Revenue (1897) Department.

MISCELLANEOUS SERIES.

G.O., No. 1034

DATED 22nd Feb. 97

[Despatch Abstract.]

Conveying G. O. P. W. D. approving on the recommendation for the preliminary issue of the Budget Estimates for "Major Works" and "Minor Works and Navigation" for 1897-98, embodying the revised estimates for 1896-97 as drawn up by the Chief Engineer for Irrigation, and ordered to be forwarded to the Govt. of India.

BACK PAPERS.

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

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
Revn	365	3/97					
Irrn	2167	2/97					

IRRIGATION.
ACCOUNT.

Rec. Dept.

Government {1897} of Madras.

PUBLIC WORKS.

Original Number 1483

GOVERNMENT OF MADRAS
17 FEB 97
REVENUE DEPARTMENT

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Communicated to the Bd of Rev.

FEBRUARY.

To Chief Engr. for Irrn. (4 Copies) } Chairman 20
Bd of Rev. (4 Copies)
RS
20-2-97

Budget Estimates

The preliminary issue of the — for "Major Works" and "Minor Works and Navigation" for 1897–98, embodying the revised estimates for 1896–97 as drawn up by the Chief Engineer for Irrigation, approved with remarks and ordered to be forwarded to the Government of India.

Issued
19-2-97

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

READ—the following *paper*:—

Note by the Chief Engineer for Irrigation.

The accompanying preliminary issue of the budget estimates of the Irrigation Branch, Public Works Department, under Imperial, Provincial and Local for 1897–98, embodying the revised estimates for 1896–97, works up to the Imperial grants provisionally sanctioned by the Government of India in its letter, No. 1 A.I., dated 7th January 1897, printed in Proceedings of Madras Government, No. 68 I., dated 20th idem, and to the Provincial and Local grants fixed in Proceedings of Madras Government, Nos. 890 and 30, Financial Department, dated 17th December 1896 and 14th January 1897, respectively, and Proceedings of Madras Government, No. 710, Revenue Department, dated 10th December 1896.

2. The budget estimates of receipts and expenditure for 1897–98 compare with the revised estimates for 1896–97 and the actuals of 1895–96 as shown below:—

	Budget estimate, 1897–98.	Revised estimate, 1896–97.	Budget estimate, 1896–97.	Actuals, 1895–96.
IMPERIAL.				
Receipts.	Rs.	Rs.	Rs.	Rs.
XXIX. Major works—				
Direct receipts	2,93,000	2,93,000	2,78,000	2,98,302
Portion of land revenue due to irrigation ..	67,63,000	63,68,000	67,28,000	58,26,126
Total ..	70,56,000	66,61,000	70,06,000	61,24,428
Expenditure.				
35. Protective Works, Irrigation	1,69,500	1,69,000	1,89,000	2,26,477
42. Major Works (Working Expenses) ..	13,76,000	15,09,500	12,80,000	13,15,103
49. Capital Expenditure not charged to Revenue ..	9,50,000	8,16,500	9,41,000	13,37,363
Total ..	24,89,500	25,75,000	24,10,000	28,78,943
PROVINCIAL.				
Receipts.				
XXX. Minor Works and Navigation—				
Direct receipts	1,60,000	1,60,000	1,70,000	1,55,840
EXPENDITURE.				
43. Minor Works and Navigation	30,50,000	37,80,300	38,95,000	31,82,954
38. Famine Relief	..	21,200	..	..
Total ..	30,50,000	38,02,000	38,95,000	31,82,954
LOCAL IRRIGATION CESS FUND.				
Expenditure.				
43. Minor Works and Navigation	9,500	12,444	8,000	27,416
Total .. { Receipts ..	72,16,000	68,21,000	71,76,000	62,80,268
Total .. { Expenditure ..	55,49,000	63,89,444	63,13,000	60,20,312

3. *Major works—Direct receipts.*—The current year's revised estimate is Rs. 15,000 more than the budget estimate, the former being based on the actuals of the previous year which exceeded the budget estimate of the current year. No increase is anticipated over the current year's revised estimate in the budget estimate for the ensuing year.

4. *Major works—Portion of Land Revenue due to Irrigation.*—The current year's revised estimate is Rs. 3,60,000 less than the budget estimate. The decrease occurs chiefly under the Gódávari delta system in consequence of the damages caused by floods, while under the Sangám anicut system irrigation has *not* extended to the extent anticipated. The budget estimate for next year is Rs. 3,95,000 more than the current year's revised estimate, the increase being chiefly due to the special remissions expected to be granted in the current year on account of damages caused by floods in the Gódávari delta system.

5. 35. *Protective Works, Irrigation.*—The current year's budget and revised estimates under this head are the same, but the ensuing year's budget expenditure is Rs. 19,500 less than the current year's revised estimate, the Government of India having provisionally assigned only Rs. 1,69,500. It is most probable that this amount will have to be augmented during the course of the year.

6. 42. *Major Works—Working expenses.*—The current year's revised estimate is Rs. 2,89,500 more than the budget estimate. The increase represents the additional grants sanctioned by the Government of India in its telegrams marginally noted for the Gódávari, Kistna and Cauvery delta and the Srivaikuntam anicut systems.

No. 65 A.I., printed in P.M.G., No. $\frac{739}{A}$ I., dated 28th August 1896.
No. 89 A.I., printed in P.M.G., No. 1021 I., dated 1st December 1896.
No. 100 A.I., printed in P.M.G., No. 33 I., dated 8th January 1897.
No. 3 A.I., printed in P.M.G., No. 99 I., dated 23rd January 1897.

In the schedule of demands printed in Proceedings of Madras Government No. 1051 I., dated 15th December 1896, Rs. 15,24,000 were applied for for expenditure during 1897–98, but only Rs. 13,70,000 having been sanctioned by the Government of India, the grants proposed for the Gódávari, Kistna and Cauvery delta systems and the Kurnool-Cuddapah Canal have been curtailed. It is apprehended that the reduction of grants will seriously affect the programme of work intended to be carried out in these systems. The Superintending Engineer, II Circle, in his endorsement, No. 2821 K.N., dated 8th January 1897, has already represented the necessity for supplementing the grants originally proposed by him for the Kistna delta system by Rs. 27,000 or Rs. 33,210 including the charge for establishment, the amount being absolutely required in the Kistna Northern division for working out the balances of several estimates prepared after the recent floods and for revetting the nose of the lock entrance at Bezwada.

7. The provisional grant of Rs. 13,70,000 for next year is distributed as shown below:—

	Extensions and improvements.	Maintenance and repairs.	Establishment.			Tools and plant.	Total.
			23 per cent. on expenditure.	10 per cent. on direct revenue.	6 per cent. on irrigation revenue.		
1	2	3	4	5	6	7	8
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Productive—							
Gódávari delta	21,000	1,90,425	49,665	11,100	1,62,300	39,600	4,80,000
Kistna	19,000	2,81,024	68,775	8,360	1,50,840	50,000	5,75,000
Pennér anicut	— 1,103	10,140	2,078	70	8,820	— 5	20,000
Sangam	3,630	18,116	5,002	60	10,200	— 8	37,000
Kurnool-Cuddapah Canal	8,000	60,752	15,808	980	7,080	1,600	94,200

—	Extensions and improvements.	Maintenance and repairs.	Establishment. 23 per cent. on expenditure.	Establishment. 10 per cent. on direct revenue.	Establishment. 6 per cent. on irrigation revenue.	Tools and plant.	Total.
1	2	3	4	5	6	7	8
	rs.	rs.	rs.	rs.	rs.	rs.	rs.
Barur tank	..	1,447	333	..	720	..	2,503
Cauvery delta	17,000	— 39,503	— 5,330	250	51,366	1,217	25,000
Srivaikuntam anicut	1,954	14,792	3,852	120	6,360	— 78	27,000
Periyar project	..	65,000	6,750	..	..	250	71,000
Protective.							
Rushikulya project	..	30,000	6,900	150	..	1,250	39,300
Total ..	69,481	6,38,183	1,62,834	18,090	3,97,686	93,726	13,70,000

8. The amount provided for extensions and improvements to the Pennér anicut system and that for maintenance and repairs to the Cauvery delta system are Rs. 1,103 and Rs. 39,503, respectively, less than the old maintenance charges provided for under "43. Minor Works and Navigation."

