

(1) Number of Pages 98
(2) Date of repair 12.6.1968
(3) Initials of the Referencer R.V.

MADRAS RECORD OFFICE

GOVERNMENT OF MADRAS

Revenue DEPARTMENT

G.O. No.
B.P. No.

359 (Mis.)

Press
Mis.

Dated

23.2.1875 196

Not to be folded or roughly handled

GOVERNMENT OF MADRAS.

BUDGET ESTIMATE

OF THE

IRRIGATION DEPARTMENT OF THE MADRAS PRESIDENCY,

FOR THE YEAR

1875-76.

*Journal
1875-76*

CONTENTS.

	PAGE.
Part I.—Budget Estimate by heads of charge	3
II.—Do. by Canals and objects of works as well by heads of charge	4 & 5
III.—Detail of Estimate for Original works	6 to 41
IV.—Do. for Repairs	44 to 58
V.—Do. for Establishments	59
VI.—Do. for Tools and Plant	60 & 61
VII.—Do. Estimate of Irrigation Revenue	62 to 64
General Abstract of Budget Works	42 & 43
Appendix	65 to 81

GOVERNMENT OF MADRAS. BUDGET ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part I.

Abstract of the Estimated Charges for Irrigation Works in the Madras Presidency for the year from 1st April 1875 to 31st March 1876, including Ordinary and Extraordinary Expenditure.

Service Heads.	Reference to detailed Estimate.	ESTIMATE.		TOTAL.	
		1875-76.	1874-75.	1875-76.	1874-75.
	PAGE.	RS.	RS.	RS.	RS.
CAPITAL.					
Extraordinary.					
Works	6 to 41	5,90,700	5,95,000		
Establishment	59	2,06,200	1,75,000		
Tools and Plant	60	70,000	30,000		
A.—Extraordinary, Total				8,66,900	8,00,000
Ordinary.					
Works	6 to 41	5,49,700	2,11,950		
Establishment	59	1,34,000	55,000		
Tools and Plant	60	30,000	25,000		
State Outlay on Guaranteed Irrigation Works	3 and 4	11,000	14,000		
Refund to Loan Grant for Outlay incurred on Madras Water-supply and Chembrambakum Tank Project	3 and 4	1,50,000	1,00,000		
B.—Ordinary, Total				8,95,700	4,05,950
TOTAL CAPITAL, EXTRAORDINARY AND ORDINARY				17,62,600	12,05,950
REVENUE.					
Works	44 to 58	13,99,500	3,50,000		
Repairs and Maintenance of Works	59	4,33,000	4,45,000		
Establishment	61	66,000	30,000		
Tools and Plant				18,98,500	8,25,000
C.—REVENUE, TOTAL					
ORDINARY AGRICULTURAL EXPENDITURE FOR WHICH NO CAPITAL OR REVENUE ACCOUNT IS KEPT					
or Miscellaneous.					
Works	40 to 41	1,18,900	2,000		
Repairs	44 to 58	1,00,500	11,50,050		
Establishment	59	67,000			
Tools and Plant					
D.—Total				2,86,400	11,52,050
E.—TOTAL ORDINARY, B+C+D				30,80,600	23,83,000
F.—GRAND TOTAL, ORDINARY AND EXTRAORDINARY, A+E				38,43,200	31,88,950

GOVERNMENT OF MADRAS.
BUDGET ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part II.

Distribution of Extraordinary and Ordinary Grants for 1875-76 by Capital and Objects of Work.

Work.	Works.	Repairs.	Establishment.	Tools and Plant.	Total.	Grant, 1874-75.
	RS.	RS.	RS.	RS.	RS.	RS.
Extraordinary.						
Godavery. Eastern Delta Project...	1,71,000		59,700	48,900		
Western do. do.	1,55,300		54,200			
Eastern do. — Pottana Channel	25,600					
Do. do. — Ry. es' Canal	30,000		26,500			
Do. do. — Mangalipatan Canal	20,300			18,000		
Do. do. — Seetangaram do.	8,000					
Kistna. Western do. — Seetangaram do.	5,000		21,000			
Do. do. — Main Canal	10,000					
Do. do. — Nizampetam Canal	37,000					
Do. do. — ... Canal	18,500		23,800	200		
Pennair Anicut. — ...	50,000		7,000	400		
Do. do. — Engineering Pennair Anicut	20,000		14,000			
Palandora Project	40,000			2,500		
Streeriguntam do.						
At the disposal of ...						
A.—Total	5,90,700		2,06,200	70,000	8,66,900	8,00,000
Ordinary.						
Kistamraz Channel	10,000					
Village Ferry Boats in Godavery District	15,000					
Shewaga Drainage Channel	5,000					
Badam Project	1,300					
Providing Village Ferry Boats in Kistna District	3,000					
Additional Escap. for the Nellore Tank	5,000					
Updator Tank	5,300					
Diversing the flood waters from the lands of Cul-	2,000					
lamady village	30,000					
Madras Water-supply Project	28,000					
Chembrambankum Tank do.	1,000					
Seesamangalam Tank	75,000					
Restoring Palar Anicut	45,000					
Do. Poincy do.	1,500					
Channels from Pooniar river	900					
Bahoor Tank Band	15,000					
Lengthening Pooniar Anicut	5,700					
Surplus Sluice on the Coleroon North Bank	7,300					
Pallapoliem Head Sluice	3,000					
Irgoor do. do.	3,000					
Vellaloor do. do.	3,000					
Singanellore do. do.	3,000					
Pereacollam do. do.	600					
... do. do.	5,500					
Murdar ... do.	5,000					
Kodagan do. do.	5,000					
Palliem do. do.	5,000					
Tinnevely do. do.	5,000					
Nathiyuni do. do.	11,000					
State Outlay on Guaranteed Irrigation Works						
Refund to Loan Grant for Outlay incurred on						
Madras Water-supply and Chembrambankum	1,50,000					
Tank Project						
Minor New Works at the disposal of District Engi-	1,74,300					
neers						
Do. do. of Government	71,700					
B.—Total	7,91,700		1,64,000	30,000	8,95,700	4,05,950
TOTAL CAPITAL A + B	13,92,400		3,70,200	1,00,000	17,62,600	12,05,950
REVENUE.						
Repairs and Maintenance of Works		13,99,500	4,33,000	66,000	18,98,500	8,25,000
C.—Total		13,99,500	4,33,000	66,000	18,98,500	8,25,000
MISCELLANEOUS.						
Experiments on concrete	1,000					
Protective works round the Polaram Island	20,000					
River Embankment on the Godavery Western Bank	10,000					
between Vizawaram and Polaram						
Do. on the Godavery Eastern Bank between	9,000					
Rajahmundry and Rahitapuram						
Carried over	50,000					

Distribution of Extraordinary and Ordinary Grants for 1875-76, etc.—(Contd.)

