

Revenue (1897) Department.

MISCELLANEOUS SERIES.

G.O., No. 3532

DATED 10th July

[Despatch Abstract.]

Comm^d & Capt^s of Rev. Puro: P. W. DeGraing
aided on note by the Chief Engineer for Irrigation
reviewing the statements of grants for, & expendi-
ture on Irrigation, Navigation & Agricultural
works during 1896-97.

BACK PAPERS.

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

FURTHER PAPERS.

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IRRIGATION.
ACCOUNT.

Government {1897} of Madras. PUBLIC WORKS.

Recd.

Regd.

} 1897.

Enclosures

Spare copies

G.O., No. 570 I., 18th June 1897.

G.O. No. 3532 d/10 July 1897

Communicated
to the Board of W.

JUNE.

List

To the Board of W. L.R.

Expenditure on Irrigation Works

Passing orders on Note by the Chief Engineer for Irrigation reviewing the statements of grants for, and expenditure on Irrigation, Navigation and Agricultural works during 1896-97.

nd
8-7-97

Despatched 15-7-97

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

READ—the following paper :—

No. 124 I.

Note by the Chief Engineer for Irrigation.

The accompanying two statements which compare the expenditure on Irrigation, Navigation and Agricultural works during 1896-97 with the final grants for the year are submitted to Government in accordance with G.O., No. 141 W., dated 13th January 1883.

2. Statement A shows by divisions the grants for, and expenditure on, original works and repairs under the several heads, and statement B shows the total grants and expenditure, including establishment, tools and plant, &c., for each system and object of works. The figures representing expenditure have been verified by the Examiner of Public Works Accounts, but they are subject to modification when the supplementary accounts for March 1897 have been booked by the Examiner (*vide* his office-note No. 1705 D./B., dated 28th May 1897).

3. The total expenditure amounted to Rs. 62,90,728 against a total final grant of Rs. 64,50,532 as shown below :—

	Grant. RS.	Expenditure. RS.
<i>Imperial.</i>		
35. Protective Works, Irrigation	2,03,500	2,04,037
42. Major Works (Working expenses)	15,89,500	16,03,425
49. Capital Expenditure not charged to Revenue	7,85,750	7,07,402
Total	25,78,750	25,14,914
<i>Provincial.</i>		
33. Famine Relief	31,048	15,931
43. Minor Works and Navigation	38,27,150	37,49,522
Total	38,58,198	37,65,453
<i>Local.</i>		
43. Minor Works and Navigation	13,584	10,361
Grand Total	64,50,532	62,90,728

The total lapse appears as 2.47 per cent. on the whole grant, but this will be considerably reduced by the adjustments yet to be made.

4. 35. *Protective Works, Irrigation.*—The works of the Rushikulya project were proceeded with very satisfactorily, the operations of the year resulting in a small excess of Rs. 587 over the grant.

5. 42. *Major Works (Working expenses).*—The total expenditure on works and repairs under this head exceeded the grants by Rs. 3,552. On the Rushikulya project in the Ganjam division, an excess of Rs. 6,730 was incurred under maintenance and repairs in anticipation of sanction to an additional allotment which was applied for but not sanctioned. The excess is ascribed to increase in the number of completed works to be maintained. The unspent balance of Rs. 1,371 in the Kistna Western division represents the amount reserved to meet payment for compensation

of land in the supplemental accounts for March 1897. Rs. 2,798 of the grant for the Kurnool-Cuddapah canal lapsed. The detailed explanation for the short outlay promised by the Superintending Engineer, III Circle, has not yet been submitted. The excess of Rs. 2,263 under extensions and improvements in the Negapatam division is due to the write-back of expenditure ordered in G.O., No. 919 I., dated 3rd November 1896.

6. 49. *Capital Expenditure not charged to Revenue.*—The unexpended balance of the grants for works of the Gódvári delta system is Rs. 15,587, which is partly due to the unavoidable delay in settling the details of the falling shutters required for the Gódvári anicut, and partly to liabilities incurred under land compensation not having yet been adjusted. The apparent short outlay of Rs. 5,156 on works of the Kistna delta system represents the amount reserved in the Kistna Western division to meet payment for compensation of land in the supplemental accounts for March 1897. The Executive Engineer states that the Sub-Collector promised to send in bills for this amount. Under tools and plant of this system there is a liability of Rs. 26,327 on account of the two stern wheel steamers from the Kidderpore dockyard which requires adjustment. The short outlay of Rs. 1,392 in the Nellore division will disappear when land compensation charges have been adjusted. In the Tanjore division the workshop debits for shutters for the Grand anicut, Mudicondanar bridge and Keeranur dam (about Rs. 12,500) are still awaited. The apparent short outlay in the Negapatam division is attributable to the reduction of expenditure owing to the write-back of Rs. 2,500 ordered in G.O., No. 919 I., dated 3rd November 1896, from the Capital to the Revenue account of the Cauvery delta system. The grant for works of the Periyár project in the Madura division was fully worked out, but land compensation charges to the extent of Rs. 6,853 have to be adjusted in the supplemental accounts for March 1897. The short outlay of Rs. 537 on the Srívaikuntam anicut system in the Tinnevely division is ascribed to the failure of the contractor employed on the improvements to the Palayakoyal tank.