9. The subjoined statement shows the amounts applied for and those provided under extensions and improvements, maintenance and repairs and tools and plant for each division for 1897–98 :—

Systems.	Divisions.	Extensions and improvements. Amount applied for.	Extensions and improvements. Amount provided.	Maintenance and repairs. Amount applied for.	Maintenance and repairs. Amount provided.	Tools and plant. Amount applied for.	Tools and plant. Amount provided.
1	2	3	4	5	6	7	8
	Productive—	rs.	rs.	rs.	rs.	rs.	rs.
Gódávari delta ..	Eastern	8,000	8,000	77,300	60,000	31,500	31,500
	Central	3,000	3,000	66,000	55,000	3,000	3,000
	Western	10,000	10,000	1,02,500	81,435	5,000	5,000
	Total ..	21,000	21,000	2,44,800	1,96,435	39,500	39,500
Kistna delta ..	Eastern	16,000	16,000	1,32,100	1,32,000	5,500	5,500
	Northern	..	..	* 43,000	35,000	40,500	40,500
	Western	3,000	3,000	1,35,000	1,14,024	4,000	4,000
	Total ..	19,000	19,000	3,40,100	2,81,024	50,000	50,000
Pénner anicut ..	Nellore	2,500	2,461	24,000	24,000	..	..
	Deduct old Maintenance charges	3,564	3,564	13,860	13,860	5	5
	Net Total ..	— 1,064	— 1,103	10,140	10,140	— 5	— 5
Sangam anicut ..	Nellore	4,500	3,975	30,000	30,000	50	49
	Deduct old Maintenance charges	345	345	11,884	11,884	57	57
	Net Total ..	4,155	3,630	18,116	18,116	— 7	— 8
Kurnool-Cuddapah Canal.	Kurnool	12,000	8,000	65,000	60,732	1,600	1,600
Barur tank ..	Salem	..	..	1,500	1,447	..	..
Cauvery delta ..	Tanjore	12,000	12,000	45,000	39,831	2,500	2,500
	Negapatam	4,000	4,000	20,000	17,500	300	300
	Trichinopoly	1,000	1,000	10,000	8,800	20	20
	Total ..	17,000	17,000	75,000	66,131	2,820	2,820
	Deduct old maintenance charges	..	..	1,05,634	1,05,634	1,603	1,603
	Net Total ..	17,000	17,000	— 30,634	— 39,503	1,217	1,217

* Exclusive of Rs. 27,000 subsequently applied for.

Systems.	Divisions.	Extensions and improvements. Amount applied for.	Extensions and improvements. Amount provided.	Maintenance and repairs. Amount applied for.	Maintenance and repairs. Amount provided.	Tools and plant. Amount applied for.	Tools and plant. Amount provided.
1	2	3	4	5	6	7	8
		rs.	rs.	rs.	rs.	rs.	rs.
Srivaikuntam anicut.	Tinnevelly	2,000	2,306	20,000	20,000	..	..
	Deduct old maintenance charges	352	352	6,208	6,208	78	78
	Net Total ..	1,648	1,954	14,792	14,792	— 78	— 78
Periyár project ..	Madura	..	..	65,000	65,000	..	250
	Protective.						
Rushikuliya project.	Ganjám	..	..	30,000	30,000	1,250	1,250
	Grand Total ..	73,739	69,481	7,53,814	6,38,183	93,477	93,726

10. *Capital Expenditure not charged to Revenue*—49. *Irrigation.*—The current year's revised estimate is Rs. 1,24,500 less than the budget estimate. The decrease represents the surrender accepted by the Government of India in its letter, No. 71-A.I., dated 16th September 1896, printed in Proceedings of Madras Government, No. 787 I., dated 25th idem, and that reported in Proceedings of Madras Government, No. 109-A I., dated 29th January 1897.

11. The provisional grant of Rs. 9,50,000 sanctioned for next year is Rupees 1,33,500 more than the current year's revised estimate and is distributed as shown below :—

Projects.	Divisions.	Land.	Works.	Establishment.	Tools and plant.	Total.
		rs.	rs.	rs.	rs.	rs.
Gódávari delta ..	Eastern	..	630	..	..	..
	Central	..	2,185	..	..	..
	Western	..	1,260	..	..	..
	Total ..	..	4,065	935	..	5,000
Kistna delta ..	Eastern	20,000	83,260	..	5,000	..
	Northern	..	28,400	..	50,600	..
	Western	16,500	1,79,316	..	..	..
	Total ..	36,500	2,90,976	66,924	55,600	4,50,000
Kalingarayan channel.	Coimbatore	..	80,081	18,419	1,500	1,00,000
Cauvery delta ..	Tanjore	..	1,16,260	26,740	..	1,43,000
Srivaikuntam anicut ..	Tinnevelly	..	1,626	374	..	2,000
Periyár project ..	Madura	..	2,02,439	46,561	1,000	2,50,000
	Total ..	36,500	6,35,447	1,59,953	58,100	9,50,000

In the schedule of demands printed in Proceedings of Madras Government, No. 1051 I., dated 15th December 1896, Rs. 12,47,000 were applied for for expenditure during 1897–98, but the provisional assignment sanctioned by the Government of India being Rs. 2,97,000 less, no amount has been allotted for the Pennér anicut system and the grants originally proposed for the other systems have been reduced in accordance with G.O., No. 68 I., dated 20th January 1897. The grant for the Gódávari system will have to be increased within the course of the year by transfer from the grants for other systems. Superintending Engineers concerned should submit, as soon as possible, revised schedules showing the distribution by component works of the reduced grants for incorporation in Part II of the final issue of the budget estimates.

12. The following statement compares the probable "direct" capital outlay to end of 1897–98 with the sanctioned estimates for the projects for which funds have been provided and for which the construction estimates have not yet been closed :—

Projects.	Sanctioned estimate.	Outlay to end of 1895–96.	Revised estimate, 1896–97.	Budget estimate, 1897–98.	Total.	Balance of estimate.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Kistna delta	1,39,19,754	1,13,76,826	5,95,042	4,50,000	1,24,21,862	14,97,922
Periyár project	84,71,009	80,85,047	67,600	2,50,000	84,02,647	68,353
Kalingarayan channel	8,25,000	..	..	1,00,000	1,00,000	7,25,000
Total ..	2,32,15,784	1,94,61,867	6,62,642	8,00,000	2,09,24,509	22,91,275

In Proceedings of Madras Government, No. 1089 I., dated 23rd December 1896, the sanction of the Government of India has been solicited to the extension of the sanction accorded to the estimate for the improvements to the Kalingarayan channel for a period of five years commencing from the 31st January 1896.

13. *Provincial Minor Works and Navigation—Direct Receipts.*—The current year's revised estimate is Rs. 10,000 less than the budget estimate, the former being based on the actuals of the previous year, which fell short of the budget estimate of the current year. No increase is anticipated over the current year's revised estimate in the budget estimate for the ensuing year.

14. *Provincial Minor Works and Navigation.*—The current year's revised estimate is Rs. 1,14,200 less than the budget estimate, owing chiefly to funds provided for the Cooum Improvements Scheme having been surrendered owing to the non-sanction of the work pending submission of an estimate for the work on modified lines. The ensuing year's budget estimate is Rs. 7,30,800 less than the revised estimate for the current year. The decrease is due to provision having been made for the execution of a smaller number of works than during the current year, owing to the prospect of heavy losses anticipated by the Financial Department under the principal heads of revenue accompanied by extensive outlay on famine relief.