Works.	Works.	Repairs.	Establishment.	Tools and Plant.	Total.	Grant, 1874-75.
	RS.	RS.	RS.	RS.	RS.	RS.
Brought forward	50,000					
River Embankment on the Godavery Eastern Bank between Rahitapuram and Parashottapuram	8,900					
Village Drainage Works	30,000					
Raising Embankments on ... from Nurismacondah to Kuditapolliem	25,000					
Minor New Works	5,000					
D.—Total	1,18,900	1,00,500	67,000		2,86,400	11,52,050
E.—TOTAL ORDINARY, B + C + D	8,20,600	15,00,000	6,64,000	96,000	30,80,600	23,83,000
TOTAL ORDINARY AND EXTRAORDINARY, A + E	14,11,300	15,00,000	8,70,200	1,66,000	39,47,500	31,83,000

Abstracts of Charges to be incurred from Imperial and Local Funds as detailed within.

	Original Works.	Repairs.	Establishment.	Tools and Plant.	Total.	Grant, 1874-75.
	RS.	RS.	RS.	RS.	RS.	RS.
Imperial Funds—In India	14,11,300	15,00,000	8,70,200	1,66,000	39,47,500	
In England					26,500	
Total as above	14,11,300	15,00,000	8,70,200	1,66,000	39,47,500	31,83,000
Local Funds—In India						
Contributions—In India						
Grand Total	14,11,300	15,00,000	8,70,200	1,66,000	39,47,500	31,83,000

GOVERNMENT
BUDGET ESTIMATE OF THE IRRIGATION DEPARTMENT
Part

Detail of Estimate for Original Works.

Executive Division.	Detail of Works and Amounts.
OUTLAY CHARGEABLE TO CAPITAL ACCOUNT.	
Ganjam... .. 1	Minor New Works
Vizagapatam 2	Do. do.
Do. 3	Kistamra Channel
EASTERN DELTA PROJECT.	
Extension of Irrigation in the Eastern Delta	
A.—HEAD WORKS.	
Improvements to Head Sluice	
B.—COST OF LAND.	
Cocanada Canal	...
Coringa do.	...
Mundapetta do.	...
Injeram do.	...
Bank do.	...
Tholiabaga Drain	...
Biccavole do.	...
Takee Main do.	...
C.—MASONRY WORKS.	
1.—Main Canals and Branches.	
Bank Canal Surplus Weir at 36½ Mile	...
Yanam do. Altering Yanam Weir	...
Samulcottah Canal—Escape over the south side Wall of Bhimavaram Aqueduct	...
Injeram do. Raising crest of Escape near Ventoor	...
2.—Distributing Channels.	
Cocanada Canal—Lead Sluices and Dividing Dams	...
Mundapetta do. do. do.	...
Coringa do. do. do.	...
Injeram do. do. do.	...
Bank do. do. do.	...
Samulcottah Canal—Masonry Sluices	...
3.—Drainage Works.	
Tholiabaga Drain—Calingulsh over head of	...
do. Aqueduct over Nadhurbada Channel	...
do. Sluice at the head of Komarapallem Channel	...
Takee Drain—Calingulsh and Aqueduct at the head of	...
Biccavole do. Escape No. 1 at ½ Mile	...
do. do. 2 at 1½ do.	...
4.—Road Bridges.	
Bridges on Samulcottah Road	...
Iron Plate Girder Bridge over Samulcottah Canal	...
Carried over	

OF MADRAS.
IRRIGATION DEPARTMENT FOR 1875-76.

III.

Irrigation, for the year 1875-76.

Amount of Estimate.	Computed Expenditure up to 31st March 1875.	ESTIMATE 1875-76. Extraordinary. Ordinary.	N.	Class of Works.	Remarks or References.
RS.	RS.	RS.			
...	...	2,500	1		
...	...	2,000	2		
27,760	...	10,000	3		Estimate under consideration.
...	...	...			
17,890	3,200	8,000			
6,545	...	800			
6,543	...	...			
3,273	...	100			
3,273	...	100			
6,220	...	1,000			
12,866	3,000	3,000			
6,300	2,500	1,000			
18,000	...	3,000			
63,020	5,500	9,000			
3,200	...	...			
1,000	...	...			
4,200	3,489	...			
*2,203	2,608	...			
10,603	6,097	...			
21,000	13,022	3,000			
9,000	614	1,200			
18,000	3,387	2,000			
9,000	...	...			
5,600	...	1,000			
†5,955	5,000	5,000			
68,555	22,023	12,200			
5,580	4,878	200			
650	722	...			
160	49	...			
†3,700	5,420	2,000			
2,220	1,674	...			
2,060	1,545	...			
14,370	14,288	2,200			
25,845	18,405	...			
...	†3,680	...			
25,845	22,085	...			
...	31,400	14,500			

*Sanctioned in G. O., No. 220, of 24th January 1872.
†Sanctioned by the Government of India, Register No. 21-I. of 1871-72 and 5-L. of 1874-75. G. O., Nos. 1,523 and 1,217, of 6th June 1871 and 7th May 1874, Item No. 3 of Budget of 1874-75.

†Revised estimate, Rupees 10,860.

†Revised estimate, Rupees 1510.

†Moiety of Imperial Fund G. O., No. 2,577, of 6th August 1869.

GOVERNMENT
BUDGET ESTIMATE OF THE INDIA
Part III.

Detail of Estimate for Original Works.

Executive Division.	No.	Detail of Work and Location.
EASTERN DELTA PROJECT.—(Continued.)		
D.—EARTH WORKS.		
1.—Main Canals and Branches.		
Goavary.—(Contd.).		
Canal...	...	...
Cocanada Canal	...	...
Mundapetta Canal	...	...
Bank do.	...	...
Coringa do.	...	...
Injeram do.	...	...
Samulcottah do.	...	...
2.—Distributing Channels.		
Cocanada Canal—Minor Channels	...	...
Mundapetta Canal—Do.	...	...
Bank do. Do.	...	...
Coringa do. Do.	...	...
Injeram do. Do.	...	...
Samulcottah do. Parallel Side Channel	...	...
3.—Drainage Works.		
Thooliabaga Drain	...	...
Takee do.	...	...
Biccavole do.	...	...
E.—NAVIGATION WORKS.		
Lock at Madapad		
Weir at do.		
Lock at Thossipudy		
Weir at do.		
Lock at Chintapilly		
Weir at do.		
Lock at Covoer		
Lock at Thapaisweram		
Weir at do.		
Lock at Pasalapudy		
Weir at do.		
Weir at Alamoer		
Tidal Weir...		
Lock at Chopellah		
Weir at do.		
Lock at Cowlaisweram		
Weir at do.		
Lock at Koolah		
Weir at do.		
Lock at 30th Mile		
Weir at do.		