7. *Provincial—43. Minor Works and Navigation, Capital Account.*—In the Kistna Northern division, Rs. 1,440 have been reserved to meet land compensation charges for the Dondapad and Munuyéru projects. The short outlay of Rs. 1,272 under works on the Buckingham canal due to stoppage of work on the Otary nulla, will be counterbalanced by the anticipated excess under tools and plant incurred on the new steam dredger. The short outlay in the Kurnool division is due to the excavation of a channel to Sirvel tank, Cumbum tank system, not having been put in hand. The unexpended balance of Rs. 22,264 in the South Arcot division represents the amount reserved for shutters made in the Public Works Workshops for the Shatiatope and Pelandorai anicut systems. It is expected the value of these shutters will be adjusted in the supplemental accounts for March 1897. The short outlay of Rs. 4,860 in the Tanjore division is partly due to value of shutters required for the Lower Coleroon anicut not having been yet debited by the General Superintendent, Public Works Workshops, and partly to surrenders reported too late for acceptance.

8. *Revenue Account.*—The grants under this head have been fully worked out.

9. *Minor Works for which neither Capital nor Revenue Accounts are kept, Public Works Department.*—The total outlay both under original works and repairs under this head fell short of the grant by Rs. 4,153. Under the former head Rs. 5,000 have been reserved in the Kistna Northern division for land compensation.

10. *Tank Restoration.*—The grants under this head have been closely worked up to, except in the Madura division where Rs. 8,877 lapsed owing to want of subordinates. The net short outlay under this head is only Rs. 3,915.

11. *Minor Works, Revenue Department.*—The total outlay under both original works and repairs fell short of the grants by Rs. 4,389. Rs. 1,374 of the short outlay occurred in the Madura division and Rs. 1,730 in the Salem division. In the former division, for want of subordinates in Tirumangalam sub-division, work could not be proceeded with, while work done in Thirumanimuthoo naddi breaches was not measured in March 1897 owing to water passing through the river; in the latter division the progress of repairs to the Thevur anicut was backward, as great difficulty

was experienced in getting in the foundation owing to the presence of water; also a large quantity of loose stones had to be removed from the deep foundation before work could be commenced.

12. *Agricultural Works*.—In the Gódvári Central division Rs. 5,021 have been reserved to adjust the cost of land. Of the short outlay of Rs. 10,013 in the Tinnevely division Rs. 3,410 will, it is anticipated, be adjusted in the supplemental accounts for compensation for land taken up. The balance represents the amount which could not be utilized owing to late receipt of sanction to additional grant. In other divisions the variations between grant and expenditure need no comment.

13. *Local—43. Minor Works and Navigation*.—In the Salem division the short outlay of Rs. 1,121 under original works represents the saving effected by the use of West Coast wood instead of teak in constructing the inspection-shed and out-houses at Juderpalayam. No expenditure is shown against the grant for the Coimbatore division owing, probably, to its late sanction (*vide* G.O., No. 379 I., dated 13th April 1897). The short outlay in the Trichinopoly division will, it is said, be adjusted in the supplemental accounts for March 1897.

14. 33. *Famine Relief*.—No explanation has been furnished by the Superintending Engineers concerned for the short outlay of Rs. 15,117 under this head.

5th June 1897,

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

A.—STATEMENT showing by divisions the grants for, and expenditure incurred on, Original Works and repairs under Irrigation, Navigation and Agricultural works during 1896-97.

