,316	3,150	3,400	3,950
Net Revenue	24,994	60,000	59,750	66,200
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	...	...	250	800
Total	24,994	60,000	60,000	67,000
Total—				
Irrigation Revenue	87,88,798	1,00,19,000	96,40,000	1,04,23,000
Deduct Revenue due to old Irrigation	35,74,360	36,05,000	38,21,000	38,79,000
Revenue due to the System	52,14,438	64,14,000	58,19,000	65,44,000
Share of enhanced Land Revenue	4,78,051	5,06,150	4,98,050	5,19,550
Total	56,92,489	69,20,150	63,17,050	70,63,550
Deduct Collection Charges in the Civil Department	2,84,626	3,47,100	3,16,150	3,53,950
Net Revenue	54,07,863	65,73,050	60,00,900	67,09,600
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	9,403	16,950	10,100	18,400
Total	54,17,266	65,90,000	60,11,000	67,28,000

GOVERNMENT OF MADRAS.

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Abstract Budget Estimate of Expenditure on Irrigation—Major Works in the Madras Presidency for the year from 1st April 1896 to 31st March 1897.

	Reference to Detailed Estimate.	Actual Outlay, 1894–95.	Budget Estimate, 1895–96.	Revised Estimate, 1895–96.	Budget Estimate, 1896–97.
IMPERIAL.	Pages.	Rs.	Rs.	Rs.	Rs.
MAJOR (PROTECTIVE) WORKS.					
Famine Relief and Insurance.					
35. CONSTRUCTION OF PROTECTIVE IRRIGATION WORKS.					
1. Works ... ... In progress ... Rs. 63,500 / Not commenced. 90,146	8 & 9	2,46,199	2,46,577	1,89,667	1,53,646
2. Establishment	42	52,613	51,423	38,333	33,039
3. Tools and plant	43	11,366	2,000	...	2,315
5. Receipts on capital account	...	— 452	...	...	...
Total ...		3,09,726	3,00,000	2,28,000	1,89,000
42. (WORKING EXPENSES).					
1. Extensions and improvements. In progress ... ... / Not commenced Rs. 57,712	8 to 11	51,046	48,392	54,026	57,712
2. Maintenance and repairs	35 to 39	5,16,590	5,01,564	6,04,151	5,71,224
3. Establishment	42	4,61,014	5,30,743	5,20,136	5,56,121
4. Tools and plant	43 to 45	82,488	1,11,301	1,06,687	94,943
5. Refunds of revenue	...	893	...	...	...
Total, Working Expenses ...		11,12,031	11,92,000	12,85,000	12,80,000
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.					
49. IRRIGATION.					
1. Works ... ... In progress ... Rs. 2,82,342 / Not commenced ... 4,64,410	10 to 33	10,67,792	9,04,825	10,24,293	7,46,752
2. Establishment	42	2,38,689	1,99,675	2,27,207	1,62,518
3. Tools and plant	45	1,11,723	45,500	45,500	31,730
4. Suspense account	...	— 807	...	...	...
5. Receipts on capital account	...	— 2,992	...	...	...
Total, Capital Expenditure ..		14,14,405	11,50,000	12,97,000	9,41,000

GOVERNMENT OF MADRAS.

CHARGES.

Part I.

Details of the Budget Estimate of Expenditure on Irrigation—Major Works in the Madras Presidency for the year 1896–97, arranged by Projects and Objects of Work.

	Amount of Sanctioned Estimate.	Actual Outlay to end of 1894–95.	Budget Estimate, 1895–96.	Probable Outlay during 1895–96 (Revised Estimate).	Budget Estimate, 1896–97.	Remarks and References.
IMPERIAL.	Rs.	Rs.	Rs.	Rs.	Rs.	
MAJOR (PROTECTIVE) WORKS.						
Famine Relief and Insurance.						
35. CONSTRUCTION OF PROTECTIVE IRRIGATION WORKS.						
Capital Account.						
Rushikulya Project	43,68,000	36,80,677	3,00,000	2,28,000	1,89,000	Government of India register No. 7 I. of 1894–95. Proceedings of Madras Govt. No. 846 I. of 7th November 1894.
42. (WORKING EXPENSES).						
Gódávari Delta	...	...	5,06,000	4,84,173	5,30,000	
Kistna do.	...	...	4,60,000	5,78,720	5,26,000	
Pennéru Anicut	...	...	19,000	18,113	19,000	
Sangam do.	...	...	42,000	41,990	43,000	
Kurnool-Cuddapah Canal ...	...	...	1,05,000	99,910	86,000	
Barur Tank Project	...	...	5,000	3,392	3,800	
Cauvery Delta	...	...	18,000	15,590	18,200	
Srívaikuntam Anicut ...	...	...	17,000	17,873	24,000	
Rushikulya Project	...	...	20,000	25,239	30,000	
Total ...	...	...	11,92,000	12,85,000	12,80,000	
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.						
49. IRRIGATION.						
Works in Progress.						
Gódávari Delta System ...	1,41,470	85,627	13,000	14,825	84,000	P.M.G. No. 393 I., dated 3rd May 1895, No. 890 I., dated 30th October 1895, and No. 919 I., dated 2nd November 1895. Estimates for other works under preparation.
Kistna Delta do. ...	1,39,19,784	1,08,33,~~588~~ 833	4,48,000	5,38,000	5,75,000	Government of India register No. 8 I. of 1884–85. 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.
Pennéru Anicut do. ...	...	~~...~~	4,000	4,000	9,000	P.M.G. No. 181 I., dated 22nd Jan. 1896. Estimate for another work under preparation.
Sangam do. do. ...	16,000	...	17,000	17,000	19,000	Government of India register No. 21 I. of 1895–96. Estimate for another work under preparation.
Barur Project	4,200	...	2,460	3,038	1,700	P.M.G. No. 1050 I., dated 22nd Dec. 1894.
Cauvery Delta	60,581	7,145	20,000	22,497	76,100	P.M.G. No. 561 I., dated 31st July 1894, No. 853 I. of 7th Nov. 1894, No. 195 I. of 28th Feb. 1895, No. 467 I. of 1st June 1895, No. 485 I. of 15th June 1895, No. 599 I. of 31st July 1895, and No. 768 I. of 2nd Sept. 1895. Government of India letter No. 259 I. of 23rd Oct. 1895, P.M.G. No. 909 I. of 1st Nov. 1895, and No. 1022 I. of 26th Nov. 1895.
Srívaikuntam Anicut ...	3,200	...	1,540	1,540	13,100	P.M.G. No. 650 I., dated 12th August 1895. Estimates for other works under preparation.
Periyár Project	84,71,000	73,56,056	6,44,000	6,96,100	1,63,100	Government of India register No. 10 I. of 1894–95. P.M.G. No. 1057 I., dated 22nd December 1894.
Total ...	...	...	11,50,000	12,97,000	9,41,000	

GOVERNMENT OF MADRAS.

CHARGES.

Part II.

Details of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for the year 1896–97.

Division.	Locality.	Sub-division of Expenditure.	Item No.	Detail of Works.	Amount of Estimate.	Outlay: To end of 1894–95.	Outlay: Probable during 1895–96.	Grant for 1896–97.	Item No.	Remarks and References.
					Rs.	Rs.	Rs.	Rs.		
				IMPERIAL.						
				MAJOR (PROTECTIVE) WORKS.						
				Famine Relief and Insurance.						
				35. CONSTRUCTION OF PROTECTIVE IRRIGATION WORKS.						
				Capital Account.						
				RUSHIKULYA PROJECT.						
				(1) HEAD WORKS.						
				Mahánadi Section.						
Rushikulya division.	...	3. Works ...	1	Surplus channel of Russellkonda reservoir, drop and road dam combined for the proposed diversion of Russellkonda-Mujjagada road over the Russellkonda.	6,300	2,350	1,950	2,000	1	P.M.G. No. 155 I., dated 18th February 1895.
		Do. ...	2	Surplus channel	4,000	732	1,500	1,500	2	
		Do. ...	3	Diversion between 51st and 52nd miles of Russellkonda-Majjagada road.	2,400	...	1,000	1,000	3	
				(2) MAIN CANALS AND BRANCHES.						
				Rushikulya Canal						
		6. Other cross drainage works.	4	Tail race channel to Govia nallah under tunnel.	5,900	1	1,400	4,500	4	P.M.G. No. 182 I., dated 25th February 1895.
		Do.	5	Under tunnel at $29\frac{7}{16}$ miles, Rushikulya canal ...	5,720	2,421	2,000	1,200	5	
				(3) DISTRIBUTARIES.						
				Mahánadi Canal.						
		2. Land ...	6	Compensation for land	4,000	...	1,000	2,000	6	Government of India Register No. 7 I. of 1894–95. P.M.G. No. 846 I., dated 7th November 1894.
		3. Works ...	7	Irrigation sluices	3,000	...	...	3,000	7	
		Do. ...	8	Minor works	2,000	...	...	2,000	8	
		4. Earthwork ...	9	Irrigation channels	9,500	...	1,000	8,500	9	
				Rushikulya Canal.						
		2. Land ...	10	Compensation for land	60,000	25,444	15,000	8,000	10	
		3. Works ...	11	Irrigation sluices	16,148				11	
		Do. ...	12	Minor masonry works	61,602	...	...	1,19,946	12	
		4. Earthwork ...	13	Irrigation channels	1,50,000				13	
				Total, Rushikulya Project ...	...	...	...	1,53,646		
				IRRIGATION.						
				42. MAJOR WORKS (WORKING EXPENSES).						
				EXTENSIONS AND IMPROVEMENTS.						
				Gódávari Delta System.						
Gódávari Eastern division.	...	.....	14	Extensions and improvements	...	...	6,900	7,000	14	
Gódávari Central.	...									
Gódávari Western division.	...	.....	15	Do. do.	...	...	1,012	1,500	15	
		.....	16	Do. do.	...	...	8,438	10,000	16	
				Total ...	...	...	16,350	18,500		

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ES—continued.

Part

II—continued.

Details of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for the year 1896–97—continued.

Division.	Locality.	Sub-division of Expenditure.	Item No.	Detail of Works.	Amount of Estimate.	Outlay: To end of 1894–95.	Outlay: Probable during 1895–96.	Grant for 1896–97.	Item No.	Remarks and References.
					Rs.	Rs.	Rs.	Rs.		
				EXTENSIONS AND IMPROVEMNTS—*cont.*						
				Kistna Delta System.						
Kistna Eastern ...	...	.....	17	Extensions and improvements		...	10,240	11,000	17	
Kistna Western.	...	.....	18	Do. do.		...	4,750	3,000	18	
				... ...		...				
				Total ...		...	14,990	14,000		
				Pennéru Anicut System.						
Nellore ...	...	.....	19	Extensions and improvements		...	5,000	1,721	19	
				Deduct old maintenance charges		...	* 3,564	* 3,564		
				Net grant ...		...	1,436	— 1,843		
				Sangam Anicut System.						
Nellore ...	...	.....	20	Extensions and improvements		...	4,413	4,365	20	
				Deduct old maintenance charges		...	* 345	* 345		
				Net grant ...		...	4,068	4,020		
				Kurnool-Cuddapah Canal.						
Kurnool ...	...	.....	21	Extensions and improvements		...	7,000	6,000	21	
				Barur Tank Project.						
Salem ...	...	.....	22	Extensions and improvements		...	520	1,004	22	
				Cauvery Delta System.						
Tanjore ...	...	.....	23	Extensions and improvements		...	8,000	8,000	23	
Negapatam ...	...	.....	24	Do. do.		...	1,500	3,000	24	
Trichinopoly ...	...	.....	25	Do. do.		...	500	1,500	25	
				... ...						
				Total ...		...	10,000	12,500		
				Srivaikuntam Anicut System.						
Tinnevelly ...	...	.....	26	Extensions and improvements		...	14	3,883	26	
				Deduct old maintenance charges		...	* 352	* 352		
				Net grant ...		...	— 338	3,531		
				Total, Extensions and Improvements ...		...	...	57,712		
				CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.						
				49. IRRIGATION.						
				GODAVARI DELTA SYSTEM.						
				OPEN CAPITAL ACCOUNT.						
				Eastern Section.						
				(1) Head Works.						
Gódávari Eastern.	...	3. Works ...	27	Raising the crest of Gódávari anicut	1,08,000	...	...	40,000	27	Government of Register No. 25 I. of 1895-96. P.M.G. No. 114 I., dated 3rd February 1896.
			28	Reserve for works	...	...	...	4,000	28	
				Total, Eastern Section ...	...	...	...	44,000		

* These sums are provided in the budget estimates for Minor Works and Navigation for 1896-97.

Details of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for the year 1896-97—continued.

Division.	Locality.	Sub-division of Expenditure.	Item No.	Detail of Works.	Amount of Estimate.	Outlay: To end of 1894-95.	Outlay: Probable during 1895-96.	Grant for 1896-97.	Item No.	Remarks and References.
					Rs.	Rs.	Rs.	Rs.		
				OPEN CAPITAL ACCOUNT—*cont.*						
				Central Section.						
				(3) Distributaries.						
				Neduvúr Channel.						
Gódávari Central.	...	4. Earthwork ...	29	Mukkamala east side channel				3,000	29	P.M.G. No. 393 I., dated 3rd May 1895.
			30	Reserve for works	3,820	...	...	5,500	30	
			31	Do. for land	...	...	...	1,500	31	
				Total, Central Section ...	...	...	...	10,000		
				Western Section.						
				(3) Distributaries.						
				Attili Canal.						
Gódávari Western.	...	4. Earthwork ...	32	Branches of Rámésvaram channel				3,000	32	Estimate under preparation.
			33	Reserve for works	...	...	...	9,000	33	
			34	Do. for land	...	...	...	3,000	34	
				Total, Western Section ...	...	...	...	15,000		
				Total, Gódávari Delta System ...	...	...	...	69,000		
				KISTNA DELTA SYSTEM.						
				EASTERN SECTION.						
				Works in Progress.						
				Western Delta Main Canal.						
				(2) Main Canals and Branches.						
Kistna Northern.	Sitanagaram.	3. Regulators ...	35	Constructing the proposed head sluice at Sitanagaram.	82,500	14,890	34,000	33,700	35	
				Major Works.						
				Masulipatam Canal.						
				(3) Distributaries.						
Kistna Eastern ...	...	4. Earthwork ...	36	Bheemanadi channel	10,300	105	100	10,000	36	
				Pulleru Canal.						
				(4) Drainage and Protective Works.						
		4. Earthwork ...	37	Widening Kaldindi drain	55,787	~~44,411~~ 44,409	7,000	4,194	37	P.M.G. No. 34 I., dated 17th January 1894.
				Pedalanka Channel.						
				(3) Distributaries.						
		3. Works ...	38	Chivagonnur under tunnel	5,720	549	4,971	200	38	
		4. Earthwork ...	39	Excavating Pedalanka channel	61,300	15,944	34,000	5,000	39	
				Bantumilli Canal.						
				(3) Distributaries.						
		4. Earthwork ...	40	Excavating Kamalapuram north side channel ...	3,590	1,643	900	1,000	40	
				Total, Works in Progress, Kistna Eastern division	...	...	...	20,394		

CHARGES—continued.

Part II—continued.

Details of the Budget Estimate for Original Works under Irrigation—*Major Works in the Madras Presidency for the year* 1896-97—continued.

Division.	Locality.	Sub-division of Expenditure.	Item No.	Detail of Works.	Amount of Estimate.	Outlay: To end of 1894-95.	Outlay: Probable during 1895-96.	Grant for 1896-97.	Item No.	Remarks and References.
					Rs.	Rs.	Rs.	Rs.		
				Works not Commenced.						
				Major Works.						
				Masulipatam Canal.						
				(3) Distributaries.						
Kistna Eastern —*cont.*	...	4. Earthwork ...	41	Excavating Urutur channel	2,690	...	...	2,500	41	
		Do. ..	42	Do. Manginapudi canal	20,000	...	...	20,000	42	
		Do. ...	43	Do. Managercodu	5,000	...	...	5,000	43	
				Pulleru Canal.						
				(3) Distributaries.						
		4. Earthwork ...	44	Regulator with side sluices at 4 miles 5 furlongs of Gudiváda channel.	5,430	...	1,430	4,000	44	
				Pedalanka Channel.						
				(3) Distributaries.						
		4. Earthwork ...	45	Excavating Kottacodu	3,840	...	2,000	1,800	45	
		Do. ...	46	Do. Kaldindi channel	2,550	...	2,000	500	46	
		Do. ...	47	Do. Kondangi branch	2,600	...	1,600	1,000	47	
		Do. ...	48	Do. Mattagunta channel	3,000	...	...	2,500	48	
		Do. ...	49	Do. Tummacodu	3,000	...	...	2,000	49	
		Do. ...	50	Do. Vennarcodu	4,250	...	1,000	2,500	50	
			51	Pipe sluices along Peddalanka channel ...	7,500	...	...	4,000	51	
				(4) Drainage and Protective Works.						
		4. Earthwork ...	52	Widening Pedalanka drain	10,000	...	...	10,000	52	
		Do. ...	53	Excavating Kaldindi drain	4,520	...	...	4,520	53	
				Bantumilli Canal.						P.M.G. No. 34 I., dated 17th January 1894.
				(2) Main Canals and Branches.						
		11. Buildings ...	54	Rest-house at Lakshmipuram	2,590	...	1,000	1,000	54	
		15. Miscellaneous.	55	Seven ramps for the extension of Bantumilli canal.	2,720	...	...	1,000	55	
				Total, Works not commenced ...	...	...	...	62,320		
				MINOR WORKS ESTIMATED TO COST Rs. 2,500 EACH AND UNDER.						
				Works in Progress.						
				Ellore Canal.						
				(3) Distributaries.						
		3. Works ...	56	Minor works	2,360	410	850	855	56	
		4. Earthwork ...	57	Do.	4,137	1,795	740	1,280	57	
		5. Miscellaneous.	58	Do.	300	50	50	150	58	
				Ryves' Canal.						
				(3) Distributaries.						
		3. Works ...	59	Minor works	4,800	1,355	1,130	1,930	59	
		4. Earthwork ...	60	Do.	535	420	...	100	60	
		5. Miscellaneous.	61	Do.	2,800	585	300	1,280	61	

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OF MADRAS.