Carried over ...

OF MADRAS.
IRIGATION DEPARTMENT 1875-76.
(Continued.)
Irrigation, for the year 1875-76.

Amount of Estimate.	Computed Expenditure up to 31st March 1875.	ESTIMATE, 1875-76.		No.	Class of Works.	Remarks or References.
		Extraordinary.	Ordinary.			
RS.	RS.	RS.	RS.			
		31,400	14,500			
28,060	15,923	12,000				
38,120	32,384	5,000				
12,700	15,665					
1,06,880	14,200	24,000				
41,180		10,000				
12,850	22	3,000				
84,200	97,989					
3,23,990	1,76,183	54,000				
8,000	7,954					
2,000	1,500	500				
7,500		3,000				
8,000		5,000				
2,000						
15,200		5,000				
42,700	9,454	13,500				
1,31,710	71,575					
2,62,600	40,912	30,000				
60,720	40,843	10,000				
4,55,030	1,53,330	40,000				
28,050	25,386	150				
7,360	6,952					
23,820	27,754	150				
5,060	4,738					
26,160	23,146	150				
3,070	2,626					
26,160	25,716	150				
22,370	18,528					
3,070	2,833					
21,960	*110					
3,000	500					
†7,120	4,890	2,000				
3,800	26					
18,200	15,263					
8,700	4,275	3,000				
20,100	5,224	10,000				
4,400		4,000				
22,930		5,000				
4,670		2,000				
20,600		3,000				
3,200		500				
2,83,800	1,67,967	30,100				
		1,69,000	14,500			

Sanctioned by the Government of India Register Nos. 21-I. of 1871-72, and 5 of 1874-75. G. O., Nos. 1,523 and 1,2 of 6th June 1871, and 7th May 1874, No. 3 of Budget of 1874-75.

* This work is not required.
† Revised estimate, Rupees 9,750.

GOVERNMENT

BUDGET ESTIMATE OF THE IRRIGATION DEPARTMENT FOR THE YEAR 1875-76.

Part III.

Detail of Estimate for Original Works.

No.	Detail of Work and Locality.	
Godavery.—(Contd.)		
EASTERN DELTA PROJECT.—(Concluded.)		
F.—BUILDINGS.		
4	Rest Houses	...
1	Rest House at Dowlaishweram	...
Total, EASTERN DELTA GODAVERY ...		
WESTERN DELTA PROJECT.		
EXTENSION OF IRRIGATION IN THE WESTERN DELTA.		
A.—WORKS.		
Improvements to Head Sluices...		
B.—COST OF LAND.		
1.—Main Canals and Branches.		
	Nursapur Canal Extension	...
	Palcole Lock	...
	Gummampad Lock on Attili Canal	...
	Rest House at Peravelli	...
	Drain west of Nursapur Canal	...
	Do. from 9½ Miles Mid Level Channel	...
	Gostanadi and Velpur	...
	Bank Canal	...
	Kakarapurru Canal	...
	Undi Canal	...
2.—Distributing Channels.		
	Mid Level Channel	...
	do. do.	...
	Nursapur Canal	...
C.—MASONRY WORKS.		
1.—Main Canals and Branches.		
	Chinacpaveram Channel Aqueduct	...
	Gostnaddi and Velpur Canals Weir at 14th Mile	...
	Venkiah Canal Chilakalampad Escape	...
	Ellore Canal Surplus Weir at Nundamur...	...
	Do. Escape in 43rd Mile	...
	Escape in 42nd Mile, Ellore Canal	...
	Do. 45th do. do.	...
	Undi Canal Dam at 15½ Miles	...
	Do. Surplus Weir at 7½ Miles	...
	Do. do. 11½ do.	...
	Do. do. 15½ do.	...
	Attili Canal surplus weir at 10½ miles	...
	Nursapur Canal Weir into Uputeru at Mogultur	...
Carried over ...		

OF MADRAS.

IRRIGATION DEPARTMENT FOR

(Continued.)

For the year 1875-76.

Amount of Estimate.	Computed expenditure to 31st March 1876.	ESTIMATE, 1875-76.		No.	Class of Works.	Remarks or Reference.
		Extraordinary.	Ordinary.			
RS.	RS.	RS.	RS.			
...	...	69,000	14,500			
10,020	7,255	2,000				
*3,000	2,996	...				
13,000	10,251	2,000				
+13,14,000	5,90,378	1,71,000		4		
19,500	1,000	10,500				
1,760	1,172					
4,500	400					
...	800					
...	682					
2,100	40					
5,750	400					
2,500	326					
2,000	...					
4,990	300					
23,600	4,120	4,135				
8,440	1,000					
2,760	...					
2,060	500					
13,260	1,500					
18,240	17,716					
6,230	1,000	5,000				
1,500	1,565					
14,000	11,745					
+1,050	1,050					
+450	396					
+745	737					
1,480	815	1,100				
4,910	1,000	3,910				
5,110	...	5,110				
3,550	...	3,550				
2,550	3,550					
2,380	2,380					
62,195	41,954	18,670				
		33,305				
		1,71,000	14,500			

Sanctioned by the Government of India, Register Nos. 211 of 1871-72 and 11 of 1874-75. G. O. Nos. 1,523 and 1,217 of 6th June 1874 and 7th May 1874. Item No. 3 of Budget of 1874-75. * Sanctioned in G. O. No. 2,416 of 14th October 1872. † Exclusive of Rupees 30,200 on Tools and Plant.

Sanctioned by the Government of India, Register No. 49-I. of 1874-75. G. O. No. 2,920 of 18th November 1874. Item No. 4 of Budget of 1874-75.

† Not provided for in Project, but ordered to be charged to it.