15. The assignment of Rs. 30·50 lakhs which is Rs. 4·50 lakhs less than the amount applied for is distributed as shown below :—

Minor Works for which Capital and Revenue Accounts are kept—

	Rs.	Rs.
Capital account (see paragraph 16)	4,37,000	
Revenue do. (do. 17)	2,80,000	
		7,17,000
Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.		
Old Maintenance Charges of Major and Minor Works for which Capital and Revenue Accounts are kept (see paragraph 18)	4,26,136	
Ordinary works (see paragraph 19)	8,30,864	
Tank restoration works (see paragraph 21)	4,88,000	
Minor works, Revenue Department (see paragraph 23)	35,000	
		17,80,000
Agricultural works (see paragraph 22)	5,53,000	
		5,53,000
Total ...		30,50,000

16. *Capital Account.*—The amount proposed for expenditure under this head compares with the sanctioned estimates as shown below :—

Projects.	Amount of sanctioned estimate.	Outlay to end of 1895–96.	Probable outlay during 1896–97.	Budget estimate, 1897–98.					Total outlay.	Balance of estimate.
				Works.	Land.	Establishment.	Tools and plant.	Total.		
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Kurnool-Cuddapah canal ..	16,500	5,845	7,380	2,838	..	652	..	3,490	16,715	— 215
Munnyeru ..	3,68,000	1,44,566	1,59,960	81,000	..	18,630	400	1,00,030	4,04,496	— 36,496
Sagileru ..	3,61,000	2,68,171	1,40,700	40,000	..	9,200	..	49,200	4,58,071	— 77,071
Pálár anicut ..	20,06,790	19,51,936	6,840	11,024	5,150	2,536	..	18,710	19,80,486	26,304
Pelandorai anicut ..	90,440	2,401	32,273	42,961	..	9,879	..	52,830	87,504	2,936
Lower Coleroon anicut	3,65,710	47,397	1,11,165	89,707	..	20,633	..	1,10,340	2,68,902	96,808
Buckingham canal.	86,44,000	82,03,148	2,50,570	80,000	..	18,400	4,000	1,02,400	85,56,118	57,882
Total ..	..	..	..	3,47,520	5,150	79,930	4,400	4,37,000	..	..

The amounts provided for the Munnyeru and Sagileru projects involve an excess over the sanctioned estimates. The submission of the revised estimates for these projects should be expedited by the Superintending Engineers concerned.

The schedule of works which remained incomplete on the closure of the construction estimate of the Pálár anicut system will be shortly submitted to Government.

Owing to the reduction of the amount applied for for expenditure during 1897–98 no funds have been provided for the following works proposed by Superintending Engineers :—

	Amount applied for.
	Rs.
Sanctioned works—	
Sangam Anicut System—	
1. Diverting surplus of Kanigiri reservoir into Pyderu. (G.O., No. 467 I., dated 9th May 1896)...	1,00,000
2. Supply channel from the Pennér above Sangam anicut to Nellore tank and improving its distributaries (G.O., No. 458 I., dated 28th May 1896)	1,00,000
Unsanctioned works—	
Sangam Anicut System—	
3. Allur swamp irrigation channels	10,000
4. Minor channels	10,000
5. Inspection bungalow at Kanigiri reservoir	3,000
Cumbum tank system—	
6. Sirvel Project Govindapalli channel extension	5,000
7. Remodelling the Sekrailcutwa channel, second section ...	5,000
Ganjám minor rivers system—	
8. Improvements to channels	10,000
Cheyár Anicut system—	
9. Improvements to Iyalavadi and Chengathvaram channels.	8,500
Maradur Anicut system—	
10. Improving Maradur Melakal	5,000
Total ...	2,56,500

17. *Revenue Account.*—The following statement shows the amount provided for each system under this head:—

Divisions.	Systems.	Extensions and improvements.	Maintenance and repairs.	Establishment. 23 per cent. on expenditure.	Establishment. 10 per cent. on direct receipts.	Tools and plant.	Total.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Ganjám ..	Ganjám minor rivers ..	..	10,000	2,300	..	..	12,300
Kurnool ..	Cumbum tank	500	1,500	460	..	..	2,460
Coimbatore ..	Thadapalli channel	1,996	2,000	1,126	8	..	6,030
	Arkenkota do. ..	1,060	902	438	..	..	2,340
	Kallingarayen channel ..	..	1,901	437	12	..	2,350
North Arcot ..	Pálár anicut	3,522	17,095	7,497	130	— 4	40,220
Chingleput ..	Do.	3,280	8,400				
North Arcot ..	Polney anicut	1,000	9,000	2,300	60	..	12,350
	Cheyár do.	3,000	12,000	3,450	20	..	18,470
Chingleput ..	Chembrambakam tank ..	— 2,033	— 92	— 500	14	— 109	— 2,770
	Madras Water-supply and Irrigation extension	— 3,600	2,299	— 299	1,250	— 10	— 360
South Arcot ..	Vallur anicut	2,701	500	737	2	..	3,940
	Tirukkóyilúr anicut	3,002	8,000	2,531	57	..	13,590
	Melnamáttur anicut	500	1,000	345	5	..	1,850
	Vriddhachalam anicut ..	496	2,500	689	6	..	3,690
	Shatiatope anicut	2,000	10,000	2,760	30	..	14,790
	Pohandoni do.	438	2,942	777	25	— 2	4,180
	Lower Coleroon anicut ..	2,000	10,000				
Tanjore ..	Do. do. ..	1,502	3,000	5,175	103	..	27,780
Trichinopoly ..	Nandyar channel	..	7,610	1,750	..	..	9,360
Tinnevelly ..	Marundur anicut	993	13,000	3,218	20	..	17,240
Ganjám ..	Chilka lake canal	..	301	69	..	..	370
Negapatam ..	Vedáraniyam canal	..	5,065	1,165	120	..	6,350
Buckingham canal.	Buckingham canal	2,366	54,000	12,964	11,140	3,000	83,470
	Total ..	24,913	1,80,823	49,389	13,000	2,875	2,80,000

In all cases the amounts applied for by Superintending Engineers have been provided with slight modifications to round off totals.

18. *Old maintenance charges.*—The sum provided is Rs. 61,974 more than that fixed in G.Os., Nos. 395 I. and 484 I., dated 18th July and 4th September 1890, respectively. The increase is due to the Board of Revenue having raised the old irrigation revenue for the Cauvery delta system from Rs. 23,65,000 to Rs. 33,97,000 (*vide* Proceedings of Madras Government, No. 1091 I., dated 26th December 1896).

19. *Ordinary works.*—The allotments proposed under this head are compared below with the current year's grants:—

	1897-98.	1896-97.
	Rs.	Rs.
Original works, major	66,132	1,29,655
Do. minor (see statement A)	2,30,827 *	1,31,800
Repairs (see statement A)	3,70,000	3,83,977
Total ...	6,66,959	6,45,432
Establishment at 23 per cent. on expenditure ...	1,53,400	1,47,414
Do. at 10 „ on direct revenue ...	500	500
Total ...	1,53,900	1,47,914
Tools and plant at 1½ per cent. on expenditure ...	10,065	9,614
Total ...	8,30,864	8,02,960

* Inclusive of a reserve of Rs. 1,66,827.

20. Under Original works—Major, funds have been provided for the following sanctioned works:—

	Amount provided. Rs.
Gódávari Western division—	
Diversion of Yerracalva and construction of masonry dams across it and Gudapalli channels	5,000
Kistna Northern division—	
Macherla tank	500
Ipur tank	12,000
Jonapad tank	10,712
Nellore division—	
Mopaud tank improvements	4,000
Budamgunta tank	2,500
Bellary division—	
Excavating a channel and constructing five syphon sluices for Gandigantur tank	2,010
Restoring the surplus weirs and raising banks of Apparazpett tank.	4,000
Improving Royalcheruvu tank	6,300
Kurnool division—	
Pedda and Chinna Mallalammal tank of Ramapuram	1,000
Coimbatore division—	
Constructing an aqueduct and bridge in lieu of Pungaliyur outlet on the Chithrachavady channel	2,870
South Arcot division—	
Cutting a channel from Ponniar river to irrigate lands in Tirukandesweram and other villages	2,700
Trichinopoly division—	
Reconstructing bridge on Road No. XX over Ponneri channel ...	3,360
Improvements to Kothamangalam tank	4,060
Madura division—	
Constructing an under tunnel at 3,200 feet from the head of Seeliampatty channel	710
Repairing and improving Athalai tank	2,590
Tinnevelly division—	
Improving Vadukachimathel tank and channel	1,820
Total ...	66,132

Owing to the curtailment of the grants applied for, the amounts proposed by Superintending Engineers for the following works for which estimates have not yet been sanctioned have not been provided:—

	Amount proposed. Rs.
Vizagapatam division—	
Mallapalem dam.—Cutting a new proposed head to Honjaram channel and clearing the old bed to Tamaram channel ...	3,000
Kistna Northern division—	
Atmakur tank	7,000
Nellore division—	
Tollapalem tank improvements	5,500
Kommalapudi do.	5,000
Vindur do.	3,000
Siddavaram do.	7,000
Tatiparti do.	6,000
Prabhagiripatnam do.	5,000
Kullur do.	3,000
Rayaguntapalem do.	2,900
Kurugonda do.	3,600
Gudur large do.	5,000
Challakalva L.B. do.	7,500
Bellary division—	
Siruguppa channel improvements	10,000