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ES—continued.

Part

II—continued.

Details of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for the year 1896-97—continued.

Division.	Locality.	Sub-division of Expenditure.	Item No.	Detail of Works.	Amount of Estimate.	Outlay: To end of 1894-95.	Outlay: Probable during 1895-96.	Grant for 1896-97.	Item No.	Remarks and References.
					Rs.	Rs.	Rs.	Rs.		
				WORKS NOT COMMENCED—*cont.*						
				Works in Progress—cont.						
				Pulleru Canal.						
Kistna Eastern —*cont.*	...	4. Earthwork ...	62	(3) Distributaries. Minor works	2,300	331	256	1,300	62	
				Polraz Canal.						
		3. Works ...	63	(3) Distributaries. Minor works	1,560	554	335	671	63	
		5. Miscellaneous	64	Do.	90	46	40	4	64	
		11. Buildings ...	65	(2) Main Canals and Branches. Minor works	3,290	1,364	600	1,300	65	
				Pedalanka Channel.						
		3. Works ...	66	(3) Distributaries. Minor works	2,480	272	1,300	900	66	
		5. Miscellaneous.	67	Do.	510	177	100	200	67	
				Bantumilli Canal.						
		4. Earthwork ...	68	(3) Distributaries. Minor works	7,271	2,571	2,600	2,100	68	
		5. Miscellaneous.	69	Do.	1,504	371	520	744	69	
				Total, Works in Progress ...	...	...	...	12,814		P.M.G. No. 34 I., dated 17th January 1894.
				Works not Commenced.						
				Masulipatam Canal.						
		9. Navigation	70	2. *Main Canals and Branches.* Minor works	500	...	...	500	70	
				(3) Distributaries.						
		3. Works ...	71	Minor works	13,920	...	4,000	8,500	71	
		4. Earthwork ...	72	Do.	15,898	...	...	9,000	72	
				Ellore Canal.						
		3. Works ...	73	(3) Distributaries. Minor works	4,500	...	...	3,000	73	
		4. Earthwork ...	74	Do.	12,780	...	500	12,000	74	
		5. Miscellaneous.	75	Do.	585	...	230	355	75	
				Ryves' Canal.						
		6. Other cross drainage works.	76	(2) Main Canals and Branches. Minor works	1,000	...	...	1,000	76	
		11. Buildings ...	77	Do.	2,500	...	...	1,300	77	
		3. Works ...	78	(3) Distributaries. Minor works	2,920	...	...	2,500	78	
		4. Earthwork ...	79	Do.	3,542	...	92	3,310	79	
		5. Miscellaneous.	80	Do.	1,047	...	80	737	80	

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ES—continued.

Part

II—continued.

Details of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for the year 1896-97—continued.

Division.	Locality.	Sub-division of Expenditure.	Item No.	Detail of Works.	Amount of Estimate.	Outlay: To end of 1894-95.	Outlay: Probable during 1895-96.	Grant for 1896-97.	Item No.	Remarks and References.
					Rs.	Rs.	Rs.	Rs.		
				Works not Commenced—cont.						
				Pulleru Canal.						
				(3) Distributaries.						
Kistna Eastern —*cont.*	...	3. Works ...	81	Minor works	5,059	...	1,200	3,850	81	
		4. Earthwork ...	82	Do.	10,762	...	1,604	8,299	82	
				Polraz Canal.						
				(3) Distributaries.						
		3. Works ...	83	Minor works	170	...	100	70	83	
		4. Earthwork ...	84	Do.	4,410	...	1,560	2,600	84	
				Pedalanka channel.						
				(3) Distributaries.						
		3. Works ...	85	Minor works	7,900	...	2,310	5,410	85	
		4. Earthwork ...	86	Do.	15,380	...	650	13,050	86	
		5. Miscellaneous ...	87	Do.	1,170	...	50	1,080	87	
				Bantumilli Canal.						
				(2) Main Canals and Branches.						
		11. Buildings ...	88	Minor works	860	...	200	400	83	
				(3) Distributaries.						
		3. Works ...	89	Minor works	3,270	...	1,870	1,150	89	
		4. Earthwork ...	90	Do.	3,000	...	...	3,000	90	
		5. Miscellaneous ...	91	Do.	4,965	...	120	3,361	91	P.M.G. No. 34 I., dated 17th January 1894.
				Total, Works not commenced ...	...	...	...	84,472		
				Total grant for works ...	...	...	...	1,80,000		
		2. Land	92	Land compensation	...	...	...	20,000	92	
				Total, Eastern division ...	...	...	...	2,00,000		
				Total, Eastern section ...	...	...	...	2,33,700		
				WESTERN SECTION.						
				Works in Progress.						
				Main Canal.						
Kistna Western ...	...			(2) Main Canals and Branches.						
		2. Land	93	Compensation for land for widening Western Delta main canal.	4,080	996	500	500	93	
		12. Earthwork ...	94	Widening Western Delta main canal.	5,86,800	5,32,200	37,000	10,000	94	
		15. Miscellaneous...	95	Constructing a wall on the right side of the lock channel in rear of Sitanagaram lock.	3,900	...	2,500	1,400	95	
		Do. ...	96	Constructing a wharf wall 700 feet long on right bank of main canal at Sitanagaram.	7,000	...	4,000	3,000	96	

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II—continued.

Details of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for the year 1896-97—continued.

Division.	Locality.	Sub-division of Expenditure.	Item No.	Detail of Works.	Amount of Estimate.	Outlay: To end of 1894-95.	Outlay: Probable during 1895-96.	Grant for 1896-97.	Item No.	Remarks and References.
					Rs.	Rs.	Rs.	Rs.		
				Works in Progress—cont.						
				Nizampatam Canal.						
				(3) Distributaries.						
Kistna Western —*cont.*	...	4. Earthwork ...	97	Improvements to west side channel	10,800	...	4,000	5,000	97	
				(4) *Drainage and Protective Works.*						
		2. Land	98	Compensation for land for Tenali drain ...	12,150	274	2,000	1,000	98	
		4. Earthwork ...	99	Excavating Tenali drain	56,658	43,336	8,000	5,000	99	
		5. Miscellaneous...	100	Fixing B. M. S. on Tenali drain	2,892	729	500	500	100	
				Bank Canal.						
				(2) Main Canals and Branches.						
		12. Earthwork ...	101	Improvements to Bank Canal	1,13,745	73,276	2,000	3,000	101	
				(3) Distributaries.						
		4. Earthwork ...	102	Improvements to Iskapalli channel	11,400	738	3,000	5,000	102	
		Do. ...	103	Excavating Varahapuram channel	9,680	...	500	6,000	103	
				(4) Drainage and Protective Works.						
		3. Works ...	104	Constructing aqueduct to carry Vellatúr channel across Repalle main drain straight cut.	14,200	...	100	5,000	104	
				Commamúr Canal.						
				(2) Main Canals and Branches.						
		2. Land... ...	105	Compensation for land for improvements to Commamúr canal.	16,068	13,942	100	300	105	P.M.G. No. 34 I., dated 17th January 1894.
		9. Navigation ...	106	Constructing side walls in rear channel of Commamúr lock.	6,150	2,171	3,000	1,000	106	
		12. Earthwork ..	107	Improvements to Commamúr canal	2,45,330	2,09,319	5,000	3,000	107	
				(4) Drainage and Protective Works.						
		3. Works ...	108	Constructing under tunnel at 8 miles 1¼ furlongs of Commamúr canal.	37,000	23,192	12,000	2,000	108	
		4. Earthwork ...	109	Excavating Tungabhadra drain	2,01,111	1,37,175	20,000	20,000	109	
		5. Miscellaneous...	110	Tungabhadra drain ramps, &c	3,389	1,188	100	300	110	
				Total, Works in Progress ...	...	...	...	72,000		
				Works not Commenced.						
				Main Canal.						
				(2) Main Canals and Branches.						
		15. Miscellaneous...	111	Constructing cattle crossing at Tadepalli, 1 mile 4 furlongs.	3,790	...	...	2,500	111	
		Do. ...	112	Constructing cattle crossing at Kuchanapalli, 3 miles 1 furlong.	3,250	...	...	2,000	112	
		Do. ...	113	Constructing cattle crossing at Mallempudi, 5 miles 1 furlong.	3,190	...	...	2,000	113	
		Do. ..	114	Constructing cattle crossing at Vadheswaram, 3 miles 6 furlongs.	3,720	...	...	2,500	114	

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II—continued.

Detail of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for the year 1896–97—continued.

Division.	Locality.	Sub-division of Expenditure.	Item No.	Detail of Works.	Amount of Estimate.	Outlay: To end of 1894–95.	Outlay: Probable during 1895–96.	Grant for 1896–97.	Item No.	Remarks and References.
				Works not Commenced—cont.	Rs.	Rs.	Rs.	Rs.		
				Main Canal—*cont.*						
Kistna Western —*cont.*	...	15. Miscellaneous ...	115	(2) Main Canals and Branches—*cont.* Constructing cattle crossing at Revendrapad, 7 miles 4 furlongs.	3,340	...	...	2,000	115	
		Do. ...	116	Constructing cattle crossing at Tummapudi, 9 miles 1 furlong.	3,440	...	...	2,000	116	
		Do. ...	117	Constructing cattle crossing at Morampudi, 10 miles 6 furlongs.	3,000	...	...	2,000	117	
				Nizampatam Canal.						
		3. Works ...	118	(3) Distributaries. Improvements to west side channel extension bridge at 14/3·210 miles.	3,430	...	...	3,000	118	
		Do. ...	119	Improvements to earthenware pipe sluices ...	2,650	...	...	2,000	119	
		Do. ...	120	Constructing an iron girder bridge on the Ponnur-Intur road at 6 miles 37 chains.	7,790	...	...	7,000	120	
		4. Earthwork ...	121	(4) Drainage and Protective Works. Improving Pedapalli drain	8,670	...	..	8,500	121	
				Bank Canal.						
		11. Buildings ...	122	(2) Main Canals and Branches. Constructing a rest-house at Sinangulapalem ...	3,620	...	2,000	1,500	122	
		Do. ...	123	Constructing a rest-house at Kollúr	2,610	...	1,500	1,000	123	
		2. Land ...	124	(3) Distributaries. Compensation for Varahapuram channel	12,000	...	...	1,000	124	P.M.G. No. 34 I., dated 17th January 1894.
		4. Earthwork ...	125	Excavating Vullipolem branch channel ...	3,710	...	...	3,500	125	
		Do. ...	126	Do. Allaparru branch channel	5,860	...	...	5,000	126	
		2. Land ...	127	(4) Drainage and Protective Works. Compensation for land for Repalle main drain straight cut.	12,400	...	500	1,000	127	
		4. Earthwork ...	128	Excavating the proposed straight cut for Repalle main drain.	39,760	...	...	20,000	128	
		5. Miscellaneous...	129	Constructing three cattle-crossings for Repalle main drain.	6,000	...	...	2,000	129	
		4. Earthwork ...	130	Excavating Allaparru drain	5,100	...	...	5,000	130	
		Do. ...	131	Do. Kuchenapudi drain	3,700	...	...	3,000	131	
		3. Works ...	132	Constructing an iron girder bridge at Chevalur over Repalle main drain.	10,160	...	...	5,000	132	
				Commamúr Canal.						
		11. Buildings ...	133	(2) Main Canals and Branches. Constructing a rest-house at Karlapalem ...	2,980	...	2,000	500	133	
		9. Navigation ...	134	Do. lock establishment sheds at Kollimerla	2,790	...	...	2,000	134	
		Do. ...	135	Do. do. at Peda Ganjám.	2,740	...	...	2,000	135	
		4. Earthwork ...	136	(3) Distributaries. Excavating Bápatla, 1st east branch	2,880	...	...	2,500	136	
		Do. ...	137	Do. 1st west branch	2,860	...	...	2,500	137	

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Details of the Budget Estimate for Original Works under Irrigation

Division.	Locality.	Sub-division of Expenditure.	Item No.	Detail of Works.
				Works not Commenced—cont.
				(4) Drainage and Protective Works.
Kistna Western —*cont.*	...	3. Works ...	138	Combined bridge and aqueduct at 1 mile 7½ furlongs from head of Doppalapudi affluent.
				Total, Works not commenced ...
				MINOR WORKS COSTING Rs. 2,500 AND UNDER.
				Main Canal.
				(3) Distributaries.
		5. Miscellaneous...	139	Fixing demarcation stones along the distributaries of Western delta main canal
		Do. ...	140	Demarcation stones for extending and improving No. 1 branch of main channel.
		2. Land	141	Compensation for land required for extending No. 1 branch of main channel.
		4. Earthwork ...	142	Improving and extending No. 1 branch of main channel.
				Nizampatam Canal.
				(2) Main Canals and Branches.
		9. Navigation ...	143	Constructing lock establishment sheds at Intúr...
		Do. ...	144	Constructing lock establishment sheds at Nallavada.
		Do. ...	145	Constructing lock establishment sheds at Nizampatam tidal lock.
		Do. ...	146	Constructing lock establishment sheds for 4th lascar at Kuchipudi lock.
				IMPROVEMENTS TO WEST SIDE CHANNEL.
				(3) *Distributaries.*
		2. Land ...	147	Compensation for land ... ...
		3. Works ...	148	Regulator at 2/0 miles ... ...
		Do. ...	149	Alterations to the existing Calingulah ... ...
		Do. ...	150	Drop at 6/4 miles ... ...
		Do. ...	151	Do. 8/0 miles ... ...
		Do. ...	152	Alterations to the existing Calingulah at 19/1½ miles.
		Do. ...	153	Weir in right bank at 19/4 miles ... ...
		5. Miscellaneous.	154	Fixing demarcation stones for West side channel improvements.
				BANK CANAL.
				(2) *Main Canals and Branches.*
		15. Miscellaneous.	155	Fixing demarcation stones on both sides of Bank canal.
		9. Navigation ...	156	Constructing lock establishment sheds at Vellatúr.

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II—continued.

Major Works in the Madras Presidency for 1896–97—continued.

Amount of Estimate.	Outlay		Grant for 1896–97.	Item No.	Remarks and References.
	To end of 1894–95.	Probable during 1895–96.			
Rs.	Rs.	Rs.	Rs.		
...	...	...	8,000	138	
...	...	...	1,01,000		
770	283	300	100	139	
60	...	...	50	140	
300	...	...	200	141	
400	...	...	300	142	
2,060	...	...	2,000	143	
1,970	...	...	1,900	144	
2,000	...	...	2,000	145	
350	...	...	340	146	P.M.G. No. 34 I., dated 17th January 1894.
600	...	...	200	147	
1,680	...	...	1,000	148	
60	...	...	60	149	
650	...	...	600	150	
540	...	...	500	151	
100	...	...	100	152	
850	...	...	800	153	
760	...	...	500	154	
2,200	1,311	500	400	155	
2,340	...	...	2,000	156	

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II—continued.

Details of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for 1896–97—continued.