Division.	No.	Detail of Work and Locality.	Amount of Estimate.	Computed Expenditure up to 31st March 1875.	ESTIMATE, 1875-76.		No.	Class of Works.	Remarks or Reference.
					Extraordinary.	Ordinary.			
			RS.	RS.	RS.	RS.			
		Brought forward ..	...	...	1,71,000	14,500			
					33,305				
		WESTERN DELTA PROJECT (continued)							
		2.—Distributing Channels							
		Head Sluice to Mid Level Channel ...	1,480	1,480	...	...			
		Do. to Low do. do. ...	1,140	885	...	...			
		Do. and Bridge to Mid Level Channel, branch of Ellore Canal ...	1,810	1,313	...	...			
		Do. do. to Low Level Channel ...	1,080	1,069	...	...			
		Escape and regulating Bridge at 9½ Mile, Mid Level Channel ...	2,840	3,267	...	...			
		Do. do. at 11½ do. do. ...	3,600	2,784	...	...			
		Do. do. at 12½ do. do. ...	1,530	123	...	...			
		Do. do. at 2½ do. on Low Level Channel ...	1,000	1,040	...	...			
		Nursapur Canal—Re-building Sluice for Peravelly West Side Channel ...	150	165	...	...			
		Do. Building a Dam for do. ...	75	48	...	...			
		Do. Do. two Dams in Peravelly East Side Channel ...	150	63	75	...			
		Do. Head Sluice to Mountain Channel, one Dividing Dam to new Branch Channel ...	750	1,021	...	...			
		Ellore Canal—26 Head Sluices for distributing Channels ...	12,590	5,826	1,000	...			
		Twelve Village Sluices for do. in Mid Level Channel ...	5,040	2,599	1,000	...			
		Nursapur Canal—Head Sluice to Villar Channel ...	400	477	...	...			
		Six Village Sluices for distributing Channels in Low Level Channel ...	2,520	1,658	900	...			
		Drainage Diversion Sluice to China Nindracol Channel ...	1,320	367	1,000	...			
		Attali Canal—11 Sluices for distributing water ...	3,520	4,195	1,000	...			
		Nursapur Canal—Head Sluice to Diggamarroo Channel ...	750	956	...	...			
		Do. Do. to Lutchmeweram Channel ...	300	211	...	...			
		Attali Canal—10 Dividing Dams in distributing Channels ...	1,500	577	450	...			
		Mid Level Channel—Bridges at different miles ...	7,780	7,765	...	...			
		Venkiah Canal—7 Masonry Sluices ...	1,750	500	1,000	...			
		Attali Canal—Sluice at the head of Ralungy Main Branch ...	1,110	1,250	...	...			
		Velpur do. —Minor Masonries ...	3,230	...	2,000	...			
		Mid Level Channel—Drops at different miles ...	4,380	3,817	1,200	...			
		Low Level Channel—Bridge and Drop at Muddapuram ...	1,430	1,001	...	...			
		Do. Deva Road Bridge ...	1,100	1,352	...	...			
		Do. Drops at different miles ...	2,070	2,521	...	...			
		Mid Level Channel—Under Tunnel at 7th Mile ...	4,330	4,314	...	...			
		Drainage Tunnel under Peravelly East Side Channel ...	300	301	...	...			
		Do. Deva Channel ...	750	821	...	...			
		2 Do. Madugupolaveram and Rayakuduru ...	1,500	1,403	...	...			
		Do. Amadalapallem Channel ...	* 650	650	...	...			
		2 Culverts under Bridge Approaches under Pentapad and Allampurru ...	...	893	...	...			
			73,825	56,712	9,625				
		3.—Drainage Works.							
		Drain from 9½ Mile Mid Level Channel 4 Drops ...	2,650	2,219	...	...			
		Drainage Diversion from Badampudy 2 do. ...	1,550	1,694	...	...			
		Do. Bar at 5½ Mile ...	380	223	...	...			
		Pundicodu Drain Bridge near Chilakumpad ...	1,305	1,356	...	...			
		Drain west of Nursapur Canal ...	...	...	...	...			
		Bridge at 3rd Mile ...	2,370	2,370	...	...			
		Do. at 4½ do. ...	...	...	...	...			
			8,255	7,862	...	...			
			...	...	42,930	14,500			
			...	...	1,71,000				

* Not provided for in Project, but ordered to be charged to it.

Sanctioned by the Government of India, Regis-
No. 49-L of 1874 G. O. No. 2,920,
November 1871, Item No. 4 of
1874-75.

Let the Estimate for Original Work...

Division.	No.	Detail of Work and Locality.
<i>Brought forward...</i>		
WESTERN DELTA PROJECT.—(Continued.)		
D.—EARTH WORK.		
1.—Main Canal and Branches.		
Main Canal	...	...
Bank do.	...	...
Nursapur Canal extending to Mogultur	...	...
Gostanaddi and Velpur Canals	...	...
Attili Canal	...	...
Undi do.	...	...
Ellore do.	...	...
Kakarapurru Canal	...	...
Closing old Nundamur Lock Channel	...	...
2.—Distributing Channels.		
Mid Level Channel	...	...
Low do. do.	...	...
Six Metalled Crossings on Mid Level Channel	...	...
Seven do. on do. do.	...	...
New Channel at Villaur	...	...
Kontel Channel	...	...
Degamurra do.	...	...
Caza do.	...	...
Chettaram do.	...	...
Lutchmasweram Channel—	...	...
Madapad do.	...	...
Ellore Canal Minor Channels	...	...
Jumnur Channel	...	...
Nursapur Canal—New Channel from Veeravasaram West Side Channel to Macha-	...	...
pari lands.	...	...
Attili Canal Branch Channels	...	...
Nursapur Canal—Pennagonda Channel to Asanta fields	...	...
Excavating a Channel for Irrigating Nos. 6 and 7 Khandums of Yelerpad	...	...
Distributing Channels from Undi Canal	...	...
Branch Channels from Mid Level Channel	...	...
Do. from Low do.	...	...
3.—Drainage Works.		
Gostanaddi Outfall and Sluice	...	...
Kanamadurru Drain	...	...
Pondada and Rudroyakoodurru Drains	...	...
Minor Drainages	...	...
Drain west of Nursapur Canal	...	...
Caza Drain	...	...
Perumellu and Pundi Codu Drains	...	...
Drain from 2½ miles Mid Level Channel	...	...
Buggesweram Drain	...	...
Drainage diversion from No. 1 Bathampudy under Tunnel	...	...

Carried over...