	Amount proposed.
	Rs.
Kurnool division—	
Breaching Patha Cuddapah tank and constructing a channel with masonry works	5,000
Salem division—	
Excavating a new supply channel to Penugundapuram tank ...	5,000
Chingleput division—	
Improvements to Kinar tank	3,050
Trichinopoly division—	
Reconstructing Chintamony odai weir on the right bank of Ponneri channel	4,000
Madura division—	
Improving Thandalay tank	15,000
Tinnevelly division—	
Improvements to North Kodamelalaghiem channel	4,000
Singampatty Perungal	3,000
Valliyur channel	3,000
Total ...	1,15,550

21. *Tank Restoration Works.*—The amount provided for expenditure on tank restoration works has been distributed as shown below :—

Divisions.	Probable balance of sanctioned estimates on 1st April 1897.	Amounts applied for by Superintending Engineers.	Amounts provided.
	Rs.	Rs.	Rs.
Gódávari Eastern	1,125	6,500	6,500
Kistna Northern	30,290	20,000	20,000
Salem	94,723	50,000	50,000
North Arcot	68,700	40,000	40,000
Chingleput	187,435	75,000	75,000
South Arcot	50,801	50,000	50,000
Negapatam	7,176	30,000	30,000
Madura	1,51,359	70,000	70,000
Tinnevelly	83,000	50,000	50,000
Total ..	..	3,31,500	3,91,500

22. The distribution of the amount of Rs. 5,53,000 provided for expenditure on agricultural works during next year compares with the current year's grants as shown below :—

	1897-98.	1896-97.
	Rs.	Rs.
Original works, major	59,420	1,14,846
Do. minor	17,700	76,503
Repairs	3,67,213	5,52,942
Establishment, at 23 per cent. on expenditure ...	99,667	1,66,012
Do. at 10 per cent. on direct receipts ...	2,500	2,500
Tools and plant, at 1½ per cent. on expenditure ...	6,500	10,827
Total ...	5,53,000	9,23,630

The major original works for which funds have been provided are enumerated in Part I of the Budget estimates for "43. Minor Works and Navigation." Funds

have not been provided for the following unsanctioned works proposed by Superintending Engineers :—

	Amount proposed.
	Rs.
Gódávari Central division—	
Raising the Vasista left bank below 12½ miles, Gunnaram canal	10,000
Kistna Northern division—	
Raising the flood banks of the Kistna river above anicut ...	30,000
Kistna Western division—	
Raising the Kistna river right bank below the anicut	50,000
Tinnevelly division—	
Authur diversion right bank below Srivaikuntam anicut ...	20,000
Total ...	1,10,000

The distribution of the grants for minor original works and repairs is shown in statement B attached to this note.

In his endorsment, No. 2824 K.N., dated 8th January 1897, the Superintending Engineer, II Circle, applied for a revised grant of Rs. 79,500 for the Kistna Northern division on the ground that the amount was required for working out the balance of several estimates prepared and sanctioned for the right and left embankments of the Kistna river. The demand has been reduced to its original amount, viz., Rs. 1,500. More will be required, but the demands must be reduced to a minimum and the additional grant obtained by transfer from the existing grant from other works. It is not certain that anything will be available from the reserve.

23. *Minor Works, Revenue Department.*—The budget estimate of Rs. 35,000 has been distributed as shown below :—

Reserve—

	Rs.
Original works	28,112
Establishment	6,466
Tools and plant	422
Total ...	35,000

Superintending Engineers should make early application for the funds required for expenditure on sanctioned works to be executed by Public Works Department officers.

24. *Local Irrigation Cess Fund.*—The current year's revised estimate of expenditure exceeds the budget estimate by Rs. 4,444, the increase having been sanctioned chiefly for constructing an inspection shed at Jaderpalem in the Salem district. The budget estimate of Rs. 9,500 for next year is distributed as shown below :—

—	Original works.	Repairs.	Total.
	Rs.	Rs.	Rs.
Salem division	5,500	2,000	7,500
Trichinopoly division ...	2,000	...	2,000
Total ...	7,500	2,000	9,500

25, 33. *Famine Relief.*—The requirements for the current year under the above head as estimated by the Superintending Engineers concerned are given below :—

	Rs.
I Circle	2,000
III „	19,200
	21,200

The above amount has been provided by *reducing* the current year's grants under "43. Provincial—Minor Works and Navigation for which neither Capital nor Revenue Accounts are kept" as shown below:—

		Rs.
Vizagapatam division—		
Repairs		1,607
Bellary—		
Original works		6,500
Repairs		1,532
Cuddapah—		
Repairs		4,016
Kurnool—		
Repairs		3,373
		17,028
	Establishment ...	3,917
	Tools and Plant ...	255
	Total ...	21,200

The amount required for expenditure for next year is estimated at Rs. 1,93,000,* but no provision has been made in the preliminary budget estimates pending a special assignment for the purpose from Provincial funds. With reference to telegram No. 46 A.C.W., dated 3rd February 1897, from the Government of India, communicated with G.O., No. 344 W., dated 5th idem, the grants for the current year under "33. Famine Relief" have been struck out from the budget estimates for "43. Minor Works and Navigation," with a view to the submission, as directed, of a separate budget under the former head.

	Rs.
* I Circle	1,68,000
Cuddapah division	10,000
Kurnool	5,000
Bellary	10,000
Total ...	1,93,000

26. The total grant for works and repairs under all heads and the contribution to "45. Civil Works" on account of establishment and tools and plant charges are shown below:—

	1897-98.	1896-97.
	Rs.	Rs.
Total grant for works and repairs	38,39,738	45,83,042
Establishment—		
23 per cent. on expenditure	8,57,767	10,15,538
10 ,, on direct revenue	34,090	34,090
6 ,, on indirect revenue	6,33,480	6,07,740
Total ...	15,25,337	16,57,368
Tools and plant, at 1½ per cent. on expenditure ...	22,806	27,348

27. The following statement shows the amounts provided for each division for land compensation under the several heads, excepting "49. Capital expenditure not charged to Revenue," particulars appertaining to which are shown in paragraph 11:—

35. Protective Works—Irrigation.
Rushikulya Project.

	Rs.	Rs.
Ganjám Division	5,000	5,000

42. Major Works (Working Expenses).
Maintenance and Repairs.

	Rs.	Rs.
Gódávari Eastern Division	500	
,, Western ,, ...	1,000	
Kistna ,, ,, ...	1,000	
Trichinopoly Division	670	
Madura Division	40,000	
		43,170

43. Minor Works and Navigation.
Capital Account.

North Arcot Division	5,150	

Agricultural Works.
Original Works.

Gódávari Central Division	4,000	
,, Western ,, ...	3,000	
Kistna Northern ,, ...	3,000	
,, Western ,, ...	1,000	
		16,150
Total ...		64,320

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

5th February 1897.

ENCLOSURES.

A.—STATEMENT showing the proposed grants for Minor original works under Rs. 2,500 each and repairs for 1897-98 under "Minor works for which neither Capital nor Revenue Accounts are kept, P.W.D."

Divisions.	Irrigation revenue for 1897-98.	Grant for 1897-98. Minor original works.	Repairs.
	Rs.	Rs.	Rs.
Ganjám	98,948	3,000	12,000
Vizagapatam	1,62,362	6,000	9,500
Gódávari Eastern	97,082	8,000	17,500
,, Central		2,000	4,000
,, Western		..	6,000
Kistna Eastern	54,271	1,500	4,000
,, Northern		..	..
,, Western		15,500	20,000
Nellore	2,96,364	10,000	30,000
Cuddapah	2,91,144	3,000	10,000
Kurnool	84,959	5,000	30,000
Bellary	3,74,851	..	2,000
West Coast	3,23,203	6,000	12,000
Coimbatore	1,50,300	4,000	12,000
Salem	2,43,076	15,000	25,000
North Arcot	6,22,544	10,000	35,000
Chingleput	3,81,293	10,000	65,000
South Arcot		1,000	2,000
Tanjore	45,152	..	..
Negapatam	4,43,278	10,000	25,000
Trichinopoly	3,50,035	6,000	37,000
Madura	7,66,651	6,000	30,000
Tinnevelly			
Total ..	..	1,24,000	3,70,000
Reserve ..	..	1,06,827	..
Total ..	..	2,30,827	3,70,000

B.—STATEMENT showing the grants for Minor original works below Rs. 2,500 each and repairs under "Agricultural works" for 1897-98.