Division.	Locality.	Sub-division of Expenditure.	Item No.	Detail of Works.	Amount of Estimate.	Outlay: To end of 1894–95.	Outlay: Probable during 1895–96.	Grant for 1896–97.	Item No.	Remarks and References.
					Rs.	Rs.	Rs.	Rs.		
				BANK CANAL—*cont.*						
				(3) *Distributaries.*						
Kistna Western —*cont.*	...	3. Works ...	157	Constructing an under tunnel at 0/4 miles for Varahapuram channel.	1,105	...	...	500	157	
		Do. ...	158	Combined bridge and drop at 4 miles 5 furlongs for Varahapuram channel.	1,120	...	...	1,000	158	
		Do. ...	159	Tail escape and bridge	1,200	...	...	1,000	159	
		Do. ...	160	Earthenware pipe sluices	1,000	...	...	500	160	
		Do. ...	161	Isakapalli channel combined bridge and drop at 2 furlongs.	1,970	...	...	1,000	161	
		Do. ...	162	Sluice at 0/2 miles, left bank ...	470	...	...	200	162	
		Do. ...	163	Do. right bank	470	...	...	200	163	
		Do. ...	164	Small bridge at 2 miles 1 furlong 500 feet ...	1,710	...	...	500	164	
		Do. ...	165	Sluice at 2/2 miles	470	...	...	200	165	
		Do. ...	166	Small bridge 3 miles 410 feet	1,670	...	...	500	166	
		Do. ...	167	Sluice at 3/2 miles	470	...	...	200	167	
		Do. ...	168	Small bridge at 4/1½ miles	1,660	...	...	500	168	
		Do. ...	169	Sluice at 4/2½ miles	480	...	...	200	169	
		Do. ...	170	Small bridge at 5/0½ miles	1,650	...	...	500	170	
		Do. ...	171	Sluice at 6/0 miles	480	...	...	200	171	
		Do. ...	172	Small bridge at 7 miles 230 feet	1,650	...	...	500	172	
		Do. ...	173	Sluice at 7/4 miles, right bank	480	...	...	200	173	
		Do. ...	174	Do. do. left bank	480	...	...	200	174	
		Do. ...	175	Small bridge at 8 miles 5 furlongs 230 feet ...	1,530	...	...	500	175	
		Do. ...	176	Sluice at 8/4 miles on right bank	490	...	...	200	176	
		Do. ...	177	Do do. on left bank	490	...	...	200	177	P. M. G. No. 34 I., dated 17th January 1894.
				ARAVAPALLI CHANNEL.						
				(3) *Distributaries.*						
		3. Works ...	178	Drop at 0/6 miles ...	410	...	...	200	178	
		Do. ...	179	Do. 3/4 miles	440	...	...	200	179	
		Do. ...	180	Tail escape	220	...	...	200	180	
		Do. ...	181	Vullipolem channel, tail escape	240	...	...	200	181	
		Do. ...	182	Allaparru branch channel, tail escape	230	...	...	200	182	
		Do. ...	183	Kunchenapudi branch channel, tail escape ...	210	...	...	200	183	
		Do. ...	184	Constructing surplus sluice at 573 feet from head of proposed surplus channel at 45 miles 6 furlongs of Bank canal.	2,090	...	1,000	1,000	184	
		Do. ...	185	Constructing head sluice to Raju channel at 573 feet from head of proposed surplus channel.	1,020	...	500	500	185	
		Do. ...	186	Constructing a drop at 330 feet from head of proposed channel at 45 miles 2 furlongs 310 feet, Bank canal.	540	...	200	300	186	
		Do. ...	187	Constructing a drop at 330 feet from head of proposed channel at 44 miles 4 furlongs 330 feet.	470	...	100	300	187	
		Do. ...	188	Constructing a drop at 3½ furlongs from head of Venkanna channel.	290	...	100	100	188	
		4. Earthwork ...	189	Excavating Aravapalli branch channel	2,360	...	...	1,000	189	
		Do. ...	190	Do. Kuchenapudi branch channel ...	1,840	...	...	1,000	190	
		2. Land ...	191	Compensation for land for Vullipolem branch channel.	600	...	...	200	191	
		Do. ...	192	Compensation for land for Allapuram branch channel.	800	...	...	200	192	

Details of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for 1896–97—continued.

Division.	Locality.	Sub-division of Expenditure.	Item No.	Detail of Works.	Amount of Estimate.	Outlay: To end of 1894–95.	Outlay: Probable during 1895–96.	Grant for 1896–97.	Item No.	Remarks and References.
				ARAVAPALLI CHANNEL—*cont.*						
				(3) *Distributaries*—cont.						
Kistna Western—*cont.*	...	2. Land ...	193	Compensation for land for Kuchenapudi branch channel.	Rs. 350	Rs. ...	Rs. ...	Rs. 200	193	
		5. Miscellaneous ...	194	Cattle crossing No. 1 at 1 mile 1 furlong of Varahapuram channel.	520	...	...	500	194	
		Do. ...	195	Cattle crossing No. 2 at 1 mile 4 furlongs 560 feet.	570	...	...	550	195	
		Do. ...	196	Cattle crossing No. 3 at 2 miles 5 furlongs 500 feet.	615	...	...	600	196	
		Do. ...	197	Cattle crossing No. 4 at 3 miles 1 furlong 440 feet.	615	...	...	600	197	
		Do. ...	198	Cattle crossing No. 5 at 5 miles 4 furlongs ...	675	...	...	650	198	
		Do. ...	199	Cattle crossing No. 6 at 6 miles 7 furlongs 220 feet.	705	...	...	700	199	
		Do. ...	200	Cattle crossing No. 7 at 8 miles 1 furlong ...	725	...	...	700	200	
		Do. ...	201	Demarcation stones for Varahapuram channel ...	670	...	...	200	201	
		Do. ...	202	Do. for Aravapalli branch channel	420	...	...	200	202	
		Do. ...	203	Do. for Vullipolem branch ...	370	...	...	200	203	
		Do. ...	204	Do. for Allaparru branch ..	420	...	...	200	204	
		Do. ...	205	Do. for Kuchenapudi branch ...	380	...	...	200	205	
				COMMAMUR CANAL.						
				(2) *Main Canals and Branches.*						
		5. River and Hill torrent works.	206	Opening vents in the east side channel of Kollimerla aqueduct at 19 miles 5 furlongs.	1,150	...	500	500	206	
		9. Navigation ...	207	Constructing sheds for Lock Superintendent and four lascars at Nallamada lock.	2,160	190	1,500	500	207	
		Do. ...	208	Constructing sheds for Lock Superintendent and four lascars at Jagerlamudi.	2,360	...	...	2,000	208	P.M.G. No 34 I., dated 17th January 1894.
		11. Buildings ...	209	Constructing sheds for lascars at Nallamada surplus sluices.	1,450	...	...	1,400	209	
		Do. ...	210	Constructing sheds for lascars at Parucheruvagu surplus sluices.	930	...	...	900	210	
		Do. ...	211	Constructing sheds for lascars at Alleruvagu surplus sluices.	580	...	...	500	211	
		15. Miscellaneous...	212	Constructing a cattle crossing at Garikapad at 23 miles 5 furlongs.	1,740	...	...	500	212	
		Do. ...	213	Constructing a cattle crossing at Cherukúr at 30/1.	750	...	...	500	213	
		Do. ...	214	Constructing a cattle crossing at Potucutla, 34 miles 5 furlongs.	1,200	...	...	500	214	
		Do. ...	215	Constructing a cattle crossing at Gasalapolem at 43 miles 3 furlongs 530 feet.	1,260	...	...	500	215	
				(3) *Distributaries.*						
		2. Land ...	216	Compensation for land for left bank of Tungabhadra side channel.	2,470	2,298	50	50	216	
		Do. ...	217	Compensation for land for Bápatla channel ...	500	49	50	100	217	
		Do. ...	218	Do. do. for 1st east branch ...	600	...	...	200	218	
		Do. ...	219	Do. do. for 1st west branch ..	700	...	...	200	219	
		3. Works ...	220	Constructing an iron girder bridge over the Santaravúr side channel at Timmasamudram.	1,190	...	500	1,000	220	
		Do. ...	221	Bápatla channel, 1st west branch tail escape weir.	440	...	...	200	221	

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II—continued.

Detail of the Budget Estimate for Original Works under Irrigation

Major Works in the Madras Presidency for 1896–97—continued.

Division.	Locality.	Sub-division of Expenditure.	Item No.	Detail of Works.	Amount of Estimate.	Outlay: To end of 1894–95.	Outlay: Probable during 1895–96.	Grant for 1896–97.	Item No.	Remarks and References.
					Rs.	Rs.	Rs.	Rs.		
				COMMAMUR CANAL—*cont.*						
				(4) *Drainage and Protective Works.*						
Kistna Western —*cont.*	...	5. Miscellaneous ...	222	Fixing B.M. stones for Romperu side drain ...	1,800	432	300	500	222	
		Do. ...	223	Two cattle ramps at Rs. 500 each	1,000	...	...	1,000	223	
				Total, Minor Works costing Rs. 2,500 and under ...	...	...	...	44,400		
				Grand total, Western Section ...	...	...	...	2,17,400		
				Total, Kistna Delta System ...	...	...	...	4,51,100		
				OPEN CAPITAL ACCOUNT.						
				PENNERU ANICUT SYSTEM.						
Nellore ...	Nellore ...	2. Works ...	224	(1) *Head Works.* Providing screw-gearings to auxiliary head sluice.	5,500	...	...	5,417	224	Estimate under preparation.
	Venkanapalem.	14. Tanks and Reservoirs.	225	(2) *Main Canals and Branches.* Venkammapalem tank surplus weir	1,940	...	...	1,900	225	P.M.G. No. 181 I., dated 22nd January 1896.
				Total, Penneru Anicut System ...	...	...	...	7,317		
				SANGAM ANICUT SYSTEM.						
	Kanigiri reservoir.	14. Tanks and weirs.	226	(2) *Main Canals and Branches.* Providing screw-gearing shutters for the Kanigiri reservoir.	13,000	...	...	11,407	226	P.M.G. No. 998 I., dated 20th November 1895.
	Duvúr ...	4. Earthwork ...	227	(3) *Distributaries.* Improvements to dasabandam channel from 5 miles 2,592, right bank, Duvúr branch channel.	4,040	...	...	4,040	227	Estimate under preparation.
				Total, Sangam Anicut System ...	...	...	...	15,447		
				BARUR TANK SYSTEM.						
Salem	...	3. Masonry works.	228	(2) *Main Canals and Branches.* Surplus sluices in the weir of Barur tank ...	3,400	...	2,000	1,382	228	P.M.G. No. 1050 I., dated 22nd December 1894.
				CAUVERY DELTA SYSTEM.						
Tanjore ...	...	3. Works ...	229	*I. Head Works.* Providing an experimental pair of shutters to replace the body wall in arch No. 8 from right south branch of the Upper Coleroon anicut.	2,850	...	2,000	850	229	P.M.G. No. 485 I., dated 15th June 1895.
		Do. ...	230	Providing additional sets of experimental shutters to replace the body wall in arch No. 8 from right south branch of the Upper Coleroon anicut.	...	...	...	4,500	230	Estimate under preparation.

IMPERIAL—MAJOR WORKS.

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Details of the Budget Estimate for Original Works under Irrigation

Division.	Locality.	Sub-division of Expenditure.	Item No.	Detail of Works.
				CAUVERY DELTA SYSTEM—*cont.*
				(2) *Main Canals and Branches.*
Tanjore—*cont.*	...	3. Regulators ...	231	Providing screw-gearing shutters for the three central arches of Kodamurty regulator.
		Do. ...	232	Improving Devanur dam across Veerasholan ...
Negapatam ...	...	Do. ...	233	Constructing a regulator of 9 vents across the Vettar just below the off take of Odemboghyar.
		Do. ...	234	Improvements to Nariangudy dam across Odemboghyar or Kodamurtyar.
Tanjore ...	...	Do. ...	235	Fitting new shutters with screw-gearing to both head sluices at Melattur anicut and fixing two experimental scouring sluice shutters in dam.
		Do. ...	236	Fixing new shutters to two head sluices of Katchamangalam anicut and two experimental shutters in body wall of dam.
				(3) *Distributaries.*
		3. Works ...	237	Restoring old Irrigation channel of Sithanevelur with necessary masonry works on Vettar, left bank.
		Do. ...	238	Improving Vadakarai Kohoor channel, branching from Thirumalarajanar, left bank, miles 64.
		2. Land ...	239	Do. do. ...
		3. Works ...	240	Improving Maraneri Iyanar tank ... ...
		Do. ...	241	Do. Peramboor tank ... ...
				(4) *Drainage and Protective Works.*
		3. Works ...	242	Reconstructing the old dam across the Iyavyanar.
		Do. ...	243	Constructing a syphon for Aiyapadi drainage under Thennangondayam drainage.
		Do. ...	244	Constructing a drainage sluice and foot bridge for Neikunnam and Vikramanar drainage channel.
		Do. ...	245	Reserve for Works ... ...
				Total capital, Cauvery Delta System ...
				SRIVAIKUNTAM ANICUT SYSTEM.
				(2) *Main Canals and Branches.*
Tinnevelly ...	...	14. Tanks and Reservoirs.	246	Palayakoyal tank improvements ... ...
			247	Reserve for works ... ...
				Total, Srivaikuntam Anicut System ...
				PERIYAR PROJECT.
				(1) *Head Works.*
Madura ...	Periyár ...	3. Works ...	248	Main dam ... ...
		Do. ...	249	Left bank escape ... ...
				Total, Head Works ...

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Madura -

Total, Periyar Project

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II—continued.

Major Works in the Madras Presidency for 1896-97—continued.

Amount of Estimate.	Outlay		Grant for 1896-97.	Item No.	Remarks and References.
	To end of 1894-95.	Probable during 1895-96.			
Rs.	Rs.	Rs.	Rs.		
2,730	1,609	478	660	231	P.M.G. No. 561 I., dated 31st July 1894.
1,270	...	...	1,270	232	,, ,, 768 I. ,, 20th September 1895.
22,700	...	2,854	19,846	233	,, ,, 540 I. ,, 4th July 1895.
1,670	...	870	800	234	,, ,, 195 I. ,, 28th February 1895.
...	...	...	5,000	235	Estimates under preparation.
...	...	...	5,000	236	
3,260	...	1,500	1,760	237	P.M.G. No. 467 I., dated 1st June 1895.
1,320	...	...	1,320	238	P.M.G. No. 1022 I., dated 26th November 1895.
300	...	...	300	239	
3,920	...	...	3,920	240	P.M.G. No. 599 I., dated 31st July 1895.
6,030	...	...	6,030	241	Estimate under preparation.
3,800	...	150	1,750	242	P.M.G. No. 853 I., dated 7th November 1894.
1,700	...	...	1,700	243	,, ,, 768 I. ,, 20th September 1895.
2,670	...	...	2,670	244	,, ,, 909 I. ,, 1st November 1895.
...	...	...	4,550	245	
...	...	...	61,926		
2,580	...	...	2,580	246	P.M.G. No. 650 I., dated 12th August 1895.
...	...	...	8,000	247	
...	...	...	10,580		
24,60,000	21,08,414	3,03,744	15,000	248	Government of India Register No. 10 I of 1894-95.
79,885	11,036	60,000	5,000	249	P.M.G. No. 1057 I., dated 22nd December 1894.
...	...	...	20,000		pele
-	-	-	10,000	250	The distribution of these amounts by component works has not been reported by the Supdg Engr. 4th Circle.
-	-	-	100000	251	
-	-	-	7,10,000		
-	-	-	1,30,000		

GOVERNMENT OF MADRAS.

CHARGES.

Part III—continued.

Detail of the Budget Estimate for Maintenance and Repairs of Irrigation Major Works in the Madras Presidency for the year 1896–97—cont.

Executive division.	—	Estimate, 1896–97. Amount.	Estimate, 1896–97. Total.	Estimate, 1895–96. Amount.	Estimate, 1895–96. Total.
	IRRIGATION—continued.	Rs.	Rs.	Rs.	Rs.
	42. MAJOR WORKS (WORKING EXPENSES)—continued.				
	Kistna Delta System.				
	Eastern Section.				
Kistna Eastern Division.	Ellore canal	20,000		20,000	
	Masulipatam canal	24,000		24,000	
	Ryves' canal	16,500		10,000	
	Pulleru do.	21,301		18,000	
	Polraz do.	15,000		10,000	
	Bantumilli canal	15,000		7,000	
	Pamarru junction canal			1,000	
	Pedalanka channel	12,000		...	
			1,23,801		90,000
Kistna Northern Division.	Head works	10,000		20,000	
	Main canal	5,000		500	
	Ellore do.	4,000		1,500	
	Masulipatam canal	2,000		4,200	
	Ryves' canal	5,000		1,500	
			26,000		27,700
Kistna Western Division.	Main canal	5,000		15,000	
	Bank do.	30,000		20,000	
	Commamur canal	40,000		30,000	
	Nizampatam do.	24,500		10,000	
	Compensation	500		...	
			1,00,000		75,000
	TOTAL, KISTNA DELTA SYSTEM ...	...	2,49,801	...	1,92,700
	Pennéru 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 1896–97.

GOVERNMENT OF MADRAS.

CHARGES.

Part III—continued.

Detail of the Budget Estimate for Maintenance and Repairs of Irrigation Major Works in the Madras Presidency for the year 1896–97—cont.