Amount of Estimate.	Compan. expenditure up to 31st March 1875.	ESTIMATE, 1875-76		No.	Remarks
		Extraordinary.	Ordinary.		
RS.	RS.	RS.	RS.		
		1,71,000	14,500		
		42,930			
49,000	10,398	...			
20,000	10,000	8,000			
500	18,914	...			
64,000	23,500	5,000			
23,610	15,079	1,000			
26,600	20,352	1,000			
31,580	10,761	5,000			
31,000	5,000	10,000			
250	855	...			
2,64,540	1,14,859	38,000			
20,280	21,402	...			
6,150	5,329	...			
960	960	...			
1,120	1,120	...			
475	190	...			
1,293	936	...			
1,905	1,945	...			
360	311	...			
600	772	...			
7,560	10,210	3,000			
* 1,320	25	...			
* 830	392	...			
6,270	2,063	5,000			
1,000	4,295	...			
750	539	...			
12,150	2,506	5,000			
3,520	3,200	...			
550	500	...			
67,093	56,695	13,000			
78,500	6,201	10,000			
20,130	13,647	...			
11,550	5,238	5,000			
4,840	2,354	2,000			
15,950	13,031	...			
5,760	4,176	...			
34,600	31,185	...			
18,530	12,163	...			
6,050	6,050	...			
16,375	14,659	...			
2,12,285	1,08,704	17,000			
		1,02,930			
		1,71,000	14,500		

Sanctioned by the Government
Register No. 491. of 1874-75
2,925, of 18th November 1874
Budget of 1874-75.

* Not provided for in project but to be charged to it.

GOVERNMENT
BUDGET ESTIMATE OF THE IRRIGATION DEPARTMENT
Part IIa.

Detail of Estimate for Original Works.

No.	Detail of Work and Locality.				
	<i>Brought forward...</i>				
	WESTERN DELTA PROJECT.—(Concluded.)				
	E.—NAVIGATION.				
Nursapur Canal	Lock at Peravelli	...	...	...	...
	Do. Itampudy	...	...	...	...
	Do. Kavetum	...	...	...	...
	Do. Mogultur	...	...	...	...
Attili do.	Do. Godicherla	...	...	...	...
	Do. Gummampad	...	...	...	...
Gostanaddi do.	Head Lock	...	...	...	...
	Lock at Pennumuntra	...	...	...	...
Junction do.	Double Lock at Muddapuram	...	...	...	...
Undi do.	Head Lock	...	...	...	...
	Tidal do. at Daldepatta	...	...	...	...
Bank do.	Lock at Siddhantur	...	...	...	...
	Do. at Kodair	...	...	...	...
	Lock Weir at Peravelli	...	...	...	...
Nursapur do.	Do. Itampady	...	...	...	...
	Do. Palcole	...	...	...	...
Attili do.	Do. Gudicherla	...	...	...	...
	Do. Gummampad	...	...	...	...
Gostanaddi do.	Do. head of Gostanaddi	...	...	...	...
Bank do.	Alterations to weir at Siddhantur	...	...	...	...
	Lock Weir at Kodair	...	...	...	...
Gostanaddi and Velpur.	Lock Weir at Penumantra	...	...	...	...
Junction Canal	Restoring Navigation with Weyyeru	...	...	...	...
	F.—BUILDINGS.				
	Rest-house at Chettipetta	...	...	...	...
	Do. at Peravelli	...	...	...	...
	Do. at Thadapilligudem	...	...	...	...
	Do. at Kodair	...	...	...	...
	Do. at Attili	...	...	...	...
	Two Rest-houses	...	...	...	...
	Bungalow at Prattipad	...	...	...	...
	I.—Miscellaneous				
	...	...	...	...	...
	TOTAL, WESTERN DELTA, GODAVERY...				
	Ferry boats	...	...	...	...
6	Minor New Works	...	...	...	...
7		...	...	...	...
8	KISTNA EASTERN DELTA AND HEAD WORKS.				
	PULLAIRU CHANNEL.				
	Improving Masulipatam Section.				
	B.—COST OF LAND.				
	a. Main Canals and Branches	...	...	...	...
	b. Distribution	...	...	...	...
	<i>Carried over...</i>				

OF MADRAS.
IRRIGATION DEPARTMENT FOR 1875-76.
(Continued.)
Irrigation, for the year 1875-76.

Amount of Estimate.	Compu. Expenditure up to 31st March 1875.	ESTIMATE, 1875-76.		No.	Class of Works.	Remarks or Reference.
		Extraordinary.	Ordinary.			
RS.	RS.	RS.	RS.			
		1,71,000	1,500			
		1,62,930				
21,390	19,415	...				
21,640	21,812	...				
24,160	23,477	...				
29,330	29,660	500				
14,730	13,497	...				
15,770	13,984	500				
17,780	13,576	...				
15,000	...	10,000				
41,000	10,256	...				
14,510	14,508	500				
32,370	...	5,000				
17,720	5,000	10,000				
16,570	5,090	10,000				
6,640	5,586	...				
5,070	4,942	...				
4,370	1,000	3,370				
4,090	3,995	...				
1,580	1,830	...				
4,670	4,849	...				
35	500	1,000				
4,260	500	2,000				
3,700	...	3,700				
*72,500	20,949	...				
3,88,885	2,44,236	46,570				
2,900	2,899	...				
2,900	3,039	...				
2,900	2,995	...				
2,900	2,900	...				
2,900	2,900	...				
5,800	...	5,800				
...	579	...				
20,300	15,312	5,800				
...	4,000	...				
†13,04,640	6,56,954	1,55,300	...	5		
...	...	...	15,000	6		
...	...	...	17,000	7		
5,000	3,000	2,000	...			
		2,000	46,500			
		3,26,300				

Sanctioned by the Government of India, Register No. 49 I. of 1871-72. G. O., No. 2,925 of 18th November 1871, Item No. 4 of Budget of 1874-75.

* G. O., No. 2,925 of 18th November 1871.

† Exclusive of Rupees 1,05,360 on account of Tools and Plant.

GOVERNMENT
BUDGET ESTIMATE OF THE IRRIGATION DEPARTMENT
Part III.

Detail of Estimate for Original Works.