Divisions.	Imperial.										Provincial—43. Minor Works and Navigation.	
	35. Protective works— Irrigation.			42. Major Works—Working expenses.				49. Capital expenditure not charged to Revenue.			Minor Works for which Capital and Revenue Accounts are kept.	
	Outlay.		Grant.	Extensions and improvements.		Grant.	Maintenance and repairs.		Grant.	Outlay.	Grant.	Outlay.
	Grant.	Outlay.		Grant.	Outlay.		Grant.	Outlay.				
1	2	3	4	5	6	7	8	9	10	11		
Ganjām ..	Rs. 1,67,317	Rs. 1,67,773	Rs. 3,500	Rs. 3,446	Rs. 24,918	Rs. 31,648	Rs. 44,000	Rs. 38,246	Rs. 3,717	Rs. 4,011		
Vizagapatam ..	..	..	6,660	4,963	77,500	77,508	10,950	6,072	..	..		
Gódvári Eastern ..	..	..	9,845	8,656	49,900	50,164	12,131	8,176	..	..		
Do. Central ..	..	..	10,640	10,968	1,12,927	1,13,415	2,03,988	1,70,000	..	..		
Do. Western ..	..	..	360	873	2,02,988	2,03,336	71,779	66,826	1,54,722	1,53,058		
Kistna Eastern ..	..	..	3,000	2,937	72,000	71,779	1,41,798	2,17,700	..	..		
Do. Northern ..	..	..	7,865	8,232	1,43,106	1,41,798	62,564	20,065	..	..		
Do. Western ..	..	..	..	..	52,221	62,564	..	..	1,72,157	1,70,885		
Nellore ..	..	..	6,500	7,769	..	62,133	..	..	80,000	80,075		
Buckingham Canal ..	..	..	..	..	..	..	..	..	15,300	11,181		
Cuddapah ..	..	..	..	..	..	..	..	..	..	..		
Kurnool ..	..	..	..	..	..	..	..	..	..	..		
Bellary ..	..	..	1,004	904	1,500	1,613	..	1,255	6,000	6,655		
West Coast ..	..	..	..	..	..	..	..	..	10,500	10,153		
Coimbatore ..	..	..	..	..	..	..	..	..	69,243	48,979		
Salem ..	..	..	..	..	..	..	..	..	23,529	18,669		
North Arcot ..	..	..	..	..	..	..	..	..	..	..		
Chingleput ..	..	..	14,760	13,930	60,352	60,737	26,073	11,276	..	..		
South Arcot ..	..	..	2,854	5,117	15,717	15,693	12,748	10,192	4,322	4,321		
Tanjore ..	..	..	227	227	7,273	7,454	1,02,000	98,553	1,000	982		
Nagapattinam ..	..	..	..	..	..	..	..	..	..	..		
Trichinopoly ..	..	..	..	..	..	..	..	..	..	..		
Madura ..	..	..	..	..	..	..	..	..	..	..		
Tinnevely ..	..	..	..	..	..	..	..	..	..	..		
Reserve ..	..	..	..	..	..	..	..	..	..	..		
Total ..	Rs. 1,67,317	Rs. 1,67,773	Rs. 67,661	Rs. 67,943	Rs. 9,71,969	Rs. 9,75,239	Rs. 6,75,761	Rs. 6,31,677	Rs. 6,40,490	Rs. 6,06,969		
Adjustment of old maintenance charges ..	..	..	..	..	..	..	..	..	..	..		
Total ..	Rs. 1,67,317	Rs. 1,67,773	Rs. 63,400	Rs. 63,682	Rs. 8,35,383	Rs. 8,39,653	Rs. 6,75,761	Rs. 6,31,677	Rs. 6,40,490	Rs. 6,06,969		

• The amount should be shown under the departmental head I-C. Compensation.

B—STATEMENT showing by systems the grants for, and expenditure incurred on, Irrigation, Navigation and Agricultural works during 1896-97.