Executive division.	—	Estimate, 1896–97. Amount.	Estimate, 1896–97. Total.	Estimate, 1895–96. Amount.	Estimate, 1895–96. Total.
	IRRIGATION—continued.	Rs.	Rs.	Rs.	Rs.
	42. MAJOR WORKS (WORKING EXPENSES)—continued.				
	Sangam Anicut System.				
Nellore Division—*cont.*	Head works	4,000		6,000	
	Kanigiri canal	23,000		20,000	
	Duvur do.	3,000		4,000	
	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		4,000	
	First section	5,800		8,500	
	Second do.	2,900		3,500	
	Third do.	5,500		8,500	
	Fourth do.	6,400		3,500	
	Fifth do.	5,300		6,500	
	Sixth do.	11,300		7,000	
	Distributaries	11,700		15,000	
	Drainages and Protective Works	900		1,500	
	Special Repairs	5,000		12,000	
	Reserve	1,000		2,000	
			57,000		72,000
	TOTAL, KURNOOL-CUDDAPAH CANAL ...	...	57,000	...	72,000
Salem Division.	Barur Tank Project	1,500	1,500	2,000	2,000
	Cauvery Delta System.				
Tanjore Division.	Upper Coleroon anicut	2,000		2,000	
	Grand anicut	3,000		3,000	
	Cauvery	5,800		4,800	
	Kodumurti and Puthaur	1,000		1,000	
	Arasillár	1,250		1,250	
	Trimulrajen	1,700		1,700	
	Mudicondanar	1,500		1,500	
	Nattar	300		300	
	Keerthemanar	200		200	
	Veerasholen	600		600	
	Solasudamaniar	700		700	
	Munjalaur	910		910	
	Vellapar	800		800	
	Vanjeaur	300		300	
	South Puthar	200		200	
	Vennár	2,000		2,000	
	Vettár	2,090		2,090	
	Odemboghy	100		100	
	Nundalar	1,200		1,200	

* These sums are provided in the budget estimates for Minor Works and Navigation for 1896–97.

GOVERNMENT OF MADRAS.

CHARGES.

Part III—continued.

Detail of the Budget Estimate for Maintenance and Repairs of Irrigation Major Works in the Madras Presidency for the year 1896–97—cont.

Executive division.		Estimate, 1896-97. Amount.	Estimate, 1896-97. Total.	Estimate, 1895-96. Amount.	Estimate, 1895-96. Total.
	IRRIGATION—continued.	Rs.	Rs.	Rs.	Rs.
	42. MAJOR WORKS (WORKING EXPENSES)—continued.				
	Cauvery Delta System—continued.				
Tanjore Division—*cont.*	Vicramanar	1,050		1,050	
	Kona voikal	600		600	
	Pudumaniar	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	
	Mainkarainar	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	
			40,000		39,000
Negapatam Division.	Vennáur	1,100		1,100	
	Vettáur	1,400		1,400	
	Odemboghyar	1,500		1,500	
	Corayaur	2,500		2,500	
	Pamanayaur	3,500		4,500	
	Pandavyaur	1,000		1,000	
	Vellayaur	1,500		1,500	
	Athiveeraramanar	2,000		2,000	
	Harichendranady	800		800	
	Mullayaur	1,976		2,374	
	Iyanar	200		200	
	Drainage and protective works	4,500		4,500	
	Unforeseen and incomplete works	...		795	
			21,976		25,169
Trichinopoly Division.	Annual maintenance—				
	Punguni channel	840		840	
	Peruvalai do.	900		900	
	Iyen do.	1,200		1,200	
	Special Repairs—				
	Punguni channel	200		1,860	
	Peruvalai do.	1,000		2,500	
	Iyen do.	1,500		1,700	
	Compensation	360		1,000	
			6,000		10,000
	Total	...	67,976	...	74,169
	Deduct old maintenance charges	...	* 1,05,634	...	* 1,05,634
	NET TOTAL, CAUVERY DELTA SYSTEM	...	— 37,658	...	— 31,465

* These sums are provided in the budget estimates for Minor Works and Navigation for 1896–97.

GOVERNMENT OF MADRAS.

CHARGES.

Part III—continued.

Detail of the Budget Estimate for Maintenance and Repairs of Irrigation Major Works in the Madras Presidency for the year 1896–97—continued.

Executive division.		Estimate, 1896-97. Amount.	Estimate, 1896-97. Total.	Estimate, 1895-96. Amount.	Estimate, 1895-96. Total.
	IRRIGATION—continued.	Rs.	Rs.	Rs.	Rs.
	42. MAJOR WORKS (WORKING EXPENSES)—continued.				
	Srivaikuntam Anicut System.				
Tinnevelly Division.	Head works	500		400	
	North main channel	3,500		1,000	
	Tanks fed by the above channel	4,000		5,000	
	South main channel	3,000		1,000	
	Tanks fed by the above channel	5,000		4,783	
			16,000		12,183
	Deduct old maintenance charges	...	* 5,208	...	* 5,208
	NET TOTAL, SRIVAIKUNTAM ANICUT SYSTEM	...	10,792	...	6,975

* These sums are provided in the budget estimates for Minor Works and Navigation for 1896–97.

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	24,106	...	24,106
Gódávari Delta System	2,37,427	...	2,37,427
Kistna do. do.	2,49,801	...	2,49,801
Pennéru Anicut do.	10,140	...	10,140
Sangam Anicut Project	18,116	...	18,116
Kurnool-Cuddapah Canal	57,000	...	57,000
Barur Tank Project	1,500	...	1,500
Cauvery Delta System	— 37,658	...	— 37,658
Srivaikuntam Anicut System	10,792	...	10,792
Total	5,71,224	...	5,71,224

GOVERNMENT OF MADRAS.

CHARGES.

Part IV.

Detail of the Budget Estimate for Establishment of the Irrigation Branch in the Madras Presidency for the year 1896–97.

	Budget Estimate, 1896–97.	Revised Estimate, 1895–96.
	Rs.	Rs.
IMPERIAL.		
FAMINE RELIEF AND INSURANCE.		
35. Construction of Protective Irrigation Works.		
Grant for Works	1,53,646	1,89,667
Deduct item for which no charge for Establishment is admissible.		
Compensation for land	10,000	23,000
Net Grant ...	1,43,646	1,66,667
Contribution to Provincial Funds at 23 per cent. on the Net Grant ...	33,039	38,333
IRRIGATION.		
42. Major Works (Working Expenses).		
Grant for Works and Repairs	6,28,936	6,58,177
Deduct items for which no charge for Establishment is admissible.		
Compensation for land, Gódávari Delta System	5,000	4,124
Do. do. Kistna do.	500	...
Do. do. Cauvery do.	360	1,000
Total ..	5,860	5,124
Net Grant ..	6,23,076	6,53,053
A. 23 per cent. on the Net Grant	1,43,307	1,50,202
Direct Revenue	2,78,000	2,80,000
Deduct estimated collections in the Revenue Department of water-rates levied on lands irrigated under the Kurnool-Cuddapah Canal	93,000	93,000
Net Direct Revenue ...	1,85,000	1,87,000
B. 10 per cent. on Net Direct Revenue	18,500	18,700
Irrigation Revenue from Major (Productive) Works exclusive of enhanced share of Land Revenue	64,74,000	57,56,000
Add estimated collections in the Revenue Department of water-rates levied on land irrigated under the Kurnool-Cuddapah Canal	97,895	97,895
Total ...	65,71,895	58,53,895

GOVERNMENT OF MADRAS.

CHARGES.

Part IV—continued.

Detail of the Budget Estimate for Establishment of the Irrigation Branch in the Madras Presidency for the year 1896–97—continued.

	Budget Estimate, 1896–97.	Revised Estimate, 1895–96.
	Rs.	Rs.
C. 6 per cent. on Irrigation Revenue	3,94,314	3,51,234
Total, A + B + C ...	5,56,121	5,20,136
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.		
49. Irrigation.		
Total Grant for Works	7,46,752	10,24,293
Deduct item for which no charge for Establishment is admissible.		
Land compensation	40,150	36,438
Net Grant ...	7,06,602	9,87,855
Contribution to Provincial Funds at 23 per cent. on Net Grant ...	1,62,518	2,27,207

GOVERNMENT OF MADRAS.

CHARGES.

Part IV-A.

Distribution of the Provision for Establishment by System of Canals for the year 1896–97.

—	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.	Percentage.	Estimated Revenue.	Percentage.	Estimated Revenue.	Percentage.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
IMPERIAL.							
FAMINE RELIEF AND INSURANCE.							
35. Construction of Protective Irrigation Works.							
Rushikulya Project	1,43,646	33,039	...	...	...	...	33,039
IRRIGATION.							
42. MAJOR WORKS (WORKING EXPENSES).							
Gódávari Delta System	2,50,927	57,713	1,20,000	12,000	27,56,000	1,65,360	2,35,073
Kistna do. do.	2,63,301	60,559	48,000	4,800	23,59,000	1,41,540	2,06,899
Pennéru Anicut System	8,297	1,908	400	40	1,46,000	8,760	10,708
Sangam Anicut Project	22,136	5,091	600	60	2,62,000	15,720	20,871
Kurnool-Cuddapah Canal	63,000	14,490	10,000	1,000	97,895	5,874	21,364
Barur Tank Project	2,504	576	...	...	12,000	720	1,296
Cauvery Delta System	— 25,518	— 5,869	3,500	350	8,33,000	49,980	44,461
Srivaikuntam Anicut System ...	14,323	3,295	1,000	100	1,06,000	6,360	9,755
Rushikulya Project	24,106	5,544	1,500	150	...	...	5,694
Total ..	6,23,076	1,43,307	1,85,000	18,500	65,71,895	3,94,314	5,56,121
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.							
49. IRRIGATION.							
Gódávari Delta System	64,500	14,835	...	...	...	...	14,835
Kistna Delta System	4,25,750	97,922	...	...	...	...	97,922
Pennéru Anicut System	7,317	1,683	...	...	...	...	1,683
Sangam Anicut Project	15,447	3,553	...	...	...	...	3,553
Barur Tank System	1,382	318	...	...	...	...	318
Cauvery Delta System	61,626	14,174	...	...	...	...	14,174
Srivaikuntam Aniut System	10,580	2,433	...	...	...	...	2,433
Periyár Project	1,20,000	27,600	...	...	...	...	27,600
Total ..	7,06,602	1,62,518	...	...	...	...	1,62,518
GRAND TOTAL ..	14,73,324	3,38,864	1,85,000	18,500	65,71,895	3,94,314	7,51,678

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 1896–97.

—	Budget Estimate, 1896–97.	Budget Estimate, 1895–96.
	Rs.	Rs.
IMPERIAL.		
FAMINE RELIEF AND INSURANCE.		
35. Construction of Protective Irrigation Works.		
Tools and Plant required for the Rushikulya Project	2,315	2,000
IRRIGATION.		
42. MAJOR WORKS (WORKING EXPENSES).		
Godavari Delta System.		
Eastern Division.		
8. Repairs and carriage—	20,500	20,830
Maintenance of floating plant including existing ferries	5,000	5,000
Special repairs to do. do. do.	...	6,500
License fees of Government boats	2,500	2,500
Charges on account of steamers used by Public Works officers on duty ...	2,000	400
Machinery		
Total ..	30,000	35,230
Central Division.		
8. Repairs and carriage, repairs to floating plant, tools and machinery	4,000	...
Western Division.		
2. Plant and machinery	1,500	7,000
3. Tools	500	500
8. Repairs and carriage—	3,000	5,000
Repairs to floating plant		
Tools		
Machinery		
Total ..	5,000	12,500
TOTAL, GODAVARI DELTA SYSTEM ..	39,000	47,730
Kistna Delta System.		
Eastern Division.		
1. Scientific instruments	...	500
8. Repairs and carriage—	4,000	4,000
Annual maintenance of ferry boats	...	1,000
Special repairs to floating plant	1,000	...
Do. to ferry boats	500	500
Repairs and conveyance of tools, &c.		
Total ..	5,500	6,000
Northern Division.		
1. Scientific instruments	500	500
2. Machinery (two Cockburn's dredgers)	...	10,000
3. Tools—New supply	500	1,200
Navigation Plant—		
2. Punts for maintaining two Cockburn's dredgers	8,000	...

GOVERNMENT OF MADRAS.

CHARGES.

Part V—continued.

Detail of the Budget Estimate for Tools and Plant under Irrigation Major Works in the Madras Presidency for the year 1896-97—cont.

—	Budget Estimate, 1896-97.	Budget Estimate, 1895-96.
IRRIGATION—continued.	Rs.	Rs.
42. MAJOR WORKS (WORKING EXPENSES)—continued.		
Kistna Northern Division—continued.		
8. Repairs and carriage—		
Annual repairs of floating plant	25,500	20,000
Special repairs of do.	9,300	6,000
Repairs to machinery	700	5,324
Charges on account of steamer used by Public Works officers	800	800
Licensing Government floating plant	...	5,500
Repairs and carriage of tools and plant	500	500
Reserve	...	2,500
Total	45,800	52,324
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	55,300	62,324
Penneru 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	50	74
Deduct old maintenance charges	* 57	* 57
NET TOTAL, SANGAM ANICUT SYSTEM	— 7	17
Kurnool-Cuddapah Canal.		
1. Scientific and mathematical instruments	300	300
8. Repairs and carriage—		
Annual maintenance of floating plant	1,036	1,416
Miscellaneous and sundries	300	300
TOTAL, KURNOOL CANAL	1,636	2,016

* These sums are provided in the budget estimates for Minor Works and Navigation for 1896-97.

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IMPERIAL—MAJOR WORKS. MADRAS PRESIDENCY.

GOVERNMENT OF MADRAS.

CHARGES.

Part V—continued.

Detail of the Budget Estimate for Tools and Plant under Irrigation Major Works in the Madras Presidency for the year 1896-97—cont.

—	Budget Estimate, 1896-97.	Budget Estimate, 1895-96.
IRRIGATION—continued.	Rs.	Rs.
42. MAJOR WORKS (WORKING EXPENSES)—continued.		
Cauvery Delta.		
Tanjore division—		
8. Repairs and carriage	200	200
Negapatam division—		
1. Scientific instruments	100	100
8. Repairs and carriage	300	500
Total	500	700
TOTAL, CAUVERY DELTA SYSTEM	* 1,603	* 1,603
Deduct old maintenance charges	— 1,103	— 903
NET TOTAL, CAUVERY DELTA SYSTEM		
Srivaikuntam Anicut System—		
8. Repairs and carriage	* 78	* 78
Deduct old maintenance charges	— 78	— 78
NET TOTAL, SRIVAIKUNTAM ANICUT SYSTEM		
Rushikulya project system—	200	200
8. Repairs and carriage	94,943	1,11,301
TOTAL, 42. MAJOR WORKS (WORKING EXPENSES)		
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.		
49. Irrigation.		
Gódávari Delta System.		
Eastern division—	165	...
3. Tools		
Kistna Delta System.		
Eastern division—		
4. Navigation plant—	5,000	10,000
Ferry boats		
Northern division—	8,900	...
4. Navigation plant—		
Two double trap punts	10,000	...
Western division—		
Tramway from Kolanukoduru quarry	2,078	5,000
4. Navigation plant—		
Ferry ballacuts	25,978	15,000
TOTAL, KISTNA DELTA SYSTEM		
Srivaikuntam Anicut System.	87	...
3. Tools and Plant—Tinnevelly division		
Periyár Project.		
Tools and Plant ... No. I division	5,000	30,000
Madura do.	500	500
TOTAL, PERIYAR PROJECT	5,500	30,500
TOTAL, CAPITAL ACCOUNT	31,730	45,500

* These sums are provided in the budget estimates for Minor Works and Navigation for 1896-97.

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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 1896–97—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

1896-97.

MADRAS,
April 1896.

(Signed) R. R. E. DRAKE-BROCKMAN, Colonel, R.E.,
Secretary to Govt., P.W.D.,
Irrigation Branch.

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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 1896 to 31st March 1897.

	Actual Realizations, 1894-95.	Budget Estimate, 1895-96.	Revised Estimate, 1895-96.	Budget Estimate, 1896-97.
PROVINCIAL.	Rs.	Rs.	Rs.	Rs.
IRRIGATION AND NAVIGATION WORKS.				
Works for which Capital and Revenue Accounts are kept.				
Thadapalli Channel System	80	60	80	80
Kalingaroyen Channel System	...	600	420	420
Pálár Anicut System	1,079	2,300	1,540	1,540
Poiney Anicut System	689	740	600	600
Cheyáru Anicut System	129	130	200	200
Chembrambakam Tank System	50	10	30	30
Madras Water-supply and Irrigation Extension	13,462	12,400	13,380	13,380
Valluru Anicut System	4	...	...	...
Tirukkóyilúr Anicut System	491	600	570	570
Mehamattur Anicut System	20	10	30	30
Vriddhachalam Anicut System	55	50	50	50
Shatiatope Anicut System	315	250	300	300
Pelandorai Anicut System	273	300	250	250
Lower Coleroon Anicut System	1,619	1,100	1,000	1,000
Maradur Anicut System	192	250	350	350
Buckingham Canal	1,09,498	1,08,000	1,10,000	1,10,000
Védáranniyam Canal	1,136	1,200	1,200	1,200
Total ..	1,29,095	1,28,000	1,30,000	1,30,000
Works for which neither Capital nor Revenue Accounts are kept, P.W.D.	9,693	8,000	10,000	10,000
AGRICULTURAL WORKS.				
Works for which neither Capital nor Revenue Accounts are kept ...	27,096	43,000	30,000	30,000
TOTAL ..	1,65,884	1,79,000	1,70,000	1,70,000

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 1896 to 31st March 1897.