Executive Division.	No.	Detail of Work and Locality.
<i>(Continued.)</i>		
		<i>Brought forward...</i>
		KISTNA EASTERN DELTA AND HEAD WORKS. — (Concluded.)
		C.—MASONRY WORKS.
		1.—Main Canals and Branches.
		Constructing a Regulating Bridge across Pullairu at Pamarru
		Do. a Calingulah at Weyyur
		Inampudy Tunnel
		Total, Main Canals and Branches...
		2.—Distributaries.
		Minor Sluices
		5.—Road Bridges.
		Masulipatam Canal at Kankipad
		Do. and Poolairo Canal—Junction of
		Total, Road Bridges ..
		Total, Masonry Works...
		D.—EARTH WORK.
		1.—Main Canals and Branches.
		Widening Pullairu from Cowtaram Lock to Pamarru
		Do. do. above Pamarru
		Enlarging Pullairu from Kakipadu to the head of Polarazu Codu
		Completing sloping banks of Masulipatam Canal from 1st to 4th mile
		Enlarging Masulipatam Canal from 4th to 12½ miles
		Total, Main Canal and Branches...
		2.—Distributaries.
		Pullairu—Branch Channels from—at Pamarru
		Minor Branches
		Total, Distributaries..
		Total, Earth Work...
		3.—Miscellaneous.
		Constructing Iron Puntis
		Total, Pullairu Project...
		RYVES' CANAL.
		B.—COST OF LAND.
		a. Main Canals and Branches
		<i>Carried over...</i>

OF MALABAR.
IRRIGATION DEPARTMENT FOR 1875-76.
(Continued.)
Irrigation for the year 1875-76.

Amount of Estimate.	Computed Expenditure up to 31st March 1876.	ESTIMATE, 1875-76.		No.	Remarks or References.
		Extraordinary.	Ordinary.		
RS.	RS.	RS.			
		3,26,300	46,500		
		2,000			
7,000	5,05	...			
5,600	5,492	...			
		10,000			
12,600	10,597	10,000			
2,000	288	1,700			
2,820	1,325	...			
1,350	1,325	...			
4,170	1,325	...			
18,770	12,210	11,700			
17,000	17,280	...			
31,250	35,727	...			
27,900	28,469	...			
10,100	8,036	2,064			
65,000	61,496	6,836			
1,51,250	1,51,008	8,900			
3,870	...	...			
3,000	...	3,000			
6,870	...	3,000			
1,58,120	1,51,008	11,900			
6,100	6,100	...			
1,87,990	1,72,318	25,600		8	
3,000	3,172	...			
		3,51,900	46,500		

Sanctioned by the Government of India, Register No. 7 A. I. of 1868-69, G. O., No. 3,215 of 12th October 1868, No. 80 of 7th January 1870, and No. 2,308 of 1st October 1872, Item No. 3 of Budget of 1874-75.

Vide Part VI.

Sanctioned by the Government of India, Register No. 7 A. I. of 1868-69, G. O., No. 3,215 of 12th October 1868, and No. 80 of 7th January 1870. Item No. 8 of Budget of 1874-75.

GOVERNMENT
BUDGET ESTIMATE OF THE IRRIGATION DEPARTMENT
Part III.—

Detail of Estimates for Original Works.

Executive Division.	No.	Detail of Work and Locality.
Kistna.—(Continued.)		
		RYVES' CANAL.—(Concluded.)
		C.—MASONRY WORKS.
		1.—Main Canal and Branches.
		Head Sluice and Bridge
		Comatigunta Calingulah and Ryves' Head Sluice
		Two Calingulahs and Bridges on Gudivada Branch of Ryves' Channel... ..
		Total, Main Canal and Branches...
		2.—Distributaries.
		Minor Sluices
		5.—Road Bridges.
		Constructing a bridge of 5 arches 20' span at crossing the Kolor Road
		Do. two Accommodation Bridges with elevating platform on Ryves' Channel
		Do. an Accommodation Bridge across Pullairu near Marwada below junction of Ryves' Channel
		Do. three Accommodation Bridges on Ryves' Branch Channel
		Total, Road Bridges...
		Total, Masonry Works...
		D.—EARTH WORK.
		1.—Main Canals and Branches.
		Ryves' Canal
		Do. Channel to Pullairu near Marwada
		Enlarging and improving Gudivada Branch
		Total, Main Canals and Branches...
		2.—Distributaries.
		Minor Branches
		Total, Earth Works...
		Constructing Iron Punt
		Total, RYVES' CANAL...
Do.	10	MASULIPATAM CANAL.
		WIDENING HEAD OF MASULIPATAM CANAL.
		B.—Cost of Land.
		1. Main Canals and Branches
		C.—Masonry Works.
		1. Main Canals and Branches
		Carried over...

OF MADRAS.
IRRIGATION DEPARTMENT FOR 1875-76.
(Continued.)

Irrigation, for the year 1875-76.

Amount of Estimate.	Computed expenditure up to 31st March 1876.	ESTIMATE, 1875-76.		No.	Class of Works.	Remarks and References.
		Extraordinary.	Ordinary.			
RS.	RS.	RS.	RS.			
...	...	3,51,900	46,500			
12,300	19,260	...	2,970			
2,900	...	...	1,292			
2,960	446	...	...			
18,930	19,706	4,262	...			
2,000	118	...	...			
6,153	...	...	...			
5,660	1,398	...	...			
3,710	2,567	738	...			
3,780	3,551	...	...			
19,303	7,516	738	...			
40,233	27,340	5,000	...			
2,76,880	2,02,212	20,000	...			
58,180	44,696	5,000	...			
26,800	2,423	...	...			
3,61,860	2,49,331	25,000	...			
3,000	...	...	...			
3,64,860	2,49,331	25,000	...			
6,100	6,100	...	...			
4,14,193	2,85,943	30,000	...	9		
4,500	5,063	...	...			
30,826	26,854	2,500	...			
...	...	2,500	46,500			
...	...	3,81,900	...			

Sanctioned by the Government of India, Register No. A. I. of 1868-69. G. O., No. 3,215 of 12th October 1868 and No. 80 of 7th January 1870, Item No. 8 of Budget of 1874-75.

Vide Part VI.

Sanctioned by the Government of India, Register No. 10 L. of 1871-72. G. O., No. 1,309 of 20th May 1871. Item No. 7 of Budget of 1874-75.

GOVERNMENT
BUDGET ESTIMATE OF THE IRRIGATION DEPARTMENT
Part III.—

Detail of Estimate for Original Works

Executive Division.	Detail of Work and Locality.
Kistna.—(Continued.)	MASULIPATAM CANAL.—(Concluded.) D.—EARTH WORK. 1. Main Canals and Branches. Widening Main Canal, North side ... Do. do. South do. ... Total, Earth Work... Sundry Works ... I.—Miscellaneous. Total, MASULIPATAM CANAL...
Do. ... 11	SHIVAGUNGA DRAINAGE CHANNEL. D.—EARTH WORK: 3. Drainages ... WESTERN DELTA. Enlarging South Main Canal—Seetanagram to Dugerala. B.—COST OF LAND. 1. Main Canal ... C.—MASONRY WORKS. 1. Main Canal and Branches ... D.—EARTH WORK. 1.—Main Canals and Branches. Widening Main Canal... Improvements to Commamare Channel ... Total, Main Canals and Branches... 3.—Drainages. Kolimerla Drainage Channel ... Total, Earth Work... 3.—Miscellaneous. Constructing Iron Plates ... Total, WESTERN DELTA...
Do. ... 13	BUDAM PROJECT—DISTRIBUTION. C.—MASONRY WORKS ... D.—EARTH WORK. Main Canals and Branches. Enlarging and extending Aramandu Channel ... Minor Channels ... Total, Earth Work... Total, BUDAM PROJECT... Carried over...