	Final grants for 1896-97.					Expenditure incurred in 1896-97.				
	Original works.	Repairs.	Establishment.	Tools and plant.	Total.	Original works.	Repairs.	Establishment.	Tools and plant.	Total.
IMPERIAL.										
35. CONSTRUCTION OF PROTECTIVE IRRIGATION WORKS.										
Rushikulya project	1,37,317	..	36,183	..	2,03,500	1,67,773	..	37,317	..	2,04,087
42. MAJOR WORKS—(WORKING EXPENDITURE).										
Godavari delta system	19,945	2,40,327	2,13,988	38,500	5,12,760	17,065	2,41,087	2,32,883	38,127	5,29,215
Kistna do.	14,000	4,18,094	2,50,626	58,500	7,41,220	14,278	4,16,914	2,44,023	57,486	7,32,731
Pennar anicut system	..	6,361	10,338	45	16,880	851	7,293	10,168	30	16,686
Sangam do.	4,020	20,116	16,751	..	39,887	5,174	19,527	21,047	..	45,718
Kurnool-Cuddapah canal	6,500	56,200	22,501	1,636	86,837	7,769	62,133	18,691	215	80,015
Barar tank project	1,004	1,500	1,176	..	3,680	904	1,613	1,173	..	3,690
Cauvery delta system	17,831	22,292	49,982	2,773	48,294	19,274	21,751	1,207	..	47,445
Srivaikuntam anicut system	164	50,159	18,055	78	68,300	69	50,189	18,044	..	68,224
Periyar project	..	40,000	..	..	40,000	..	40,000	..	..	40,000
Rushikulya project	..	24,918	5,881	1,300	32,099	..	31,648	7,291	..	39,751
Total	63,400	8,35,383	5,88,298	1,02,419	15,89,500	63,682	8,38,653	6,00,699	350	16,03,425
49. CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.										
Godavari delta system	67,031	..	12,958	165	80,204	51,494	..	10,810	..	62,304
Kistna do.	4,43,465	..	96,166	55,411	5,95,042	4,38,309	..	91,553	..	6,69,367
Pennar anicut system	6,000	..	952	..	6,952	4,777	..	804	..	6,581
Sangam do.	16,447	..	8,533	..	19,000	15,278	..	2,666	..	16,566
Barar tank project	1,382	..	318	..	1,700	1,255	..	289	..	1,544
Cauvery delta system	37,819	..	8,629	..	46,448	21,469	..	4,679	..	26,148
Srivaikuntam anicut system	1,080	..	248	..	1,328	542	..	125	..	667
Periyar project	1,02,000	..	21,160	..	33,160	98,553	..	21,944	..	35,225
Reserve	1,487	..	342	..	1,829	..	..	..	..	..
Total	6,75,761	..	1,44,326	34,337	7,85,750	6,31,677	..	1,32,970	331	7,07,402
Total, Imperial	9,06,478	8,35,383	7,68,807	68,082	25,78,750	8,63,122	8,38,653	7,70,986	350	25,14,914

PROVINCIAL.

43. MINOR WORKS AND NAVIGATION.
Works for which Capital and Revenue Accounts are kept.

	Capital Account.					Revenue Account.				
	Original works.	Repairs.	Establishment.	Tools and plant.	Total.	Original works.	Repairs.	Establishment.	Tools and plant.	Total.
Kurnool-Cuddapah canal	13,800	..	3,174	..	16,974	10,176	..	2,298	..	12,474
Munera project	1,29,024	..	29,676	1,200	1,59,900	1,27,801	..	28,646	..	1,57,447
Dondapad tank project	25,698	..	850	..	26,548	25,258	..	1,349	..	26,607
Sagilera project	80,000	..	18,170	230	98,400	80,075	..	18,364	..	98,439
Thadapalli channel system	6,000	..	690	..	6,690	6,555	..	1,530	..	8,185
Falar anicut system	7,000	..	1,610	..	8,610	8,451	..	1,359	..	9,810
Cheyra anicut system	3,500	..	492	..	3,992	3,691	..	836	..	4,527
Lower Coleroon anicut system	64,449	..	14,823	13,728	93,000	60,067	..	18,708	..	79,775
Maradur anicut system	1,000	..	230	..	1,230	982	..	226	..	1,208
Backingham canal	1,72,167	..	89,596	37,373	2,49,126	1,70,885	..	37,612	..	2,39,598
Pelandur anicut system	26,238	..	6,065	..	32,273	4,638	..	1,051	..	6,689
Shatitope do.	2,085	..	480	..	2,565	943	..	217	..	1,160
Nandiyar channel	4,352	..	994	..	5,346	4,321	..	994	..	5,315
Ganjām Minor Rivers system	3,717	..	855	..	4,572	4,011	..	923	..	4,934
Cumbum tank system	1,600	..	345	..	1,945	1,005	..	232	..	1,237
Total	6,40,490	..	1,18,020	52,631	7,11,041	5,06,969	..	1,09,345	298	6,62,382
Cumbum tank system	50	750	184	..	984	59	745	185	..	989
Thadapalli channel system	4,000	3,300	1,688	..	8,988	3,966	3,324	1,229	..	8,519
Arkenotta do.	700	1,600	629	..	3,929	689	1,477	342	..	2,508
Kalingaroyen do.	180	5,800	1,418	..	7,398	180	6,470	909	..	6,569
Falar anicut system	9,357	35,811	10,518	..	55,686	9,856	35,975	10,623	..	55,950
Poinoy do.	2,000	7,000	2,130	..	11,130	1,997	7,208	2,145	..	11,360
Cheyra do.	3,500	18,622	5,108	..	27,230	3,679	18,691	5,118	..	27,288
Chembambakam tank	934	708	860	109	2,611	934	697	355	109	2,105
Madras water-supply and irrigation extension	3,281	4,482	1,626	10	9,400	3,281	4,860	1,955	10	9,504
Vallur anicut system	119	413	1,124	..	1,656	119	465	1,138	..	1,722
Tirukoyilur anicut system	2,000	5,094	1,899	..	8,993	2,040	5,123	1,690	..	8,856
Mehamatur do.	802	1,950	637	..	3,389	803	1,950	637	..	3,390
Vidhachalam do.	1,504	2,500	926	..	4,930	1,504	2,572	945	..	5,066
Shatitope do.	2,194	11,000	3,065	..	16,259	2,167	11,048	3,387	..	16,293
Pelandur do.	2,446	11,442	3,219	..	17,105	2,449	11,439	3,216	..	17,102
Lower Coleroon do.	3,400	22,220	5,996	..	31,616	2,279	22,247	5,698	..	30,174
Nandiyar anicut system	..	17,004	3,936	..	20,940	..	16,994	3,914	..	20,908
Chilka lake canal	..	301	69	..	370	..	216	69	..	275
Buckingham canal	3,030	64,380	26,504	4,800	98,714	3,080	64,143	26,044	4,863	98,147
Vedrantham tank	..	4,225	1,092	..	5,317	..	4,171	1,050	..	5,244
Kurnool-Cuddapah canal	..	1,400	322	..	1,722	..	..	232	..	1,240
Ganjām Minor Rivers system	..	9,053	2,082	..	11,135	..	9,118	2,057	..	11,170
Total	31,067	2,29,391	72,904	5,275	3,88,637	31,425	2,28,184	71,046	17	3,36,642