	Reference to Detailed Estimate.	Actual Outlay, 1894-95.	Budget Estimate, 1895-96.	Revised Estimate, 1895-96.	Budget Estimate, 1896-97.
PROVINCIAL.	PAGES.	Rs.	Rs.	Rs.	Rs.
MINOR WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.					
CAPITAL.					
1. Works ... In progress ... ... Rs. 3,07,323; Not commenced ... Rs. 6,15,535	8 to 19	3,26,430	6,16,455	5,25,968	9,22,858
2. Establishment	31	73,392	1,11,745	1,12,786	1,78,019
3. Tools and Plant	33	11,191	21,300	51,100	21,733
Total, Capital ...		4,11,013	7,49,500	6,89,854	11,22,610
REVENUE.					
1. Extensions and Improvements. In progress ... ... Rs. 22,659; Not commenced ...	20 to 23	21,974	38,560	25,036	22,659
2. Maintenance and Repairs	28 & 29	2,05,427	1,72,013	1,88,740	1,72 209
3. Establishment	31	64,027	61,232	62,168	57,819
4. Tools and Plant	33	4,223	3,875	3,875	3,875
Refunds of Revenue	...	73	...	...	...
Total, Revenue ...		2,95,724	2,75,680	2,79,819	2,56,562
Total Minor Works for which Capital and Revenue Accounts are kept		7,06,737	10,25,180	9,69,673	13,79,172
MINOR WORKS FOR WHICH NEITHER CAPITAL NOR REVENUE ACCOUNTS ARE KEPT.					
1. Works—Major ... In progress ... ... Rs. 85,200; Not commenced ... Rs. 23,800	22 & 23	1,97,896	1,28,200	1,23,808	1,09,000
Minor	22 & 23	3,72,433	1,91,510	1,32,871	2,13,857
2. Repairs	29	6,83,497	9,78,946	9,55,551	10,34,051
3. Establishment	32	5,92,409	5,71,626	5,32,420	5,42,994
4. Tools and Plant	33	18,756	19,538	18,654	19,856
Refunds of Revenue	...	53	...	...	...
Total Minor Works for which neither Capital nor Revenue Accounts are kept		18,65,044	18,89,820	17,63,304	19,19,758
AGRICULTURAL WORKS.					
Works for which neither Capital nor Revenue Accounts are kept.					
1. Works—Major ... In progress ... ... Rs. 92,500; Not commenced	24 & 25	64,916	91,532	1,03,725	92,500
Minor	24 & 25	18,953	18,230	12,448	13,900
2. Repairs	29	2,13,265	2,43,692	3,00,560	3,74,389
3. Establishment	32	64,423	78,694	91,949	1,08,407
4. Tools and Plant	33	4,032	4,852	6,341	6,874
Refunds of Revenue	...	117	...	...	...
Total, Agricultural Works ...		3,65,706	4,37,000	5,15,023	5,96,070
Total, Provincial ...		29,37,487	33,52,000	32,48,000	38,95,000

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 1896 to 31st March 1897—continued.

	Reference to Detailed Estimate.	Actual Outlay, 1894–95.	Budget Estimate, 1895–96.	Revised Estimate, 1895–96.	Budget Estimate, 1896–97.
	PAGES.	Rs.	Rs.	Rs.	Rs.
GRAND TOTAL, PROVINCIAL 43. MINOR WORKS AND NAVIGATION.					
Works ... In progress ... ... RS. 4,85,023					
Works ... Not commenced 8,89,751		10,02,602	10,84,487	9,23,856	13,74,774
Repairs		11,02,189	13,94,651	14,44,851	15,80,649
Establishment		7,94,251	8,23,297	7,99,323	8,87,239
Tools and Plant		38,202	49,565	79,970	52,338
Refunds of Revenue		243	...	...	...
Total, Provincial ...		29,37,487	33,52,000	32,48,000	38,95,000
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		9,721	6,000	8,000	3,000
II. Repairs		763	2,000	16,000	5,000
Total ...		10,484	8,000	24,000	8,000

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 1896–97, arranged by Projects and Objects of Work.

PROVINCIAL.	Amount of Sanctioned Estimate.	Actual Outlay to end of 1894–95.	Budget Estimate, 1895–96.	Probable Outlay during 1895–96 (Revised Estimate).	Budget Estimate, 1896–97.	Remarks and References.
43. MINOR WORKS AND NAVIGATION.	Rs.	Rs.	Rs.	Rs.	Rs.	
Minor Works for which Capital and Revenue Accounts are kept.						
CAPITAL.						
Works in Progress.						
Kurnool-Cuddapah Canal ...	19,350	...	...	6,150	18,450	Government of India Register No. 24 I. of 1895–96 and P.M.G. No. 766 I., dated 20th September 1895. Estimates for other works under preparation.
Munnyeru Project	3,68,000	25,535	1,23,000	1,17,759	1,23,000	P.M.G. No. 1089 I., dated 17th December 1893.
Dondapad Tank Project ...	1,27,193	93,315	27,100	37,165	10,850	P.M.G. No. 191 I., dated 25th Feb. 1892; No. 376 I., dated 9th May 1894; No. 530 I., dated 16th July 1894, and No. 615 I., dated 29th August 1894.
Sagiléru Project	3,61,000	1,40,253	98,400	1,27,980	1,10,700	P.M.G. No. 10 I., dated 9th January 1894 and No. 915 I., dated 21st November 1894.
Thadapalli Channel System ...	26,600	3,962	12,900	12,900	8,610	P.M.G. No. 957 I., dated 6th Nov. 1893.
Pálár Anicut System	20,06,798	19,35,314	9,000	16,735	12,300	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 24th January 1896 and No. 303 I., dated 31st March 1896.
Cheyáru Anicut System ...	1,62,050	1,42,644	8,400	14,000	3,690	P.M.G. No. 855 I., dated 6th October 1893; No. 328 I., dated 9th April 1895; No. 842 I., dated 7th October 1895; No. 945 I., dated 11th November 1895; No. 991 I., dated 19th November 1895, and No. 1055 I., dated 5th December 1895.
Lower Coleroon Anicut System.	2,20,050	9,261	66,300	48,596	78,720	P.M.G. No. 835 I., dated 8th October 1892; No. 960 I., dated 6th November 1893; No. 372 I., dated 5th May 1894, and No. 181 I., dated 25th Feb. 1895.
Maradur Anicut System ...	3,600	...	...	2,475	6,150	P.M.G. No. 1006 I., dated 14th December 1894; Estimate for another work under preparation.
Buckingham Canal	86,14,000	80,05,611	1,67,900	1,95,895	1,50,140	Government of India Register No. 15 I. of 1883–84; P.M.G. No. 3 I., dated 8th January 1895.
Canal from the Madras Harbour to the Buckingham Canal.	9,50,000	...	2,00,000	50,000	6,00,000	P.M.G. No. $\frac{1084}{A}$ I., dated 14th December 1895.
Other Projects	...	...	36,500	60,199	...	
Total, Capital ..	...	...	7,49,500	6,89,854	11,22,610	
REVENUE.						
Ganjám Minor Rivers System ...	...	...	...	1,245	3,690	
Cumbum Tank System ...	...	...	2,460	676	2,460	
Thadapalli Channel System ...	...	...	3,000	2,756	4,300	
Arkenkotta do. do. ...	...	...	1,800	1,677	1,840	
Kalingaroyen do. do. ...	...	...	1,300	3,609	2,500	
Pálár Anicut System	...	...	47,010	42,105	43,602	
Poiney do. do.	...	...	13,600	22,196	12,360	
Cheyáru do. do.	...	...	21,000	27,772	16,010	
Chembrambakam Tank System.	...	...	— 3,000	— 2,998	— 2,040	
Madras Water-supply and Irrigation Extension.	...	...	1,340	1,438	— 270	
Valluru Anicut System ...	...	...	600	600	900	
Tirukkóyilúr Anicut System ...	...	...	17,000	19,457	12,350	

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 1896–97, arranged by Projects and Objects of Work—continued.

	Amount of Sanctioned Estimate.	Actual Outlay to end of 1894–95.	Budget Estimate, 1895–96.	Probable Outlay during 1895–96 (Revised Estimate).	Budget Estimate, 1896–97.	Remarks and References.
PROVINCIAL—*continued.*	Rs.	Rs.	Rs.	Rs.	Rs.	
43. MINOR WORKS AND NAVIGATION—*continued.*						
Minor Works for which Capital and Revenue Accounts are kept—continued.						
REVENUE—*cont.*						
Mehamattur Anicut System ...	...	...	2,500	4,118	1,850	
Vriddhachalam Anicut System...	...	...	4,300	5,724	3,700	
Shatiatope Anicut System ...	...	...	17,200	10,944	14,660	
Pelandorai do. do. ...	...	...	6,000	4,430	4,190	
Lower Coleroon Anicut System.	...	...	29,630	18,881	28,390	
Nandyar Channel	...	...	...	2,534	5,050	
Maradur Anicut System ...	...	...	14,000	16,515	11,110	
Chilka Lake Canal	...	...	370	370	370	
Buckingham Canal	...	...	91,700	91,900	85,110	
Védáranniyam Canal	...	...	3,870	3,870	4,430	
Total, Revenue ..	...	...	2,75,680	2,79,819	2,56,562	
Total, Minor Works for which Capital and Revenue Accounts are kept	...	...	10,25,180	9,69,673	13,79,172	
Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.						
Old maintenance charges ...	...	...	4,04,662	4,17,922	4,21,282	
Ordinary Minor Works ...	...	...	8,43,758	7,51,890	7,90,946	
Tank Restoration Works—						
Investigation	...	...	58,200	26,125	...	
Execution	...	...	5,52,900	5,32,367	6,77,530	
Minor Works, Revenue Department.	...	...	30,000	35,000	30,000	
Total ...	...	...	18,89,820	17,63,304	19,19,758	
Total, Irrigation and Navigation Works	...	...	29,15,000	27,32,977	32,98,930	
AGRICULTURAL WORKS.						
Works for which neither Capital nor Revenue Accounts are kept.						
MAJOR ORIGINAL WORKS.						
In Progress.						
Constructing left flood bank of the Nagavalli river between Annavaram and Ampli villages.	5,730	...	5,032	2,030	3,000	P.M.G. No. 681 I., dated 10th August 1892.
Raising the Vasista Gódávari right bank from anicut to Chinchinada ferry.	72,800	1,785	10,000	10,000	30,000	P.M.G. No. 56 I., dated 19th Jan. 1893.

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 1896–97, arranged by Projects and Objects of Work—continued.

	Amount of Sanctioned Estimate.	Actual Outlay to end of 1894–95.	Budget Estimate, 1895–96.	Probable Outlay during 1895–96 (Revised Estimate).	Budget Estimate, 1896–97.	Remarks and References.
PROVINCIAL—*continued.*	Rs.	Rs.	Rs.	Rs.	Rs.	
AGRICULTURAL WORKS —*continued.*						
Works for which neither Capital nor Revenue Accounts are kept —continued.						
MAJOR ORIGINAL WORKS—*cont.*						
In Progress—cont.						
Raising Vasista Gódávari right bank from Chinchinada ferry to Narsapur.	8,300	1,924	1,000	4,000	3,000	P.M.G. No. 431 I., dated 16th May 1893.
Raising the Vasista left bank from head to junction of Gunnavaram canal.	33,500	10,992	6,000	6,000	10,000	P.M.G. No. 101 I., dated 4th Feb. 1893.
Diverting Vinetyam right bank along Pasarlapudi channel left bank.	16,000	2,417	5,000	5,000	11,000	P.M.G. No. 1043 I., dated 10th Dec. 1893.
Raising the Kistna river left bank.	78,300	14,527	10,000	10,000	10,000	P.M.G. No. 278 I., dated 28th March 1893.
Rest-house at Avanigedda ...	3,120	...	3,000	3,000	500	P.M.G. No. 366 I., dated 1st May 1894.
Raising the flood embankment of the Kistna river on right side from 44 to 55½ miles.	33,000	1,285	...	17,000	15,000	P.M.G. No. 248 I., dated 13th March 1895.
Raising the Cauvery both banks from road No. 4 to Kumbakónam bridge.	25,900	9,664	6,000	6,000	10,000	P.M.G. No. 500 I., dated 11th September 1890.
Total, Major Original Works ...	...	...	...	...	92,500	
Minor Original Works	...	...	...	...	13,900	
Repairs	...	...	...	...	3,74,389	
Establishment	...	...	...	...	1,08,407	
Tools and Plant	...	...	...	...	6,874	
Total, Agricultural Works ...	...	...	...	...	5,96,070	
Total, Provincial ...	...	...	...	...	38,95,000	
LOCAL IRRIGATION CESS FUND.						
43. MINOR WORKS AND NAVIGATION.						
Minor Works for which neither Capital nor Revenue Accounts are kept.	...	...	8,000	24,000	8,000	
Total ...	...	...	8,000	24,000	8,000	

GOVERNMENT OF MADRAS.

CHARGES.

Part II.

Detail of the Budget Estimate for Original Works under Irrigation Minor Works in the Madras Presidency for the year 1896–97.

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894-95.	Outlay: Probable during 1895-96.	Grant, 1896-97.	Item No.	Remarks and references.
				KURNOOL-CUDDAPAH CANAL.						
				OPEN CAPITAL ACCOUNT.						
				2. *Main Canals and Branches.*						
					Rs.	Rs.	Rs.	Rs.		
Kurnool ...	...	14. Miscellaneous.	1	Demarcating land under the canal	13,360	...	5,000	6,000	1	P.M.G. No. 1098 I., dated 19th December 1895.
				3. *Distributaries.*						
				MLS. CHS.						
		3. Works ...	2	Improving Rampalli channel culvert 0 1·27	199	...	...	199	2	
		Do. ...	3	Road dam 0 74	45	...	...	45	3	
		Do. ...	4	Drop No. 1 ... ... 1 15	107	...	...	107	4	
		Do. ...	5	Road dam 1 38	45	...	...	45	5	
		Do. ...	6	Drop No. 2 ... ... 2 10	85	...	...	85	6	
		Do. ...	7	Road dam 2 41	45	...	...	45	7	
		Do. ...	8	Drop No. 3 with side sluice ... 2 44	170	...	...	170	8	
		Do. ...	9	Do. No. 4 ... ... 2 70	93	...	...	93	9	
		Do. ...	10	Road dam 2 75	45	...	...	45	10	
		Do. ...	11	Drop No. 1 with side sluice ... 2 65	132	...	...	132	11	P.M.G. No. 766 I., dated 20th September 1895.
		Do. ...	12	Road dam 2 76	45	...	...	45	12	
		Do. ...	13	Drop No. 2 ... ... 3 5	75	...	...	75	13	
		Do. ...	14	Road dam 3 10	45	...	...	45	14	
		Do. ...	15	Do. 3 52	45	...	...	45	15	
		4. Earthwork ...	16	Deepening main channel	528	...	...	528	16	
		Do. ...	17	Do. branch channel No. 1	123	...	...	123	17	
		Do. ...	18	Do. do. No. 2	51	...	...	51	18	
		Do. ...	19	Banking main channel	108	...	...	108	19	
		Do. ...	20	Do. branch channel No. 1	236	...	...	236	20	
		Do. ...	21	Do. do. No. 2	78	...	...	78	21	
		Do. ...	22	Reserve for works	...	...	...	6,700	22	Estimates under preparation.
				Total, Kurnool-Cuddapah Canal ...	...	...	...	15,000		
				CAPITAL ACCOUNT.						
				Munnyeru Project.						
				1. *Head Works.*						
Kistna Northern.	...	3. Works ...	23	Anicut	31,300	19,486	17,975	6,000	23	P.M.G. No. 1089 I., dated 12th December 1893.
		Do. ...	24	Under-sluice	8,480	...	5,000	500	24	
		4. Buildings ...	25	Rest-house at Muchintala	1,650	...	...	300	25	P.M.G. No. 20 I., dated 9th January 1896.
				2. *Main Canals and Branches.*						
		3. Regulators ...	26	Head sluice	10,700	...	7,700	1,000	26	
		4. Falls and weirs.	27	Drop at 15 miles 2 furlongs	750	...	...	339	27	
		Do.	28	Do. at 22 do. 4 do.	620	...	...	281	28	
		5. River and hill torrent works.	29	Outlet at 4 do. 6/624 furlongs	1,260	...	250	1,010	29	
		Do.	30	Do. at 10 do. 4 do.	1,680	...	275	1,405	30	
		6. Other cross drainage works.	31	Under-tunnel at 2 miles 3½ furlongs	7,920	...	4,770	1,500	31	G. No. 1089 I., dated 12th December 1893.
		Do.	32	Do. at 2 do. 7 do.	2,380	...	1 435	945	32	
		Do.	33	Do. at 3 do. 3 do.	3,900	...	2,350	1,550	33	
		Do.	34	Do. at 6 do. 6 do.	7,860	...	4,735	3,125	34	
		Do.	35	Do. at 7 do. 6 do.	7,860	...	4,735	3,125	35	
		Do.	36	Do. at 9 do. 1 do.	2,540	...	1,530	1,010	36	
		Do.	37	Do. at 11 do. 2 do.	1,680	...	1,010	670	37	
		Do.	38	Do. at 12 do.	2,280	...	1,375	905	38	