Divisions.	Minor original works.	Repairs.
	Rs.	Rs.
Ganjám	3,000	6,000
Vizagapatam	300	2,500
Gódávari Eastern		20,000

Divisions.	Minor original works.	Repairs.
	Rs.	Rs.
Gódávari Central	1,000	65,000
Do. Western	3,000	16,000
Kistna Eastern	...	9,000
Do. Northern	...	1,588
Do. Western	...	1,00,000
Nellore	...	6,500
Buckingham Canal	...	7,000
Cuddapah	...	4,000
Coimbatore	3,500	6,500
Salem	...	625
Chingleput	500	1,500
South Arcot	400	6,000
Tanjore	2,000	60,000
Negapatam	2,000	20,000
Trichinopoly	2,000	25,000
Tinnevelly	...	10,000
Total ...	17,700	3,67,213

ORDER—No. 125 *I.*, dated 9th February 1897.

The budget estimates preliminary issue for "Major Works" and "Minor Works and Navigation" for 1897–98, *embodying* the revised estimates for 1896–97 as drawn up by the Chief Engineer for Irrigation, are approved and will be forwarded to the Government of India. The distribution by divistons of the grants for minor original works and repairs proposed by him is also approved.

2. The modifications of allotments for the *current* year given in paragraph 25 are sanctioned.

3. The attention of the Superintending Engineers concerned is drawn to the remarks made in the *foregoing note*.

4. Ordered that the following letter be sent.

[Here enter No. 126 I., dated 9th February 1897.]

(True Extract.)

Under Secretary to Government,
Irrigation Branch.

To the Chief Engineer for Irrigation.
„ all Superintending Engineers.
„ the Superintending Engineer on Special Duty, Cauvery Completion Estimates.
„ the Examiner, Public Works Accounts.
„ the Revenue Department.
„ the Financial „

Lxd. T. K. Narayana Aiyangar.

PRELIMINARY ISSUE.

Public Works Department.

BUDGET ESTIMATE

OF

REVENUE AND EXPENDITURE

UNDER

IRRIGATION—MAJOR WORKS

IN THE

MADRAS PRESIDENCY

FOR THE YEAR

1897-98.

MADRAS,
9th February 1897.

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

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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 1897 to 31st March 1898.

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

GOVERNMENT OF MADRAS.

REVENUE.

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

	Actual Realizations, 1895-96.	Budget Estimate, 1896-97.	Revised Estimate, 1896-97.	Budget Estimate, 1897-98.
	Rs.	Rs.	Rs.	Rs.
IRRIGATION.				
XXIX. MAJOR WORKS—PORTION OF LAND REVENUE DUE TO IRRIGATION.				
Gódávari Delta—				
Irrigation Revenue	24,47,457	28,80,000	25,29,000	28,29,000
Deduct Revenue due to old Irrigation	1,24,000	1,24,000	1,24,000	1,24,000
	23,23,457	27,56,000	24,05,000	27,05,000
Revenue due to the System	1,47,726	1,70,000	1,54,400	1,54,400
Share of enhanced Land Revenue				
Total ...	24,71,183	29,26,000	25,59,400	28,59,400
Deduct Collection Charges in the Civil Department	1,23,559	1,46,300	1,28,400	1,43,400
Net Revenue ...	23,47,624	27,79,700	24,31,000	27,16,000
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	849	1,300	1,000	1,000
Total ...	23,48,473	27,81,000	24,32,000	27,17,000
Kistna Delta—				
Irrigation Revenue	20,92,295	24,30,000	25,10,000	25,85,000
Deduct Revenue due to old Irrigation	71,000	71,000	71,000	71,000
	20,21,295	23,59,000	24,39,000	25,14,000
Revenue due to the System	1,40,888	1,80,000	1,90,000	2,00,000
Share of enhanced Land Revenue				
Total ...	21,62,183	25,39,000	26,29,000	27,14,000
Deduct Collection Charges in the Civil Department	1,08,109	1,27,000	1,31,000	1,36,000
Net Revenue ...	20,54,074	24,12,000	24,98,000	25,78,000
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	5,632	10,000	10,000	10,000
Total ...	20,59,706	24,22,000	25,08,000	25,88,000
Pennéru Anicut—				
Irrigation Revenue	2,63,848	2,63,000	2,64,000	2,64,000
Deduct Revenue due to old Irrigation	1,17,000	1,17,000	1,17,000	1,17,000
	1,46,848	1,46,000	1,47,000	1,47,000
Revenue due to the System	20,509	20,000	21,000	21,000
Share of enhanced Land Revenue				
Total ...	1,67,357	1,66,000	1,68,000	1,68,000
Deduct Collection Charges in the Civil Department	8,368	8,300	8,400	8,400
Net Revenue ...	1,58,989	1,57,700	1,59,600	1,59,600
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	522	300	400	400
Total ...	1,59,511	1,58,000	1,60,000	1,60,000

GOVERNMENT OF MADRAS.

REVENUE—continued.

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

	Actual Realizations, 1895-96.	Budget Estimate, 1896-97.	Revised Estimate, 1896-97.	Budget Estimate, 1897-98.
	Rs.	Rs.	Rs.	Rs.
IRRIGATION—*continued.*				
XXIX. MAJOR WORKS—PORTION OF LAND REVENUE DUE TO IRRIGATION—continued.				
Sangam Anicut—				
Irrigation Revenue	3,07,687	4,01,000	3,08,000	3,09,000
Deduct Revenue due to old Irrigation	1,39,000	1,39,000	1,39,000	1,39,000
Revenue due to the System	1,68,687	2,62,000	1,69,000	1,70,000
Share of enhanced Land Revenue	16,292	22,000	16,000	16,500
Total	1,84,979	2,84,000	1,85,000	1,86,500
Deduct Collection Charges in the Civil Department	9,249	14,0[illegible]	9,300	9,200
Net Revenue	1,75,730	2,70,000	1,75,700	1,77,300
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	6,277	6,000	6,300	6,700
Total	1,82,007	2,76,000	1,82,000	1,84,000
Cauvery Delta—				
Irrigation Revenue	44,35,373	41,50,000	42,03,000	42,54,000
Deduct Revenue due to old Irrigation	35,44,111	33,17,000	33,56,000	33,97,900
Revenue due to the System	8,91,262	8,33,000	8,47,000	8,56,100
Share of enhanced Land Revenue	1,10,520	1,17,000	1,10,950	1,12,000
Total	10,01,782	9,50,000	9,57,950	9,68,100
Deduct Collection Charges in the Civil Department	50,089	48,000	47,950	48,100
Net Revenue	9,51,693	9,02,000	9,10,000	9,20,000
Srivaikuntam Anicut—				
Irrigation Revenue	1,56,738	1,85,000	1,85,000	1,85,000
Deduct Revenue due to old Irrigation	79,000	79,000	79,000	79,000
Revenue due to the System	77,738	1,06,000	1,06,000	1,06,000
Share of enhanced Land Revenue	1,805	2,000	2,000	2,000
Total	79,543	1,08,000	1,08,000	1,08,000
Deduct Collection Charges in the Civil Department	3,977	5,000	5,000	5,000
Net Revenue	75,566	1,03,000	1,03,000	1,03,000

GOVERNMENT OF MADRAS.

REVENUE—continued.