OF MADRAS.
IRRIGATION DEPARTMENT FOR 1875-76
(Continued.)
Irrigation, for the year 1875-76.

Amount of Estimate.	Computed expenditure to 31st March 1876	ESTIMATE, 1875-76.		No.	Class of Works.	Remarks and References.
		Extraordinary.	Ordinary.			
RS.	RS.	RS.	RS.			
		3,81,900	46,500			
		2,500				
31,409	30,717	900	...			
37,594	22,325	16,000	...			
69,002	53,112	16,900	...			
9,202	8,240	900	...			
1,13,530	93,269	20,300	...	10		Sanctioned by the Government of India, Register No. 10 I. of 1871-72. G. O. No. 1,389 of 20th May 1871, Item No. 7 of Budget of 1874-75.
26,720	21,720	...	5,000	11	A	G. O., No. 2,584, of 11th September 1874.
...	97	...	...			
31,463	30,902	...	...			
2,10,287	2,02,843	8,000	...			
19,590	19,540	...	...			
2,29,877	2,22,383	8,000	...			
8,430	8,430	...	...			
2,38,307	2,30,813	8,000	...			
6,630	6,624	...	...			
2,76,400	2,68,436	8,000	...	12		Sanctioned by the Government of India, Register No. 7 A. I. of 1868-69., G. O. No. 3,215 of 1868, Item No. 9 of Budget of 1874-75.
11,155	9,810	...	1,300			
34,600	33,600	...	...			
665	1,690	...	...			
35,265	35,290	...	...			
46,420	45,100	...	1,300	13	A	Sanctioned in G. O., No. 2,598 of 31st October 1870. Item No. 10 of Budget of 1874-75.
...	...	4,10,200	52,800			

GOVERNMENT
BUDGET ESTIMATE OF THE IRRIGATION
Part III.—

Detail of Estimate for Original Works.

Executive Division.	No.	Detail of Work and Locality.
Kistna.—(Continued.)	14	<p>WESTERN PETA COMPLETION PROJECT.</p> <p>MAIN CANAL.</p> <p>Land Compensation</p> <p>Masonry</p> <p>Earth Works</p> <p>Do.</p> <p>15</p> <p>NIZAMPATAM CANAL.</p> <p>MAIN CANALS AND BRANCHES.</p> <p>Earth Works</p> <p>DISTRIBUTARIES.</p> <p>Earth Works</p> <p>Masonry</p> <p>Do.</p> <p>16</p> <p>BANK CANAL.</p> <p>B.—COST OF LAND.</p> <p>1.—Main Canals and Branches.</p> <p>Kollur Branch Duct</p> <p>Vellatur do.</p> <p>Iskapilly Channel do.</p> <p>Total, Main Canals and Branches...</p> <p>2.—Distributaries.</p> <p>Visherashwaram Channel</p> <p>Pottumeraka Branch</p> <p>Aravapully do.</p> <p>Vullipalem do.</p> <p>Alaparru do.</p> <p>Kenchanapudy do.</p> <p>Pregnam do.</p> <p>Total, Distributaries...</p> <p>Total, Cost of Land...</p> <p>C.—MASONRY WORKS.</p> <p>1. MAIN CANALS AND BRANCHES</p> <p>2. DISTRIBUTING CHANNELS</p> <p>5. ROAD BRIDGES</p> <p>Carried over...</p>

NOT MADE S.
TION DEPARTMENT FOR 187
(Continued.)
Irrigation, for year 1875-76.

Amount of Estimate.	Computed expenditure up to 31st March 1875.	ESTIMATE 1875-76.		Class of Works.	Remarks or References.
		Extraordinary.	Ordinary.		
RS.	RS.	RS.	RS.		
		4,10,200	52,800		
1,935	...	...	...		
5,36,085	5,000	5,000	...	14	Exclusive of Tools and Plant and capitalized assessment.
5,38,020	5,000	5,000	...		
Total...					
10,645	4,500	4,500	...		
2,095	...	...	...		
8,200	5,500	5,500	...	15	
26,940	10,000	10,000	...		
940	...	...	...		
870	...	...	...		
585	...	...	...		
2,395	...	...	...		
645	...	...	...		
655	...	...	...		
505	...	...	...		
715	...	...	...		
715	...	...	...		
595	...	...	...		
445	...	...	...		
4,275	...	...	...		
6,670	...	...	...		
28,730	...	...	...		
38,510	...	...	...		
8,825	...	...	...		
		4,25,200	52,800		

Estimate forwarded for the sanction of the Government of India. No. 3,572 of 19th December 1874.

GOVERNMENT

ESTIMATE OF THE REVENUE

Part III.

Detail of Estimate for Original Works.

Executive Division.

(Continued.)

Detail of Work and Locality.

Brought forward...

Navigation.

Improvements to Lock at Head	...	...	...	...	...
2nd-Class lock at Kollur	...	...	...	...	...
Do. Vellatur	...	...	...	...	...
Do. Penumidy	...	...	...	...	...
Do. Bobarlunka	...	...	...	...	...
Do. End	...	...	...	...	...

Total, Navigation...

Buildings.

3 Rest-houses at Kollapara, Penumidy, and Pallaputla	Rs. 1,000, 3,000, and 1,000 respectively...	...	...	...	...
--	---	-----	-----	-----	-----

Total, Masonry Works...

D.—EARTH WORK.

1. Main Canal and Branches	...	...	...	...	...
Distribution	...	...	...	...	...

Total, Excavation of Bed...

River Embankment.

Earth Works	...	...	...	...	...
-------------	-----	-----	-----	-----	-----

Total, Earthworks...

Total, Bank Canal...

17 Providing Village Ferry Boats	...	...	...	...	...
18 Minor New Works	...	...	...	...	...

PENNAIR DELTA.

IMPROVEMENTS TO SARAVAPULLY CHANNEL IN CONNECTION WITH PENNAIR ANICUT.

B.—COST OF LAND.