Detail of the Budget Estimate for Original Works under Irrigation

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894-95.	Outlay: Probable during 1895-96.	Grant, 1896-97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				2. *Main Canal and Branches*—cont.						
Kistna Northern —*cont.*	...	6. Other cross drainage works.	39	Under-tunnel at 12 miles 7 furlongs	7,500	...	...	7,500	39	
		Do.	40	Do. at 14 do. 4 do.	2,300			2,300	40	
		Do.	41	Do. at 15 do. 3½ do.	2,300	...	...	1,014	41	
		Do.	42	Do. at 16 do. 2 do.	2,240	...	...	1,001	42	
		Do.	43	Do. at 16 do. 7 do.	2,210	...	...	2,609	43	
		Do.	44	Do. at 18 do. 6 do.	5,760	...	...	1,630	44	
		Do.	45	Do. at 19 do. 4 do.	3,600	...	...	1,001	45	
		Do.	46	Do. at 20 do. 3 do.	2,210	...	...	724	46	
		Do.	47	Do. at 21 do. 2 do.	1,600	...	...	1,585	47	
		Do.	48	Do. at 22 do. 0 do.	3,500	...	...	987	48	
		Do.	49	Do. at 23 do. 3 do.	2,180	...	...	1,024	49	
		Do.	50	Do. at 25 do. 2 do.	2,260	...	...	1,005	50	
		7. Bridges ...	51	Bridge at 1 mile	2,220	..	..	840	51	
		Do. ...	52	Do. at 2 miles 0/528 furlongs	2,110	...	1,270	595	52	
		Do. ...	53	Do. at 3 do. 6/264 do.	1,500	...	905	595	53	
		Do. ...	54	Do at 4 do. 3/198 do.	1,500	...	905	595	54	
		Do. ...	55	Do. at 5 do. 3/132 do.	1,500	...	905	595	55	P.M.G. No. 1089 I., dated 12th December 1893.
		Do. ...	56	Do. at 7 do. 2 furlongs	1,500	...	905	595	56	
		Do. ...	57	Do. at 9 do. 3/396 furlongs	1,500	...	905	595	57	
		Do. ...	58	Do. at 10 do. 4/264 do.	1,500	...	1,145	765	58	
		Do. ...	59	Do. at 11 do. 2 furlongs	1,910	...	815	535	59	
		Do. ...	60	Do. at 12 do. 5/330 furlongs	1,350	...	815	535	60	
		Do. ...	61	Do. at 14 do. 4 furlongs	1,350	...		1,350	61	
		Do. ...	62	Do. at 16 do. 2 do.	1,350	...	...	1,350	62	
		Do. ...	63	Do. at 17 do. 7 do.	1,350	..	...	611	63	
		Do. ...	64	Do. at 19 do. 7 do.	1,350	...	...	611	64	
		Do. ...	65	Do. at 23 do. 3 do.	1,350	...	...	611	65	
		Do. ...	66	Do at 24 do. 0 do.	1,350	...	...	557	66	
		12. Earthwork ...	67	Excavating channel	1,230	...	...	557	67	
		15. Miscellaneous.	68	Demarcation stones	1,230	...	...	557	67	
				3. *Distributaries.*	1,13,400	...	35,790	35,122	68	
		3. Works ...	69	Sluices for branch channels	2,000	964	500	536		
		4. Earthwork ...	70	Excavating branch channels	8,380	...	...	2,600	69	
		5. Miscellaneous.	71	Demarcation stones for branch channels ...	11,000	...	...	4,000	70	
					1,000	...	...	400	71	
				Total, Munnyeru Project ...	...	...	...	1,00,000		
				Dondapad Tank Project.						
				2. *Main Canals and Branches.*						
		2. Land ...	72	Compensation for Dondapad tank bund ...	6,840	11	...	6,302	72	P.M.G. No. 191 I., dated 25th February 1892.
		3. Regulators ...	73	Surplus weir and head sluice to east side channel.	29,700	23,822	5,605	273	73	
		12. Earthwork ...	74	Tank bund	29,800	26,162	5,419	1,000	74	P.M.G. No. 191 I., dated 25th February 1892, P.M.G. No. 376 I., dated 9th May 1894, P.M.G. No. 536 I., dated 16th July 1894, and P.M.G. No. 615 I., dated 29th August 1894.
				3. *Distributaries.*						
		3. Works ...	75	Constructing sluice No. II of Nadigedda tank...	1,500	1,428	26	46	75	
		Do. ...	76	Excavating the east side channel	7,680	3,236	1,152	292	76	
		Do. ...	77	Nadigedda tank bund	21,680	15,171	5,213	1,296	77	
		Do. ...	78	Excavating the distributary to Nadigedda tank.	2,200	450	959	791	78	
				Total, Dondapad Tank Project ...	...	...	...	10,000		

Detail of the Budget Estimate for Original Works under Irrigation

Minor Works in the Madras Presidency for the year 1896-97—continued.

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894-95.	Outlay: Probable during 1895-96.	Grant, 1896-97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				SAGILERU PROJECT.						
				I. Works.						
				I. Head Works.						
Cuddapah ...	...	1. Preliminary expenses.	79	1. Preliminary expenses	* 6,000	1,916	1,000	1,000	79	
		3. Works ...	80	Constructing an anicut	50,400	11,509	18,700	16,000	80	
		Do. ...	81	Scouring sluice	14,800	2,436	6,000	5,000	81	
		4. Buildings ...	82	Inspection bungalow with out-houses at Pormamilla.	3,200	...	...	3,000	82	
				2. *Main Canals and Branches.*						
		2. Land	83	Land compensation	6,456	1,037	1,000	1,000	83	
		3. Regulator ...	84	Constructing head sluice	16,500	3,336	10,000	3,000	84	
		Do. ...	85	Regulator at 2 miles 1,340 feet	5,800	...	3,000	2,000	85	
		6. Other cross drainage works.	86	Sluice at 3¼ miles	995	117	100	500	86	
		Do.	87	Inlet at 1¼ miles	3,480	...	1,500	1,500	87	
		Do.	88	Pipe aqueduct, 1 mile 153 feet	1,390	...	1,000	500	88	
		Do.	89	Do. 1 „ 52 chains...	1,680	...	500	1,000	89	
		Do.	90	Inlet at 750 feet	980	...	500	500	90	
		Do.	91	Do. at 5 miles 76·53 chains	720	...	500	500	91	
		7. Bridges ...	92	Bridge No. 1 at 1 mile	3,560	951	500	1,500	92	
		Do. ...	93	Do. „ 2 at 1½ miles	5,800	1,542	1,500	2,000	93	
		Do. ...	94	Diversion of Cumbum road	4,890	1,413	2,000	1,500	94	
		Do. ...	95	Bridge on do.	3,720	977	1,500	1,000	95	
		Do. ...	96	Bridge at 5 miles 1,363 feet	2,540	...	1,500	1,000	96	
		8. Escapes ...	97	Escapes across Pulivagu	19,700	6,664	11,000	2,000	97	
		Do. ...	98	Do. at 6 miles 10·81 chains	1,260	...	200	1,000	98	
		Do. ...	99	Do. at 5 „ 76·53 „	1,540	...	200	1,000	99	
		Do. ...	100	Do. at 6 „ 23·80 „	940	...	100	500	100	
		12. Earthwork ..	101	Excavating channel	1,16,300	52,813	30,000	35,000	101	
		14. Tank and reservoir.	102	Raising and strengthening the bund of Chintalapalli tank.	...	3,793	11,000	6,000	102	
		Do.	103	Weir and right flank of Chintalapalli tank ...	770	122	100	500	103	
		Do.	104	Sluice No 1 right flank of do. ...	1,180	...	100	1,000	104	
		Do.	105	Do. „ 2 do. of do. ...	1,180	...	500	500	105	
				Total ...	...	...	...	90,000		
				THADAPALLI CHANNEL SYSTEM.						
				OPEN CAPITAL ACCOUNT.						
				3. Distributaries.						
Coimbatore ...	Satyamangalam.	4. Earthwork ...	106	Cutting side channel	7,000	3219 ~~2,029~~	3,000	1,400	106	
		3. Works ...	107	22 foot-bridges	5,280	...	2,600	2,600	107	
		2. Land ...	108	Compensation for land	7,530	...	...	3,000	108	
				Total ...	...	...	...	7,000		

* The amounts entered in this column are those which will be included in the revised estimate for the project now under preparation.

Detail of Budget Estimate for Original Works under Irrigation

Minor Works in the Madras Presidency for the year 1896–97—continued.

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay. To end of 1894–95.	Outlay. Probable during 1895–96.	Grant, 1896–97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				PALAR ANICUT SYSTEM.						
				KAVERIPAUK MAIN SURPLUS CHANNEL.						
				Kalapalampattu Branch Channel.						
North Arcot ...	...	4. Earthwork ...	109	Improvements to channel to Torayur tank ...	2,000	...	...	2,000	109	
				REDDIVALAM–NEDUMPALLI CONDAM DISTRIBUTARIES.						
				Reddivalam Branch Channel.						
		3. Works ...	110	Proposed under tunnel at 4,710 feet, below Tennal tank.	700	...	...	700	110	
		4. Earthwork ...	111	Deepening and widening Reddivalam channel from Reddivalam tank to Nelvoy tank.	2,300	645	...	1,655	111	
				3. *Distributaries.*						
				Karivedu-Kolathur and Damal, &c., Project.						
				Kolathur Branch.						
		4. Earthwork ...	112	Cutting Karivedu-Kolathur proposed extension from a point 700 feet below the existing head sluice in Govindavady channel.	1,430	...	...	1,430	112	
		3. Works ...	113	Proposed improvements to the existing head sluice of Karivedu-Kolathur channel above drop No. 7 in the Govindavady channel.	170	...	...	170	113	
		Do. ...	114	Proposed drop at 5,000 feet below head in Karivedu and Kolathur channel.	280	...	...	280	114	
		Do. ...	115	Proposed regulators in Kolathur and Damal branch channels below Karivedu tank weir.	570	...	...	570	115	
		Do. ...	116	Constructing the proposed regulating weir at the crossing of the Avalur supply with the Damal channel at 1 mile 7 furlongs below Karivedu tank weir.	280	...	...	280	116	
				Damal Branch.						
		4. Earthwork ...	117	Improving and strengthening the Avalur channel to supply Damal, &c., tanks.	1,250	...	...	1,250	117	
		3. Works ...	118	Improvements to the Avalur channel head sluice.	650	...	...	650	118	
			119	Unforeseen works	...	...	...	1,015	119	
				Total, Pálár Anicut System ...	...	...	...	10,000		
				Cheyáru Anicut System.						
		2. Land ...	120	Compensation for land taken up for Cheyáru main channel.	1,660	300 800	...	1,360	120	
			121	Unforeseen works	...	...	...	1,640	121	
				Total, Cheyáru Anicut System ...	...	...	...	3,000		

Detail of the Budget Estimate for Original Works under Irrigation

Minor Works in the Madras Presidency for the year 1896–97—continued.

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay		Grant, 1896–97.	Item No.	Remarks and references.
						To end of 1894–95.	Probable during 1895–96.			
					Rs.	Rs.	Rs.	Rs.		
				LOWER COLEROON ANICUT SYSTEM.						
				I. Head Works.						
Tanjore	...	3. Works ...	122	Fitting a second pair of experimental shutters to the Lower Coleroon anicut.	4,200	...	...	4,200	122	Estimate under preparation.
				3. *Distributaries.*						
				South Rajen Voikal.						
		4. Earthwork ...	123	Improvements to Oosi voikal	2,534	...	1,862	700	123	P.M.G. No. 372 I., dated 5th May 1894.
				2. *Main Canals and Branches.*						
				Khan Sahib's Canal.						
South Arcot ...	...	3. Regulators ...	124	Regulator across the canal	10,540	3,174	6,540	826	124	P.M.G. No. 1053 I., dated 22nd December 1894.
		12. Earthwork ...	125	Widening the canal	9,600	...	4,600	5,000	125	,, ,, 835 I. ,, 8th October 1892.
				4. *Drainages and Protective Works.*						
				Old Coleroon Drain.						
		3. Works ...	126	Aqueduct and bridge extension	25,240	...	6,612	18,628	126	P.M.G. No. 835 I., dated 8th October 1892.
		4. Earthwork ...	127	Old Coleroon drain clearing, widening and forming banks.	89,600	240	...	34,646	127	,, ,, ,, ,, ,, ,,
				Total, Lower Coleroon Anicut System ...	...	...	...	64,000		
				MARADUR ANICUT SYSTEM.						
				OPEN CAPITAL ACCOUNT.						
				2. *Main Canals and Branches.*						
Tinnevelly ...	...	14. Tanks and reservoirs.	128	Improving Butterkulam	2,920	...	2,012	900	128	P.M.G. No. 1006 I., dated 14th December 1894.
		3. Regulators ...	129	Do. Maradur Melakal	...	...	...	4,100	129	Estimate under preparation.
				Total, Maradur Anicut System ...	...	...	...	5,000		
				BUCKINGHAM CANAL.						
				2. *Main Canals and Branches.*						
Buckingham Canal.	...	9. Navigation ...	130	Constructing a tidal lock at the Pálár south flood gate.	12,800	...	6,000	6,000	130	P.M.G. No. 659 I., dated 16th August 1895.
			131	Constructing a tidal lock at the Mannyeru north flood gate.	15,500	...	6,000	9,500	131	,, ,, 563 I. ,, 15th July 1895.
			132	Converting Swarnamukhi north flood gate into lock.	14,520	...	5,000	9,240	132	,, ,, 17 I. ,, 6th January 1896.

Detail of the Budget Estimate for Original Works under Irrigation

Minor Works in the Madras Presidency for the year 1896–97—continued.

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894–95.	Outlay: Probable during 1895–96.	Grant, 1896–97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				BUCKINGHAM CANAL—*cont.*						
Buckingham Canal —*cont.*	...	9. Navigation ...	133	2. *Main Canals and Branches*—cont. Constructing a tidal lock at Pambli	12,500	...	10,880	1,620	133	P.M.G. No. 489 I., dated 15th June 1895.
		.....	134	Do. a tidal lock at Pálár south bank ...	12,710	...	4,000	8,710	134	,, ,, 17 I. ,, 16th January 1896.
		.....	1 5	Do. a flood gate across Vayalur salt channel.	12,600	...	5,000	7,600	135	,, ,, 1099 I. ,, 19th December 1895.
		.....	136	Making the Ottary nulla navigable	10,120	...	...	10,120	136	Estimate submitted to Government.
		6. Other cross drainage works.	137	Improvements to canal from Pálár to Merkanam. Pipe inlet at 49/1 miles	590	...	...	590	137	
		.....	138							
		.....	139	Inlet ramp at 46/3 miles	150	...	...	150	138	
		12. Earthwork ...	140	Inlet at 51/3 miles	290	...	...	290	139	P.M.G. No. 199 I., dated 22nd February 1896.
		.....	141	Earthwork clearance	15,100	...	...	15,000	140	
		.....	142	Improvements to banks and berms	4,870	...	...	4,870	141	
		.....	143	Cutting basin	100	...	...	100	142	
		9. Navigation ...	144	Improvements to canal from 65/3 to 75/2 miles. Constructing a lock at Mannyeru south flood gate at 158/111 miles.	12,700	...	...	12,500	143	,, ,, 956 I., ,, 12th November 1895.
		.....	145	Constructing a lock at Chippaleru north flood gate.	20,000	...	...	12,710	144	Estimates submitted to Government.
		.....	146	Incomplete works	12,000	...	...	12,000	145	
					...	...	..	7,000	146	
				Total, Buckingham Canal ...	...	...	...	1,18,000		
				Canal from the Madras Harbour to the Buckingham Canal.						
		3. Works	147	Combined bridge and regulator at the mouth of river Cooum.	1,73,700	...	...	80,000	147	
		.....	148	Improvements to road culvert under Marina for drainage channel at 3rd mile of junction canal.	1,700	...	...	1,700	148	
		.....	149	Excavating a drainage channel from 3rd mile of junction canal.	2,825	...	...	2,800	149	
		.....	150	Diversion of road from Ennore road to Tiruvattore road.	2,300	...	...	2,300	150	
		.....	151	Road from Monegar Choultry road to eastern end of cemetery.	1,510	...	...	1,510	151	
		.....	152	Bridge under Tiruvattore road at 0 mile 52·57 chains of Harbour canal.	46,960	...	...	46,960	152	
		.....	153	Bridge under Basin road at 0 mile 5 chains of Harbour canal.	47,740	...	...	47,740	153	P.M.G. No. 1084/A I., dated 14th December 1895.
		.....	154	Tunnel under over bridge approach for Messrs. Best and Company.	1,290	...	...	1,290	154	
		.....	155	Lock at Basin in Buckingham canal	29,110	...	...	29,110	155	
		.....	156	Excavating Harbour canal	1,53,070	...	...	80,000	156	
		.....	157	Skew bridge under Monegar Choulfry road at 1 mile 11·50 chains of Harbour canal.	49,800	...	...	15,000	157	
		.....	158	Skew bridge under beach road at 1 mile 57·50 chains of Harbour canal.	47,990	...	...	15,000	158	
		.....	159	Royapuram lock at 1 mile 35 chains of Harbour canal.	75,736	...	...	20,248	159	
		.....	160	Retaining wall and wharf steps	1,30,600	...	...	20,000	160	
		.....	161	Compensation for land and buildings	1,37,200	...	...	1,37,200	161	
				Total, Canal from the Madras Harbour to the Buckingham Canal	...	...	...	5,00,858		
				Total, Capital ...	...	...	...	9,22,858		

Detail of the Budget Estimate for Original Works under Irrigation

Minor Works in the Madras Presidency for the year 1896-97—continued.