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

	Actual Realizations, 1895-96.	Budget Estimate, 1896-97.	Revised Estimate, 1896-97.	Budget Estimate, 1897-98.
	Rs.	Rs.	Rs.	Rs.
IRRIGATION—*continued.*				
XXIX. MAJOR WORKS—PORTION OF LAND REVENUE DUE TO IRRIGATION—continued.				
Barur Tank—				
Irrigation Revenue	11,022	14,000	12,000	14,000
Deduct Revenue due to old Irrigation	2,000	2,000	2,000	2,000
Revenue due to the System	9,022	12,000	10,000	12,000
Share of enhanced Land Revenue	30	...	...	...
Total	9,052	12,000	10,000	12,000
Deduct Collection Charges in the Civil Department	453	1,000	1,000	1,000
Net Revenue	8,599	11,000	9,000	11,000
Kurnool-Cuddapah Canal—				
Share of enhanced Land Revenue under tanks owing to supply of canal water	4,956	8,400	6,300	6,300
Deduct Collection Charges in the Civil Department	248	400	300	300
Net Revenue	4,708	8,000	6,000	6,000
Rushikulya Project—				
Irrigation Revenue	63,535	1,00,000	90,000	1,10,000
Deduct Revenue due to old Irrigation	25,816	30,000	30,000	33,000
Revenue due to the System	37,719	70,000	60,000	77,000
Share of enhanced Land Revenue	32	150	150	200
Total	37,751	70,150	60,150	77,200
Deduct Collection Charges in the Civil Department	1,888	3,950	2,950	4,200
Net Revenue	35,863	66,200	57,200	73,000
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	...	800	800	1,000
Total	35,863	67,000	58,000	74,000
Total—				
Irrigation Revenue	97,77,955	1,04,23,000	1,01,01,000	1,05,50,000
Deduct Revenue due to old Irrigation	41,01,027	38,79,000	39,18,000	39,62,900
Revenue due to the System	56,76,028	65,44,000	61,83,000	65,87,100
Share of enhanced Land Revenue	4,42,758	5,19,550	5,00,800	5,12,400
Total	61,18,786	70,63,550	66,83,800	70,99,500
Deduct Collection Charges in the Civil Department	3,05,940	3,53,950	3,24,300	3,55,600
Net Revenue	58,12,846	67,09,600	63,49,500	67,43,900
Four per cent. on sale-proceeds of tank-bed and other waste lands less 5 per cent. for collection charges	13,280	18,400	18,500	19,100
Total	58,26,126	67,28,000	63,68,000	67,63,000

GOVERNMENT OF MADRAS.

CHARGES.

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

	Reference to Detailed Estimate.	Actual Outlay, 1895-96.	Budget Estimate, 1896-97.	Revised Estimate, 1896-97.	Budget Estimate, 1897-98.
	Pages.	Rs.	Rs.	Rs.	Rs.
IMPERIAL.					
MAJOR (PROTECTIVE) WORKS.					
Famine Relief and Insurance.					
35. CONSTRUCTION OF PROTECTIVE IRRIGATION WORKS.					
1. Works ... ... In progress ... Rs. 55,000					
Not commenced. Rs. 83,618		1,92,432	1,53,646	1,55,528	1,38,618
2. Establishment		38,392	33,039	33,472	30,732
3. Tools and plant		— 3,595	2,315	...	150
5. Receipts on capital account		— 752	...	...	...
Total ...		2,26,477	1,89,000	1,89,000	1,69,500
42. (WORKING EXPENSES).					
1. Extensions and improvements. In progress ... ... Not commenced ... Rs. 69,481		65,124	57,712	62,624	69,481
2. Maintenance and repairs		6,29,765	5,71,224	8,19,965	6,38,183
3. Establishment		5,14,080	5,56,121	5,89,566	5,68,610
4. Tools and plant		1,06,914	94,943	97,345	93,726
5. Refunds of revenue		220	...	...	...
Total, Working Expenses ...		13,16,103	12,80,000	15,69,500	13,70,000
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.					
49. IRRIGATION.					
1. Works ... ... In progress ... Rs. 2,79,079					
Not commenced ... Rs. 4,52,868		10,64,874	7,46,752	6,95,535	7,31,947
2. Establishment		2,37,963	1,62,518	1,49,933	1,59,953
3. Tools and plant		36,915	31,730	— 28,968	58,100
5. Receipts on capital account		— 2,389	...	...	...
Total, Capital Expenditure ...		13,37,363	9,41,000	8,16,500	9,50,000

GOVERNMENT OF MADRAS.

CHARGES.

Part I.

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

	Amount of Sanctioned Estimate.	Actual Outlay to end of 1895-96.	Budget Estimate, 1896-97.	Probable Outlay during 1896-97 (Revised Estimate).	Budget Estimate, 1897-98.	Remarks and References.
IMPERIAL.						
MAJOR (PROTECTIVE) WORKS.						
Famine Relief and Insurance.	Rs.	Rs.	Rs.	Rs.	Rs.	
35. CONSTRUCTION OF PROTECTIVE IRRIGATION WORKS.						
Capital Account.						
Rushikulya Project	43,68,000	39,07,154	1,89,000	1,89,000	1,69,500	Government of India register No. 7 I. of 1894-95. Proceedings of Madras Govt. No. 846 I. of 7th November 1894.
42. MAJOR WORKS (WORKING EXPENSES).						
Gódávari Delta	...	...	5,30,000	5,13,990	4,80,000	
Kistna do.	...	...	5,26,000	7,41,020	5,75,000	
Pennéru Anicut	...	...	19,000	19,140	20,000	
Sangam do.	...	...	43,000	37,370	37,000	
Kurnool-Cuddapah Canal ...	...	...	86,000	87,206	94,200	
Barur Tank Project	...	...	3,800	3,680	2,500	
Cauvery Delta	...	...	18,200	48,160	25,000	
Srivaikuntam Anicut ...	...	...	24,000	68,300	27,000	
Periyár Project	...	...	...	20,134	71,000	
Rushikulya Project	...	...	30,000	30,500	38,300	
Total ...	...	...	12,80,000	15,69,500	13,70,000	
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.						
49. IRRIGATION.						
Works in Progress.						
Gódávari Delta System ...	1,13,84,155	1,09,32,065	84,000	80,204	5,000	P.M.G. No. 876 I., dated 24th October 1896, No. 464 I., dated 29th May 1896, No. 507 I., dated 12th June 1896, No. 618 I., dated 29th July 1896, No. 649 I., dated 5th August 1896, No. 7 I., dated 4th January 1897 and No. 14 I., dated 5th January 1897.
Kistna Delta do. ...	1,39,19,784	1,13,76,820	5,75,000	5,95,042	4,50,000	Government of India register No. 8 I. of 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.
Cauvery Delta	17,80,101	16,87,283	76,100	46,448	1,43,000	P.M.G. No. 876 I., dated 24th October 1896, No. 473 I., dated 4th June 1896, No. 514 I., dated 16th June 1896, No. 663 I., dated 11th August 1896, No. 667 I., dated 11th August 1896, No. 919 I., dated 3rd November 1896, No. 937 I., dated 10th November 1896, No. 1086 I., dated 23rd December 1896 and No. 77 I., dated 20th January 1897.
Srivaikuntam Anicut ...	13,77,561	13,61,847	13,100	1,415	2,000	P.M.G. No. 876 I., dated 24th October 1896 and No. 862 I., dated 22nd October 1896.
Periyár Project	84,71,000	80,85,047	1,63,100	67,600	2,50,000	Government of India register No. 10 I. of 1894-95. P.M.G. No. 1057 I., dated 22nd December 1894.
Works not commenced.						
Kalingaroyen Channel ...	8,25,000	...	...	...	1,00,000	Government of India register No. 2 I. of 1890-91. P.M.G. No. 279 I., dated 21st March 1891 and No. 1089 I., dated 23rd December 1896.
Total ...	...	...	...	...	9,50,000	

GOVERNMENT OF MADRAS.

CHARGES.

Part IV.

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

	Budget Estimate, 1897–98.	Revised Estimate, 1896–97.
	Rs.	Rs.
IMPERIAL.		
FAMINE RELIEF AND INSURANCE.		
35. Construction of Protective Irrigation Works.		
Grant for Works	1,38,618	1,55,528
Deduct item for which no charge for Establishment is admissible.		
Compensation for land	5,000	10,000
Net Grant ...	1,33,618	1,45,528
Contribution to Provincial Funds at 23 per cent. on the Net Grant ...	30,732	33,472
IRRIGATION.		
42. Major Works (Working Expenses).		
Grant for Works and Repairs	7,07,664	8,82,589
Deduct items for which no charge for Establishment is admissible.		
Compensation for land, Gódávari Delta System	1,500	5,000
Do. do. Kistna do.	1,000	500
Do. do. Cauvery do.	670	360
Rent payable to the Travancore Government under the Périyár lease	40,000	20,134
Total ...	43,170	25,994
Net Grant ...	6,64,494	8,56,595
A. 23 per cent. on the Net Grant	1,52,834	1,97,016
Direct Revenue	2,93,000	2,93,000
Deduct estimated collections in the Revenue Department of water-rates levied on lands irrigated under the Kurnool-Cuddápah Canal	1,12,100	1,12,100
Net Direct Revenue ...	1,80,900	1,80,900
B. 10 per cent. on Net Direct Revenue	18,090	18,090
Irrigation Revenue from Major (Productive) Works exclusive of enhanced share of Land Revenue	65,10,100	61,23,000
Add estimated collections in the Revenue Department of water-rates levied on land irrigated under the Kurnool-Cuddapah Canal	1,18,000	1,18,000
Total ...	66,28,100	62,41,000

GOVERNMENT OF MADRAS.