(a) Should be shown separately under I-C. Compensation.

B.—Statement showing by systems the grants for, and expenditure incurred on, Irrigation, Navigation and Agricultural works during 1896-97—*cont.*

	Final grants for 1896-97.					Expenditure incurred in 1896-97.				
	Original works.	Repairs.	Establishment.	Tools and plant.	Total.	Original works.	Repairs.	Establishment.	Tools and plant.	Total.
PROVINCIAL—<i>cont.</i>										
<i>Minor Works for which neither Capital nor Revenue Accounts are kept.</i>										
Old maintenance charges	10,381	1,42,850	2,68,523	1,868	4,23,622	10,381	1,42,850	2,68,183	1,868	4,21,282
Ordinary works	2,77,521	4,07,325	1,66,565	10,179	8,51,590	2,69,555	4,11,138	1,57,053	10,265	8,48,044
Tank Restoration Works— Execution	..	4,45,009	1,02,352	6,676	5,54,037	..	4,41,094	1,01,101	6,590	5,48,785
“Minor Works,” Revenue Department	14,342	12,074	6,076	397	32,889	12,925	9,102	4,805	333	27,255
Total	3,02,244	10,07,258	5,38,516	19,120	18,62,138	2,92,861	10,04,184	5,29,247	19,046	18,45,368
LOCAL.										
48. MINOR WORKS AND NAVIGATION.										
<i>Minor works for which neither Capital nor Revenue Accounts are kept</i>										
Agricultural works	1,40,689	5,96,940	1,66,978	10,737	9,15,334	1,32,714	5,97,294	1,63,456	11,028	9,05,182
83. Famine relief	..	31,048	..	..	31,048	10,241	5,690	..	..	15,931
Total, Provincial	10,14,490	18,64,637	8,91,418	87,653	38,58,198	9,74,210	18,35,352	8,73,094	82,410	37,65,463
Total	7,160	6,424	..	..	13,584	6,007	4,354	..	..	10,361

ORDER—No. 570 I., dated 18th June 1897.

The above review indicates that the grants for the past official year have, except in a few cases, been satisfactorily worked out. From paragraph 5 of the note by the Chief Engineer for Irrigation, it is observed that there is a tendency to incur expenditure in anticipation of allotments. It is hoped that the instructions contained in Proceedings of Madras Government, No. 180 I., dated 22nd February 1897, for the regulation of outlay will be strictly adhered to by Superintending Engineers.

2. Ordered that a copy of these Proceedings be forwarded to the Government of India for information, with reference to its Circular No. 21 (Public Works), dated 13th December 1882.

[Here enter No. 571 I., dated 18th June 1897.]

(True Extract.)

C. H. R. Burton
Under Secretary to Government,
Irrigation Branch.

To the Chief Engineer, Public Works Department.
 " the Chief Engineer for Irrigation.
 " the Chief Engineer, Tank Restoration Scheme.
 " all Superintending Engineers.
 " the Examiner, Public Works Accounts.
 " the Revenue Department.

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