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894-95.	Outlay: Probable during 1895-96.	Grant, 1896-97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				REVENUE ACCOUNT.						
				Extensions and Improvements.						
Kurnool ...	...	.....	162	Cumbum tank system	...	...	6	500	162	
Coimbatore ...	...	.....	163	Thadapalli channel system	...	...	300	500	163	
			164	Arkenkota channel system	...	...	363	500	164	
North Arcot ...	...	.....	165	Pálár anicut system	...	...	9,038	5,014	165	
				Deduct Old Maintenance Charges ...	...	...	* 178	* 178		
				Net ...	...	...	8,860	4,836		
Chingleput ...	...	.....	166	Pálár anicut system	...	...	659	200	166	
				Total, Pálár Anicut System ...	...	...	9,519	5,036		
North Arcot ...	...	.....	167	Poiney anicut system	...	...	3,297	2,000	167	
			168	Cheyáru anicut system	...	...	4,563	3,000	168	
Chingleput ...	...	.....	169	Chembrambakam tank	...	...	1,000	808	169	
				Deduct Old Maintenance Charges ...	...	...	* 2,283	* 2,283		
				Net ...	...	...	— 1,283	— 1,475		
			170	Madras Water-supply and Irrigation extension...	...	...	889	...	170	
				Deduct Old Maintenance Charges ...	...	...	* 3,600	* 3,600		
				Net ...	...	...	— 2,711	— 3,600		
			171	Valluru anicut system	...	...	138	232	171	
South Arcot ...	...	.....	172	Tirukkóyilúr anicut system	...	...	3,500	2,000	172	
			173	Mehamattur anicut system	...	...	987	502	173	
			174	Vriddhachalam anicut system	...	...	150	504	174	
			175	Shatiatope anicut system	...	...	1,363	1,894	175	
			176	Pelandorai anicut system	...	...	...	505	176	
				Deduct Old Maintenance Charges ...	...	...	* 59	* 59		
				Net ...	...	...	— 59	446		
Tanjore ...	...	.....	177	Lower Coleroon anicut system	...	...	788	2,000	177	
			178	Do. do.	...	...	1,700	2,000	178	
				Total, Lower Coleroon Anicut System ...	...	...	2,488	4,000		

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

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.
Trichinopoly ...	...	.....	179	Nandyar channel ... ...
Tinnevelly ...	...	.....	180	Maradur anicut system ... ...
Buckinghan Canal.	...	.....	181	Buckingham canal ... ...
				Total, Extensions and Improvements ...
				Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.
				Ordinary Major Original Works.
Gódávari Western.	...	.....	182	Diversion of Yerracalva and construction of masonry dams across it and Gundapalli channel.
Kistna Northern.	...	.....	183	Macherla tank ... ...
			184	Ipur do. ... ...
			185	Jonapad do. ... ...
Kistna Eastern ...	...	.....	186	Excavating a navigable canal to the Pandraka Salt Factory.
Nellore ...	...	.....	187	Mannangidinni tank improvements ... ...
			188	Mopad do. ... ...
			189	Maripad do. ... ...
			190	Gundavole do. ... ...
Bellary	...	.....	191	Rampur channel improvements ... ...
			192	Dasanur do. do. ... ...
			193	Maravapalli agraharam tank ... ...
			194	Royalcheruvu old tank ... ...
Kurnool ...	...	.....	195	Pedda and Chinna Mallalammah tank of Ramapuram.
			196	Macha Veerappah tank of Indresweram ...
Chingleput ...	...	.....	197	Tirumeshi tank head-sluice and new supply channel.
			198	Kumaravadi tank improvements ... ...
South Arcot ...	...	.....	199	Cutting a channel from Ponniar river to irrigate lands in Tirukondesweram and other villages.
Tinnevelly ...	...	.....	200	Puliyur-Periyakulam ... ...
			201	Sivalaperi channel ... ...
			202	Vadukachimathel tank and channel ... ...
				Total ...
			203	Minor Original Works ... ...
			204	Old maintenance charges for works for which Capital and Revenue Accounts are kept.
				Total, Ordinary Works ...

Minor Works in the Madras Presidency for the year 1896–97—continued.

Amount of estimate.	Outlay: To end of 1894–95.	Outlay: Probable during 1895–96.	Grant, 1896–97.	Item No.	Remarks and References.
Rs.	Rs.	Rs.	Rs.		
...	...	1,450	3,500	179	
...	...	215	1,000	180	
...	...	750	2,120	181	
...	...	...	22,659		
8,210	195	3,000	5,000	182	P.M.G. No. 13 I., dated 10th January 1895.
26,900	...	10,000	12,000	183	,, ,, 964 I. ,, 6th November 1893.
31,000	...	...	8,000	184	,, ,, 1031 I. ,, 23rd November 1893.
26,630	...	...	5,000	185	,, ,, 148 I. ,, 16th February 1895.
...	...	...	5,000	186	,, ,, 320 I. ,, 2nd April 1896.
4,740	...	3,000	1,700	187	,, ,, 607 I. ,, 4th August 1891.
23,800	...	16,000	14,000	188	,, ,, 57 I. ,, 18th January 1896.
5,590	...	...	5,500	189	,, ,, 638 I. ,, 10th August 1895.
5,480	...	...	5,000	190	,, ,, 481 I. ,, 11th June 1895.
21,488	29	10,000	12,000	191	,, ,, 505 I. ,, 21st ,, 1894, P.M.G. No. 1127 I., dated 22nd December 1893 and P.M.G., No. 601 I., dated 31st July 1895.
18,200	1,152	10,000	7,000	192	P.M.G. No. 665 I., dated 12th September 1894.
5,900	...	1,000	4,900	193	,, ,, 676 I. ,, 22nd August 1895.
10,300	...	1,500	4,000	194	,, ,, 224 I. ,, 4th March 1896.
4,000	...	2,000	1,000	195	,, ,, 5 I. ,, 3rd January 1896.
6,480	...	1,700	2,600	196	,, ,, 175 I. ,, 21st February 1895.
3,520	...	...	3,500	197	,, ,, 706 I. ,, 30th August 1895.
4,740	...	...	2,800	198	,, ,, 1064 I. ,, 11th December 1895.
14,730	...	7,000	2,000	199	,, ,, 232 I. ,, 9th March 1895.
5,160	...	2,000	3,000	200	,, ,, 660 I. ,, 13th September 1894.
6,700	...	3,000	3,000	201	,, ,, 311 I. ,, 2nd April 1895.
3,820	...	1,000	2,000	202	,, ,, 615 I. ,, 3rd August 1895.
...	...	...	1,09,000		
...	...	...	1,79,380	203	
...	...	...	10,381	204	
...	...	...	2,98,761		

Detail of the Budget Estimate for Original Works under Irrigation

Minor Works in the Madras Presidency for the year 1896-97—continued.

Executive division.	Locality.	Sub-division of expenditure.	Item No.	Detail of works.	Amount of estimate.	Outlay: To end of 1894-95.	Outlay: Probable during 1895-96.	Grant, 1896-97.	Item No.	Remarks and references.
					Rs.	Rs.	Rs.	Rs.		
				Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.—cont.						
				Minor Original Works—*cont.*						
Tinnevelly—*cont.*	...	.....	205	Minor Works, Revenue Department, Minor Original works.	...	...	...	24,096	205	
				Agricultural Works.						
				Major Original Works.						
Vizagapatam ...	...	.....	206	Constructing left flood bank of the Nagavalli river between Annaveram and Ampli villages.	5,730	...	2,030	3,000	206	P.M.G. No. 681 I., dated 10th August 1892.
Gódávari Central.	...	.....	207	Raising the Vasista left bank from head to junction of Gunnaram canal.	33,500	10,992	6,000	10,000	207	,, ,, 101 I. ,, 4th February 1893.
	...	.....	208	Diverting Vinatyam right bank along Pasarlapudi channel left bank.	16,000	2,417	5,000	11,000	208	,, ,, 1043 I. ,, 10th December 1893.
Gódávari Western.	...	.....	209	Raising the Vasista right bank from head to Chinchinada.	72,800	1,785	15,000	30,000	209	,, ,, 56 I. ,, 19th January 1893.
	...	.....	210	Raising the Vasista Gódávari right bank from Chinchinada ferry to Narsapur.	8,300	1,924	4,000	3,000	210	,, ,, 431 I. ,, 16th May 1893.
Kistna Eastern ...	...	.....	211	Raising the Kistna left bank	78,300	14,527	10,000	10,000	211	,, ,, 278 I. ,, 28th March 1893.
Kistna Western.	...	.....	212	Rest-house at Avanigedda	3,120	...	3,000	500	212	,, ,, 366 I. ,, 1st May 1894.
		.....	213	Raising the flood embankment of the Kistna river on right side from 44 to 55¼ miles.	33,000	1,285	17,000	15,000	213	,, ,, 248 I. ,, 13th March 1895.
Tanjore ...	...	.....	214	Raising the Cauvery both banks from road No. 4 to Kumbakónam bridge.	25,900	9,664	6,000	10,000	214	,, ,, 500 I. ,, 11th September 1890.
				Total ...	...	...	...	92,500		
	...	.....	215	Minor original works	...	...	...	13,900	215	
				Total, Agricultural Works ...	...	...	...	1,06,400		
				LOCAL IRRIGATION CESS FUND.						
				43. Minor Works and Navigation.						
				Minor Works for which neither Capital nor Revenue Accounts are kept.						
Salem ...	...	.....	216	Minor original works	...	...	...	3,000	216	

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	...	15,000	15,000
Munnyeru Project	...	1,00,000	1,00,000
Dondapad Tank System	...	10,000	10,000
Sagiléru Project	...	90,000	90,000
Thadapalli Channel System	...	7,000	7,000
Pálár Anicut System	...	10,000	10,000
Cheyáru do.	...	3,000	3,000
Lower Coleroon Anicut System	...	64,000	64,000
Maradur Anicut System	...	5,000	5,000
Buckingham Canal	...	1,18,000	1,18,000
Canal from the Madras Harbour to the Buckingham Canal	...	5,00,858	5,00,858
Total ...	...	9,22,858	9,22,858
REVENUE.			
Cumbum Tank System	...	500	500
Thadapalli Channel System	...	500	500
Arkenkotta do.	...	500	500
Pálár Anicut System	...	5,036	5,036
Poiney do.	...	2,000	2,000
Cheyáru do.	...	3,000	3,000
Chembrambakam Tank	...	— 1,475	— 1,475
Madras Water-supply and Irrigation Extension	...	— 3,600	— 3,600
Valluru Anicut	...	232	232
Tirukkóyilúr Anicut System	...	2,000	2,000
Mehamattur do.	...	502	502
Vriddháchalam do.	...	504	504
Shatiatope do.	...	1,894	1,894
Pelandorai do.	...	446	446
Lower Coleroon do.	...	4,000	4,000
Nundiyar Channel	...	3,500	3,500
Marudur Anicut System	...	1,000	1,000
Buckingham Canal	...	2,120	2,120
Total ...	...	22,659	22,659
Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept, P.W.D.—			
Major	...	1,09,000	1,09,000
Minor	...	1,79,380	1,79,380
Old Maintenance charges for works for which Capital and Revenue Accounts are kept	...	10,381	10,381
"Minor Works, Revenue Department," Minor Original Works ...	...	24,096	24,096
Total ...	...	3,22,857	3,22,857

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	...	92,500	92,500
Minor works	...	13,900	13,900
Total ...	...	1,06,400	1,06,400
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	3,000	...	3,000
Total ...	3,000	...	3,000

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 1896–97.

Executive division.	—	Estimate, 1896–97. Amount.	Estimate, 1896–97. Total.	Estimate, 1895–96. Amount.	Estimate, 1895–96. Total.
	IRRIGATION.	Rs.	Rs.	Rs.	Rs.
	43. MINOR WORKS AND NAVIGATION.				
	Minor Works for which Capital and Revenue Accounts are kept.				
	Provincial.				
	Maintenance and Repairs.				
Ganjám ...	Ganjám Minor Rivers System	3,000		...	
Kurnool ...	Cumbum Tank System	1,500	3,000	1,500	...
Coimbatore ...	Thadapalli Channel System	2,989	1,500	1,934	1,500
Do. ...	Arkenkotta Channel System	996	2,989	1,000	1,934
Do. ...	Kalingaroyen Channel System	1,998	996	...	1,000
North Arcot ...	Pálár Anicut System—		1,998		...
	Head works			...	
	Kávéripak channel			14,000	
	Govindavádi channel			...	
	Mahendravadi channel			2,000	
	Dusi channel	24,800		...	
	Tennampettu channel			7,000	
	Chuckramallur channel			2,000	
	Reserve for incomplete works			...	
Chingleput ...	Kambakal channel	8,400		2,500	
	Total ...	33,200		27,500	
	Deduct Old Maintenance Charges ...	2,909		*2,909	
			30,291		24,591
North Arcot ...	Poiney Anicut System	8,000		8,000	
			8,000		8,000
Do. ...	Cheyáru Anicut System	10,000		10,000	
			10,000		10,000
Chingleput ...	Chembrambakam Tank System	3,000		3,029	
	Deduct Old Maintenance Charges ...	3,097		*3,097	
			— 97		— 68
Do. ...	Madras Water-supply and Irrigation Extension...	2,501		3,000	
	Deduct Old Maintenance Charges ...	200		200	
			2,301		2,800
Do. ...	Vallur Anicut System	500		488	
			500		488
South Arcot ...	Shatiatope Anicut System	10,000		12,000	
			10,000		12,000
Do. ...	Pelandorai Anicut System	3,000		3,672	
	Deduct Old Maintenance Charges ...	58		* 58	
			2,942		3,614

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

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 1896–97—continued.

Executive division.	—	Estimate, 1896–97. Amount.	Estimate, 1896–97. Total.	Estimate, 1895–96. Amount.	Estimate, 1895–96. Total.
	IRRIGATION—*continued.*	Rs.	Rs.	Rs.	Rs.
	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 ...	Vriddháchalam Anicut System	2,500	2,500	2,000	2,000
Do. ...	Mehamattur Anicut System	1,000	1,000	1,032	1,032
Do. ...	Tirukkóyilúr Anicut System	7,994	7,994	10,772	10,772
Do. ...	Lower Coleroon Anicut System	16,000		16,000	
Do. ...	Do. do.	3,000		3,000	
Tanjore ...			19,000		19,000
Trichinopoly ...	Nandiar channel	606	606	...	...
Tinnevelly ...	Maradur Anicut System	8,004	8,004	10,000	10,000
Ganjám ...	Chilka Lake Canal	301	301	301	301
Negapatam ...	Védáranniyam Canal	3,504	3,504	3,049	3,049
Buckingham Canal.	Buckingham Canal—				
	262 miles	35,370		39,300	
	M. Maintenance establishment	6,000		6,000	
	Repairs to masonry works	8,000		8,000	
	Unforeseen and sundry items	3,910		5,100	
	Payment to the Madras Municipality being the amount of lease for Trevelyan wharf ...	1,600		1,600	
			54,880		60,000
	Total ...	...	1,72,209	...	1,72,013
	Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D., Ordinary works	3,47,000		3,92,000	
	Old Maintenance charges	1,42,850		1,42,850	
	Tank Restoration works to be executed by ordinary divisions	5,44,201	10,34,051	4,44,096	9,78,946
	Agricultural Works—			2,43,692	
	Repairs	3,74,389	3,74,389		2,43,692
	Total ...	...	15,80,649	...	13,94,651
	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 ...	...	5,000	...	2,000

GOVERNMENT OF MADRAS.

CHARGES.

Part IV.

Detail of the Budget Estimate for Establishment of the Irrigation Branch in the Madras Presidency for the year 1896–97.