CHARGES—continued.

Part IV—continued.

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

	Budget Estimate, 1897–98.	Revised Estimate, 1896–97.
	Rs.	Rs.
C. 6 per cent. on Irrigation Revenue	3,97,686	3,74,460
Total, A + B + C ...	5,68,610	5,89,566
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.		
49. Irrigation.		
Total Grant for Works	7,31,947	6,95,535
Deduct item for which no charge for Establishment is admissible.		
Land compensation	36,500	43,651
Net Grant ...	6,95,447	6,51,884
Contribution to Provincial Funds at 23 per cent. on Net Grant ...	1,59,953	1,49,933

GOVERNMENT OF MADRAS.

CHARGES.

Part VI.

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

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

MINOR WORKS AND NAVIGATION.

PRELIMINARY ISSUE.

Public Works Department.

BUDGET ESTIMATE

OF

REVENUE AND EXPENDITURE

UNDER

IRRIGATION MINOR WORKS AND NAVIGATION

IN THE

MADRAS PRESIDENCY

FOR THE YEAR

1897-98.

MADRAS,
9th February 1897.

(Signed) W. HUGHES,
Joint Secy. 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 1897 to 31st March 1898.

	Actual Realizations, 1895-96.	Budget Estimate, 1896-97.	Revised Estimate, 1896-97.	Budget Estimate, 1897-98.
PROVINCIAL.	Rs.	Rs.	Rs.	Rs.
IRRIGATION AND NAVIGATION WORKS.				
Works for which Capital and Revenue Accounts are kept.				
Thadapalli Channel System	89	80	80	80
Arkenkotta Channel System	6	...	...	...
Kalingarayen Channel System	157	420	420	420
Pálár Anicut System	2,156	1,540	1,300	1,300
Poiney Anicut System	226	600	600	500
Cheyáru Anicut System	258	200	200	200
Chembrambakam Tank System	140	30	180	140
Madras Water-supply and Irrigation Extension	10,103	13,380	13,500	12,500
Valluru Anicut System	21	...	20	20
Tirukkóyilúr Anicut System	378	570	570	570
Mehamattur Anicut System	47	30	50	50
Vriddhachalam Anicut System	130	50	50	50
Shatiatope Anicut System	215	300	300	300
Pelandorai Anicut System	105	250	250	250
Lower Coleroon Anicut System	1,024	1,000	1,030	1,030
Maradur Anicut System	197	350	250	290
Buckingham Canal	1,08,383	1,10,000	1,10,000	1,11,400
Védáranniyam Canal	1,136	1,200	1,200	1,200
Total ...	1,24,771	1,30,000	1,30,000	1,30,000
Works for which neither Capital nor Revenue Accounts are kept, P.W.D.	6,830	10,000	5,000	5,000
AGRICULTURAL WORKS.				
Works for which neither Capital nor Revenue Accounts are kept ...	24,239	30,000	25,000	25,000
TOTAL ...	1,55,840	1,70,000	1,60,000	1,60,000

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 1897 to 31st March 1898.

	Reference to Detailed Estimate.	Actual Outlay, 1895-96.	Budget Estimate, 1896-97.	Revised Estimate, 1896-97.	Budget Estimate, 1897-98.
PROVINCIAL.	Pages.	Rs.	Rs.	Rs.	Rs.
MINOR WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.					
CAPITAL.					
1. Works ... { In progress ... ... Rs. 2,93,545 / Not commenced ... 59,125 }		4,93,224	9,22,858	5,67,515	3,52,670
2. Establishment		1,06,799	1,78,019	1,24,236	79,930
3. Tools and Plant		17,360	21,733	47,566	4,400
Receipts on capital account		—1,392	...	...	
Total, Capital ...		6,15,991	11,22,610	7,39,317	4,37,000
REVENUE.					
1. Extensions and Improvements. { In progress ... ... / Not commenced Rs. 24,913 }		21,540	22,659	31,653	24,913
2. Maintenance and Repairs		1,93,695	1,72,209	2,13,144	1,89,823
3. Establishment		60,473	57,819	69,302	62,389
4. Tools and Plant		4,851	3,875	3,875	2,875
Refunds of Revenue		133	...	...	
Total, Revenue ...		2,80,692	2,56,562	3,17,974	2,80,000
Total Minor Works for which Capital and Revenue Accounts are kept		8,96,683	13,79,172	10,57,291	7,17,000
MINOR WORKS FOR WHICH NEITHER CAPITAL NOR REVENUE ACCOUNTS ARE KEPT.					
1. Works— Major ... { In progress ... ... Rs. 52,212 / Not commenced ... 13,920 }		1,16,669	1,09,000	1,29,655	66,132
Minor		1,686	2,13,857	1,58,073	2,69,320
2. Repairs		10,79,110	10,34,051	9,71,414	9,04,818
3. Establishment		5,47,928	5,42,994	5,22,348	5,21,556
4. Tools and Plant		18,224	19,856	18,389	18,174
Refunds of Revenue		101	...	...	
Total Minor Works for which neither Capital nor Revenue Accounts are kept		17,63,718	19,19,758	17,99,879	17,80,000
AGRICULTURAL WORKS.					
Works for which neither Capital nor Revenue Accounts are kept.					
1. Works— Major ... { In progress ... Rs. 59,420 / Not commenced ... ... }		98,015	92,500	1,14,846	59,420
Minor		13,277	13,900	76,503	17,700
2. Repairs		3,13,998	3,74,389	5,52,942	3,67,213
3. Establishment		90,819	1,08,407	1,68,512	1,02,167
4. Tools and Plant		6,108	6,874	10,827	6,500
Refunds of Revenue		336	...	...	
Total, Agricultural Works ...		5,22,553	5,96,070	9,23,630	5,53,000
Total, Provincial ...		31,82,954	38,95,000	37,80,800	30,50,000

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 1897 to 31st March 1898—continued.

	Reference to Detailed Estimate.	Actual Outlay, 1895-96.	Budget Estimate, 1896-97.	Revised Estimate, 1896-97.	Budget Estimate, 1897-98.
	Pages.	Rs.	Rs.	Rs.	Rs.
GRAND TOTAL, PROVINCIAL 43. MINOR WORKS AND NAVIGATION.					
Works ... In progress ... ... Rs. 4,05,177		7,44,411	13,74,774	10,78,245	7,90,155
Works ... Not commenced 3,84,978					
Repairs		15,86,803	15,80,649	17,37,500	14,61,854
Establishment		8,06,019	8,87,239	8,84,398	7,66,042
Tools and Plant		46,543	52,338	80,657	31,949
Refunds of Revenue		570	...	...	...
Receipts on capital account		—1,392	...	...	...
Total, Provincial ...		31,82,954	38,95,000	37,80,800	30,50,000
LOCAL IRRIGATION CESS FUND.					
43. MINOR WORKS AND NAVIGATION.					
Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.					
I. Original Works		7,253	3,000	6,000	7,500
II. Repairs		20,162	5,000	6,444	2,000
Total ...		27,415	8,000	12,444	9,500

GOVERNMENT OF MADRAS.

CHARGES.

Part I.