Particulars.	Budget Estimate for 1896–97. Per mensem.	Per annum.	Total.	Revised Estimate for 1895–96.
	Rs.	Rs.	Rs.	Rs.
IRRIGATION.				
43. Minor Works and Navigation.				
PROVINCIAL.				
Grant for works and repairs	...	...	29,55,423	23,68,707
Deduct items on which no charge for establishment is admissible—				
Grant for land compensation	...	...	1,75,862	66,395
Net Grant for Works and Repairs ...	...	...	27,79,561	23,02,312
A. Share of the Public Works establishment charges at 23 per cent. on the net grant for works and repairs.	...	...	6,39,299	5,29,531
Estimate of Direct Revenue	...	...	1,70,000	1,70,000
B. Share of the Public Works establishment charges at 10 per cent. on Direct Revenue.	...	...	17,000	17,000
Revenue due to old Irrigation under Major Productive Works.	...	...	38,49,000	37,93,000
C. Share of the Public Works establishment at 6 per cent. on Revenue.	...	...	2,30,940	2,27,580
Total, A + B + C ...	...	...	8,87,239	7,74,111
Special establishment for investigating requirements of tanks systematically	...	...	...	25,212
Total, Establishment Charges ...	...	...	8,87,239	7,99,323

GOVERNMENT OF MADRAS.

CHARGES.

Part IV-A.

Detail of estimated charges for establishment by systems of canals for 1896–97.

—	Percentage on the Grant for Works and Repairs. Grant for Works and Repairs.	23 per cent.	Percentage on the Direct Revenue. Direct Revenue.	10 per cent.	Percentage on the Indirect Revenue. Indirect Revenue.	6 per cent.	Cost of Establishment actually employed.	Total Charges for Establishment.
	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	15,000	3,450	...	...	...	...	...	3,450
Munnyeru Project	1,00,000	23,000	...	...	...	...	...	23,000
Dondapad Tank Project	3,698	850	...	...	...	...	...	850
Sagiléru Project	89,000	20,470	...	...	...	...	...	20,470
Thadapalli Channel System	4,000	920	...	...	...	...	...	920
Pálár Anicut System	10,000	2,300	...	...	...	...	...	2,300
Cheyáru do.	1,640	377	...	...	...	...	...	377
Lower Coleroon Anicut System ...	64,000	14,720	...	...	...	...	...	14,720
Maradur Anicut System ...	5,000	1,150	...	...	...	...	...	1,150
Buckingham Canal	1,18,000	27,140	...	...	...	...	...	27,140
Canal from the north side of the Madras Harbour to the basin in the Buckingham Canal	3,63,658	83,642	...	...	...	...	...	83,642
Total ...	7,73,996	1,78,019	...	...	...	...	...	1,78,019
Revenue.								
Ganjám Minor Rivers System ...	3,000	690	...	...	...	...	...	690
Cumbum Tank System	2,000	460	...	...	...	...	...	460
Thadapalli Channel System	3,489	803	80	8	...	...	...	811
Arkenkotta do.	1,496	344	...	...	...	...	...	344
Kalingaroyen do.	1,998	460	420	42	...	...	...	502
Pálár Anicut System	35,327	8,125	1,540	154	...	...	...	8,279
Poiney do.	10,000	2,300	600	60	...	...	...	2,360
Cheyáru do.	13,000	2,990	200	20	...	...	...	3,010
Chembrambakam Tank System ...	— 1,572	— 362	30	3	...	...	...	— 359
Madras Water-supply and Irrigation Extension	— 1,299	— 299	13,380	1,338	...	...	...	1,039
Vallur Anicut System	732	168	...	...	...	...	...	168
Tirukkóyilúr do.	9,994	2,299	570	57	...	...	...	2,356
Mahamattur do.	1,502	345	30	3	..	...	...	348
Vriddháchalam do.	3,004	691	50	5	...	...	...	696
Shatiatope do.	11,894	2,736	300	30	...	...	...	2,766
Pelandorai do.	3,388	779	250	25	...	...	...	804
Lower Coleroon do.	23,000	5,290	1,000	100	...	...	...	5,390
Nundiar Channel Extension ...	4,106	944	...	...	...	...	...	944
Maradur do.	9,004	2,071	350	35	...	...	...	2,106
Chilka Lake Canal	301	69	...	...	...	...	...	69
Buckingham Canal	57,000	13,110	1,10,000	11,000	...	...	...	24,110
Védáranniyam Canal	3,504	806	1,200	120	...	...	...	926
Total ...	1,94,868	44,819	1,30,000	13,000	...	...	...	57,819

GOVERNMENT OF MADRAS.

CHARGES.

Part IV-A—continued.

Detail of estimated charges for establishment by systems of canals for 1896–97—continued.

—	Percentage on the Grant for Works and Repairs.		Percentage on the Direct Revenue.		Percentage on the Indirect Revenue.		Cost of Establishment actually employed.	Total Charges for Establishment.
	Grant for Works and Repairs.	23 per cent.	Direct Revenue.	10 per cent.	Indirect Revenue.	6 per cent.		
IRRIGATION—continued.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
43. MINOR WORKS AND NAVIGATION—continued.								
Provincial—continued.								
Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.								
Ordinary Works	6,30,880	1,45,103	10,000	1,000	...	...	...	1,46,103
Tank Restoration Works	5,44,201	1,25,166	...	...	...	...	...	1,25,166
Old Maintenance charges	1,53,231	35,243	...	...	38,49,000	2,30,940	...	2,66,183
Minor Works, Revenue Department...	24,096	5,542	...	...	...	...	...	5,542
Total ...	13,52,408	3,11,054	10,000	1,000	38,49,000	2,30,940	...	5,42,994
Agricultural Works.								
Works for which neither Capital nor Revenue Accounts are kept ...	4,58,289	1,05,407	30,000	3,000	...	...	...	1,08,407
Total, Provincial ...	27,79,561	6,39,299	1,70,000	17,000	38,49,000	2,30,940	...	8,87,239

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 1896–97.

—	Special Tools and Plant.	General Tools and Plant.	Total.	Grant for Works and Repairs.
IRRIGATION.	Rs.	Rs.	Rs.	Rs.
43. MINOR WORKS AND NAVIGATION.				
Provincial.				
Minor Works for which Capital and Revenue Accounts are kept.				
Capital.				
Thadapalli channel system	690	...	690	...
Sagiléru project	230	...	230	...
Buckingham Canal	5,000	...	5,000	...
Canal from the Madras Harbour to the Buckingham Canal.	15,500	...	15,500	...
Cheyárn anicut system	313	...	313	...
Total ...	21,733	...	21,733	...
Revenue.				
Pálár Anicut System	...	...	...	...
Deduct Old Maintenance charges ...	4	...	4	...
Net ...	— 4	...	— 4	...
Chembrambakam Tank System	...	...	...	...
Deduct Old Maintenance charges ...	109	...	109	...
Net ...	— 109	...	— 109	...
Madras Water-supply and Irrigation Extension	...	...	...	...
Deduct Old Maintenance charges ...	10	...	10	...
Net ...	— 10	...	— 10	...
Pelandorai Anicut System	...	...	...	...
Deduct Old Maintenance charges ...	2	...	2	...
Net ...	— 2	...	— 2	...
Buckingham Canal	4,000	...	4,000	...
Total ...	3,875	...	3,875	...
Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.				
Ordinary Works	...	9,463	9,463	6,30,880
Tank Restoration Scheme	...	8,163	8,163	5,44,201
Old Maintenance charges	1,868	...	1,868	1,53,231
Minor Works, Revenue Department	...	362	362	24,096
Agricultural Works.				
Works for which neither Capital nor Revenue Accounts are kept	...	6,874	6,874	4,58,289
Total ...	1,868	24,862	26,730	18,10,697
Total, Provincial ..	27,476	24,862	52,338	...

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 1896–97—Nil.

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

GOVERNMENT OF MADRAS.

CHARGES.

Schedule A—Showing the distribution of the grants for Minor Original Works and Repairs for 1896–97.

	Irrigation Revenue.	Minor Original Works (under Rs. 2,500 each).	Repairs.
		1896–97.	1896–97.
Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept.	Rs.	Rs.	Rs.
Old Maintenance charges—			
Pennéru Anicut System	...	3,564	13,860
Sangam do. do.	...	345	11,884
Cauvery Delta do.	...	...	1,05,634
Srívaikuntam Anicut System	...	352	5,208
Chembrambakam Tank	...	2,283	3,097
Pálár Anicut System	...	178	2,909
Pelandorai Anicut System	...	59	58
Madras Water-supply and Irrigation Extension Project	...	3,600	200
Total	...	10,381	1,42,850
Minor Works, Public Works Department, Ordinary—			
Divisions—			
Ganjám	74,218	7,000	17,000
Vizagapatam	61,053	16,000	17,000
Gódávari Eastern	47,321	3,000	15,000
Do. Western		2,000	4,000
Kistna Eastern	18,400	...	6,000
Do. Northern		1,000	8,000
Nellore	92,634	10,000	25,000
Bellary	80,730	5,000	30,000
Cuddapah	84,455	5,000	25,000
Kurnool	29,229	3,000	10,000
West Coast	...	...	2,000
Coimbatore	44,038	6,000	12,000
Salem	58,146	4,000	12,000
North Arcot	76,557	10,000	25,000
Chingleput	2,60,717	10,000	35,000
South Arcot	93,874	10,000	35,000
Tanjore	18,975	1,000	2,000
Trichinopoly	1,22,946	15,000	25,000
Madura	99,422	9,000	12,000
Tinnevelly	65,338	10,000	30,000
Total	...	1,27,000	3,47,000
Reserve	...	52,380	...
Total	...	1,79,380	3,47,000
Minor Works, Revenue Department, Original Works—Reserve	...	24,096	...

GOVERNMENT OF MADRAS.

CHARGES.

Schedule A—Showing the distribution of the grants for Minor Original Works and Repairs for 1896-97—continued.

	Irrigation Revenue.	Minor Original Works (under Rs. 2,500 each).	Repairs.
		1896-97.	1896-97.
Tank Restoration Works.	Rs.	Rs.	Rs.
Execution—			
Divisions—			
Vizagapatam	...	...	45,000
Gódávari Eastern	...	...	6,000
Do. Western	...	...	4,000
Kistna Northern	...	...	24,000
Salem	...	...	50,000
Chingleput	...	...	75,201
North Arcot	...	...	50,000
South Arcot	...	...	50,000
Negapatam	...	...	75,000
Madura	...	...	1,00,000
Tinnevelly	...	...	65,000
Total	...	...	5,44,201
Agricultural Works.			
Divisions—			
Rushikulya	...	1,000	1,000
Ganjám	...	2,000	3,000
Vizagapatam	...	500	3,800
Gódávari Eastern	...	...	30,000
Do. Central	...	1,000	65,000
Do. Western	...	...	16,000
Kistna Eastern	...	...	9,000
Do. Northern	...	...	1,300
Do. Western	...	...	1,00,000
Nellore	...	1,000	7,000
Cuddapah	...	...	4,000
Coimbatore	...	3,500	6,500
Salem	...	...	589
North Arcot	...	...	1,000
Chingleput	...	500	4,000
South Arcot	...	400	8,700
Tanjore	...	2,000	60,000
Negapatam	...	...	20,000
Trichinopoly	...	2,000	25,000
Tinnevelly	...	...	1,500
Buckingham Canal	...	...	7,000
Total	...	13,900	3,74,389

Read the following:—

Note by the Chief Engr. for Irrigation.

No 96. dt

The accompanying final issue of the budget estimates of the Irrigation Branch for 1896-97, which have been prepared to work up to the following grants approved by the Govt of India in its orders, No. 4/80 a.I., dy 25th March 96, printed in P.W.D. No. 318 I, dy 2nd April 96, are submitted to Government:—

35. Construction of Protective Irrigation Works— Rs

Imperial 189,000

42. Major works (Working Expenses) –

Imperial 12,80,000

43. Minor works & Navigation –

Provincial 38,95,000

Incorporated local . . . 8,000

49. Capital Expenditure not charged to Revenue –

Imperial 9,41,000

Imperial.

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

3. Under "49. Capital Expenditure not charged to Rev"

the Govt of India having increased the total provisional assignment of Rs 8,88,500 by Rs 52,500, the preliminary grant of Rs 5,22,500 proposed for the Jhelum Doab Eyot has been increased to that extent in the final budget in accordance with G.O. No. 318 I dated 2nd April 1896.

Provincial.

4. The revised estimate under this head adopted by the Govt of India excludes there-

the telegram printed
in P.W.G. No. 296. I. 27
26th March 96.

5. The distribution by departmental heads of the preliminary budget grants for the Sagiles Project, the Thadepalli channel & Chipas anicut typhoons has been slightly modified with reference to the schedules submitted with letters Nos 2 & 68 I, dy 1st & 2nd April 96, from the Supdgs, III & IV Circles, respectively.

6. The Supdg, III Circle, Masulipatam

when the estimates are sanctioned.

expedite the submission, for the sanction of Govt, of the revised estimates now under preparation for the Sagiles Project.

7. Subsequent to the issue of G.O. No. 1084. I, dy 14th Dec 95, it having been found that the estimates for the Coonn improvements scheme should be submitted for the sanction of the Govt of India, the commencement of the work was ordered to be deferred in G.O. No. 190. I, dy 2nd

the telegram printed

orders. For effecting the object for which this scheme was designed, a ~~cheap~~ less expensive alternative arrangement has been submitted for the consideration of Govt.

8. The grant for extensions & improvements, Buckingham Canal, has been increased by Rs 1120 by transfer of that amount from the grant under maintenance & repairs to the canal, the Supg Engr, N Circle, having reported in his endorsement No 485 B.C. of 18 March 96, that the preliminary grant of Rs 1000 under the head

When the Estimates are called for

maintenance & repairs for the Palar Anicut system in the Chingleput Dn, has been increased from Rs 5,000 to Rs 8,400, the Supg Engr, N Circle, having in his endorsement No 73. E.I. of 25. March 96, represented that the additional amount of Rs 3400 was required for the execution of sanctioned works for starting which arrangements have already been made.

10. An allotment of Rs 5,000 has been

H. Ichapuram trenched

canal to the Pandraka
Salt Factory in the
Kistna System Dn.
in accordance with
G.O. No. 320. I., of
2nd April 96.

† In prices.

11. To admit of the
restoration of tanks
in the Bezwada
taluq damaged
last year by floods
being proceeded with
the grant for the
Kistna Northern
Dn. under repairs
to ordinary Minor
Works for which neither
Capital nor R.S.
Accounts are kept,
P.W.D. has been

when the Estimates are
sanctioned

the additional grant
being provided by
reducing the grant
for that Dist. under
tank restoration repairs
by Rs 6000 as desired
by the Supdg Engr. II
Circle, in his en-
dorsement, No 2591
K.S. of 8th Mar 96.

12. In his letter
No. 37, dt 10 Feb 96,
the Supdg Engr on Special
Duty, Cauvery Com-
pletion Estimates,
having suggested
that a special grant
may be allotted
for the conservancy
of the Coleroon with

H. Tobacco and Printed

it for the flood discharge of 250,000 to 300000 cubic feet per second which it must eventually take, the grant for the Tanjore Dn under repairs to Agricultural Works has been increased from Rs 45000 to Rs 60000 in accordance with endorsement No. 61 R.I., dy 17th March 1916, of the Supdg Engr, V Circle. The Supdg Engr, V Circle, has not yet replied to the reference made to him as to the extent to which

When the Estimates are sanctioned

grant for the Trichinopoly Dn under this head should be augmented to admit of work of a similar kind required to be done in that Divn being procured with. On the receipt of this reply the necessary funds will be appropriated from the Reserve. An addl

grant of Rs 3000 has been provided for the Chingleput Dn with reference to endorsement No. 73 E.I. dy 20 March 1916 of the Supdg Engr, V Circle.

13. In the preliminary budget funds were provided for the following major original works:—

Minor works for which neither Capital nor Rev. Accts are kept

H. Sch. as are printed

		Amount provided for
Nellore D.	Idamapalli tank improvements	9000
Kurnool D.	Yerragundam pollium do	2000
Salem D.	Excavating a new supply channel to Perumagoundapuram tank	6000

Agricultural Works.

Tanjore D.	Improving Moordicondanat both banks below road at 15.	2000
South Arcot D.	Raising & strengthening the Coleroon left flood bank & restoring sluices . . .	10,000

As the estimates for the above works have not yet been sanctioned, no provision has been made for them in the final budget, & the amounts thus set free have been credited to the reserve, from which any funds required for expenditure on the works may be drawn. To

when the estimates are sanctioned.

No. 357 I dated 20th April 1896.

Order thereon

Copy & put

The final issue of the Irrigation budget estimates for 1896-97 as drawn up by the Chief Engineer for Irrigation is approved, & 50 printed copies thereof will be forwarded to the Govt of India.

No. 358 I dated 20th April 1896.

Endorsement -

Forwarded.

Rued 14/4

A.G.H. 21.4.96

21/4/96

JG 21/4/96

+ 15 to Simla & the remainder to Calcutta

To
The Chief Engr for I.
Do. I.R.S.
Supdg Engrs.
Supdg Engr, Special duty, Canvery Comn. Mysore
Collector
Ex. D. W.
Rev. Dept
Judl Dept

Not
To be issued in advance of the Govt of India's sanction not to take effect

P. W. CURRENT No. 3901

~~Hdt~~

~~Hardbo. Hdrs~~
~~Hardbo. post~~

Accs: 24.4.96

Vordpt estimates
final issue, for 1896-97
T.W.D., Imperial Branch

Special

Issue as from
as the Indents for the
Govt. of India are
used from Press.

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Rm/6