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

	Amount of Sanctioned Estimate.	Actual Outlay to end of 1895-96.	Budget Estimate, 1896-97.	Probable Outlay during 1896-97 (Revised Estimate).	Budget Estimate, 1897-98.	Remarks and References.
PROVINCIAL.	Rs.	Rs.	Rs.	Rs.	Rs.	
43. MINOR WORKS AND NAVIGATION.						
Minor Works for which Capital and Revenue Accounts are kept.						
CAPITAL.						
Works in Progress.						
Kurnool-Cuddapah Canal ...	19,350	5,345	18,450	13,899	3,490	P.M.G. No. 766 I., dated 20th September 1895, and No. 1098 I., dated 19th December 1895.
Munnyeru Project	3,68,000	1,44,566	1,23,000	1,59,900	1,00,030	P.M.G. No. 1089 I., dated 17th December 1893, and No. 497 I., dated 12th June 1896.
Sagiléru Project	3,61,000	2,68,171	1,10,700	1,10,700	49,200	P.M.G. No. 10 I., dated 9th January 1894, and No. 915 I., dated 21st November 1894.
Pálár Anicut System	20,06,790	19,51,936	12,300	9,840	18,710	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; and No. 652 I., dated 14th August 1895; No. 84 I., dated 23rd January 1896; No. 303 I., dated 31st March 1896.
Pelandorai Anicut System ...	90,440	2,401	...	32,273	52,830	P.M.G. No. 378 I., dated 9th May 1894; No. 1088 I., dated 18th December 1895; No. 301 I., dated 31st March 1896, and No. 551 I., dated 2nd July 1896.
Lower Coleroon Anicut System.	3,65,710	47,397	78,720	1,11,165	1,10,340	P.M.G. No. 836 I., dated 8th October 1892; No. 960 I., dated 6th November 1893; No. 372 I., dated 5th May 1894; No. 181 I., dated 26th Feb. 1895; No. 273 I., dated 21st March 1896; No. 536 I., dated 25th June 1896, and No. 555 I., dated 3rd July 1896.
Buckingham Canal	86,14,000	82,03,148	1,50,140	2,50,570	1,02,400	Government of India Register No. 15 I. of 1883-84; P.M.G. No. 3 I., dated 8th January 1895.
Other Projects	...	...	...	50,970	...	
Total, Capital ..	...	...	...	7,39,317	4,37,000	
REVENUE.						
Ganjám Minor Rivers System ...	...	...	3,690	12,300	12,300	
Cumbum Tank System ...	...	...	2,460	2,460	2,460	
Thadapalli Channel System ...	...	...	4,300	8,605	6,030	
Arkenkotta do. do. ...	...	...	1,840	3,198	2,340	
Kalingarayen do. do. ...	...	...	2,500	4,900	2,350	
Pálár Anicut System	...	...	43,602	58,757	40,220	
Poiney do. do.	...	...	12,360	9,900	12,350	
Cheyáru do. do.	...	...	16,010	24,155	18,470	
Chembrambakam Tank System.	...	...	— 2,040	— 2,109	— 2,770	
Madras Water-supply and Irrigation Extension.	...	...	— 270	2,817	— 360	
Valluru Anicut System ...	...	...	900	656	3,940	
Tirukkóyilúr Anicut System ...	...	...	12,350	12,350	13,590	

GOVERNMENT OF MADRAS.

CHARGES.

Part I—continued.

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

	Amount of Sanctioned Estimate.	Actual Outlay to end of 1895–96.	Budget Estimate, 1896–97.	Probable Outlay during 1896–97 (Revised Estimate).	Budget Estimate, 1897–98.	Remarks and References.
PROVINCIAL—*continued.*	Rs.	Rs.	Rs.	Rs.	Rs.	
43. MINOR WORKS AND NAVIGATION—*continued.*						
Minor Works for which Capital and Revenue Accounts are kept—continued.						
REVENUE—*cont.*						
Mehamattur Anicut System ...	...	...	1,850	4,927	1,850	
Vriddhachalam Anicut System...	...	...	3,700	5,545	3,690	
Shatiatope Anicut System ...	...	...	14,660	14,660	14,790	
Pelandorai do. do. ...	...	...	4,190	12,800	4,180	
Lower Coleroon Anicut System.	...	...	28,390	33,584	27,780	
Nandyar Channel System ...	...	...	5,050	745	9,360	
Maradur Anicut System ...	...	...	11,110	14,790	17,240	
Chilka Lake Canal	...	...	370	370	370	
Buckingham Canal	...	...	85,110	85,614	83,470	
Védárannıyam Canal	...	...	4,430	6,890	6,350	
Total, Revenue ..	...	...	2,56,562	3,17,974	2,80,000	
Total, Minor Works for which Capital and Revenue Accounts are kept	...	...	13,79,172	10,57,291	7,17,000	
Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.						
Old maintenance charges ...	...	...	4,21,282	4,23,622	4,26,136	
Ordinary Minor Works ...	...	...	7,90,946	8,02,960	8,30,864	
Tank Restoration Works—						
Execution	...	...	6,77,530	5,38,297	4,88,000	
Minor Works, Revenue Department.	...	...	30,000	35,000	35,000	
Total ...	...	...	19,19,758	17,99,879	17,80,000	
Total, Irrigation and Navigation Works	...	...	32,98,930	28,57,170	24,97,000	
AGRICULTURAL WORKS.						
Works for which neither Capital nor Revenue Accounts are kept.						
MAJOR ORIGINAL WORKS.						
In Progress.						
Raising the Vasista Gódávari right bank from head to Chinchinada.	72,800	15,826	30,000	35,596	21,378	P.M.G., No. 56 I., dated 19th January 1893.

GOVERNMENT OF MADRAS.

CHARGES.

Part I—continued.

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

	Amount of Sanctioned Estimate.	Actual Outlay to end of 1895–96.	Budget Estimate, 1896–97.	Probable Outlay during 1896–97 (Revised Estimate).	Budget Estimate, 1897–98.	Remarks and References.
PROVINCIAL—*continued.*	Rs.	Rs.	Rs.	Rs.	Rs.	
AGRICULTURAL WORKS —*continued.*						
Works for which neither Capital nor Revenue Accounts are kept —continued.						
MAJOR ORIGINAL WORKS—*cont.*						
In Progress—cont.						
Raising the Kistna river left bank below the anicut.	78,300	23,498	10,000	10,000	35,892	P.M.G. No. 278 I., dated 28th March 1893.
Raising Mudicondanar both banks from road No. 15 to eastern limit of Kumbakónam bridge.	5,150	...	...	3,000	2,150	P.M.G. No. 402 I., dated 7th May 1896.
Total, Major Original Works ...	...	...	...	...	59,420	
Minor Original Works	...	...	...	...	17,700	
Repairs	...	...	...	...	3,67,213	
Establishment	...	...	...	...	1,02,167	
Tools and Plant	...	...	...	...	6,500	
Total, Agricultural Works ...	...	...	...	...	5,53,000	
Total, Provincial ...	...	...	...	...	30,50,000	
LOCAL IRRIGATION CESS FUND.						
43. MINOR WORKS AND NAVIGATION.						
Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.	...	...	8,000	12,444	9,500	
Total ...	...	...	8,000	12,444	9,500	

GOVERNMENT OF MADRAS.

CHARGES.

Part IV.

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

Particulars.	Budget Estimate for 1897–98. Per mensem.	Per annum.	Total.	Revised Estimate for 1896–97.
	Rs.	Rs.	Rs.	Rs.
IRRIGATION.				
43. Minor Works and Navigation.				
Provincial.				
Grant for works and repairs	...	...	22,52,009	28,15,745
Deduct items on which no charge for establishment is admissible—				
Grant for land compensation	...	...	16,150	54,360
Net Grant for Works and Repairs ...	...	...	22,35,859	27,61,385
A. Share of the Public Works establishment charges at 23 per cent. on the net grant for works and repairs.	...	...	5,14,248	6,35,118
Estimate of Direct Revenue	...	...	1,60,000	1,60,000
B. Share of the Public Works establishment charges at 10 per cent. on Direct Revenue.	...	...	16,000	16,000
Revenue due to old Irrigation under Major Productive Works.	...	...	39,29,900	38,88,000
C. Share of the Public Works establishment at 6 per cent. on Revenue.	...	...	2,35,794	2,33,280
Total, A + B + C ...	...	...	7,66,042	8,84,398
Total, Establishment Charges ...	...	...	7,66,042	8,84,398

GOVERNMENT OF MADRAS.

CHARGES.

Part VI.

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

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

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CURRENT No.

ENCLOSURES TO C. No.

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LETTER OF GOVERNMENT								
STATEMENT WITH DITTO								
PAPERS NOT FILED UP, BEING MEANT FOR DEBIATOR IN ORIGINAL.								

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