1. Main Canal and Branches.

Land for Main feeder...	...	...	...	...	...
Do. Sarvapally new cut and improving old Ramareddy Channel	...	...	...	...	...
Do. do. Channel	...	...	...	...	...
Do. do. Tank	...	...	...	...	...

Total...

C.—MASONRY WORKS.

1. Main Canal and Branches.

Auxilliary Head Sluice...	...	...	...	...	...
Regulating Sluice at the head of Jaffer Sahib Channel	...	...	...	...	...

Carried over...

DEPARTMENT OF

DEPARTMENT FOR 1875

Continued)

Irrigation, for the year 1875-76.

Amount of Estimate.	Computed expenditure up to 31st March 1875.	ESTIMATE 1875-76.		No.	Class of Work.	Remarks or References.
		Extraordinary.	Ordinary.			
RS.	RS.	RS.	RS.			
		4,25,200	5,800			
500		11,000				
23,500						
19,400						
18,070						
19,310						
26,620						
1,07,400		11,000				
5,000		1,000				
1,88,465		12,000				
1,15,715		10,000				
42,420		5,000				
1,58,135		15,000				
38,490		10,000				
1,96,625		25,000				
4,48,000		37,000				
...		...		...	16	
...		...		3,000	17	
...		...		10,000	18	
800		333	467			
200		...	200			
3,000		...	3,000			
12,256		6,758	5,498			
16,256		7,091	9,165			
6,350		6,378	...			
4,720		5,081	...			
		9,165				
		4,62,200		65,800		

Estimate forwarded for the sanction of the Government of India G. O. No. 3,572, of 19th December 1874.

Estimate awaited.

GOVERNMENT
BUDGET ESTIMATE OF THE IRRIGATION
Part III.—

Detail of Estimate for Original Works.

Executive Division.

No.

Detail of Work and Locality.

re.—(Continued.)

PENNAIR DELTA.—(CONTINUED.) Brought forward.

C.—MASONRY WORKS.—(Continued.)

1.—Main Canal and Branches.—(Continued.)

Converting Bridge across head of the Kristnapatam Canal into Head Sluice
Connecting existing and proposed Head Sluice by a parapet wall
Lowering floor of Head Sluice
Do. Kristnapatam Road Bridge

2.—Distributing Channels.

2 Irrigation Sluices of old Ramareddy Channel
12 Do. Sarvapally High Level Channel
6 Do. Valluru Branch Channel
6 Do. Idagaly do.
4 Do. Iparu and Pudiparty Channel
2 Do. Pudiparty Channel

Head Sluice of Iparu and Pudiparty Branch Channel

Regulating Sluice at the Idagaly Tank

Regulating Sluice of Vallur Channel

Fall near Brahmadevam

Do. in Paritapalem Channel

Do. Iparu Branch

Do. Pudiparty do.

3 Iron Aqueducts

Demolishing and rebuilding of Iron Aqueduct Piers

1 Aqueduct in High Level Channel

Surplus Sluice

Closing centre set of Under-sluices of Pennair Anicut

Land for Idagaly Branch Channel

Do. Iparu and Pudiparty Branch Channel

Do. Pudiparty Branch

Do. Valluru do.

Head Sluice of Saravally Branch

Do. of Idagaly do.

Do. of Vallur do.

Altering Shutters

3.—Road Bridges.

Bridge of 2 arches near Stonehousepet

Demolishing Bridge over old Supply Channel

4 Bridges at the Saravapully High Level Channel

D.—EARTH WORK.

1.—Main Canal and Branches.

Deepening Main Feeder

Enlarging Old Channel

Deepening new cut and improving old Ramareddy Channel

Excavating Saravapully High Level Channel

Do. Vallur Channel

Do. Idagaly do.

Total...

Carried over...

OF MADRAS.

IRIGATION DEPARTMENT FOR 1875-76

(Continued.)

Irrigation, for the year 1875-76

RS.	RS.	ESTIMATE, 1875-76.		Class of Works.	Remarks or References.
		Extraordinary.	Ordinary.		
		RS. 4,62,200	RS. 61,800		
		9,165			
990	1,189	...			
353	360	...			
100	98	...			
70	27	...			
12,583	13,133	...			
500	342	...			
3,580	3,459	...			
2,040	1,868	...			
1,560	1,891	...			
1,040	1,442	...			
520	650	...			
1,100	1,220	...			
1,730	1,292	...			
3,100	2,456	...			
1,350	1,045	...			
970	1,218	...			
1,040	1,260	...			
6,300	3,981	...			
680	56	...			
5,000	4,541	...			
6,470	6,781	...			
2,760	2,582	...			
1,875	...	1,835			
500	...	500			
200	...	200			
1,800	...	1,800			
7,340	8,956	...			
4,440	5,131	...			
3,080	4,333	...			
216	...	...			
59,991	55,317	4,335			
13,500	13,357	...			
125	103	...			
14,160	12,225	...			
27,785	25,685	...			
6,536	1,867	3,000			
820	1,262	...			
66,590	65,572	2,000			
82,120	69,720	...			
11,500	12,541	...			
11,430	15,121	...			
1,78,996	1,66,083	5,000			
		18,500			
		4,62,200	65,800		

Sanctioned by the Government of India,
Register No. 7 A.I. of 1868-69. G.O. Nos.
3,235 of 12th October 1868, 12 and 972
of 5th January and 23rd March 1869.
Item No. 13 of Budget of 1874-75.

GOVERNMENT
BUDGET ESTIMATE OF THE IRRIGATION
Part III.—
Detail of Estimate for Original Works,

Executive Division.	No.	Detail of Work and Locality.
<i>Brought forward...</i>		
Nellore.—(Concluded.)		
PENNAIR DELTA.—(CONTINUED.)		
D.—EARTH WORK.—(Continued.)		
2.—Distributing Channels.		
		Excavating Ipuru and Pudeparty Branch ...
		12 Distributing Channels of High Level Channel ...
	6	do. Idagaly Branch ...
	6	do. Pudeparty do. ...
	6	do. Vallur do. ...
	2	do. Old Ramareddy Channel ...
		Minor Branch Channel of Vallur Branch ...
	Do.	Ipuru and Pudeparty do. ...
	Do.	Idagaly Branch ...
		Total ...
3.—Drainage.		
		Drainage Channel from Aqueduct to old Ramareddy Channel ...
		Pottempaud Drainage Channel ...
		Improving old Drain from Pottempaud to Darbhalametta ...
		Surplus Channel from Sarvapully Reservoir to Main Drain ...
		Closing Bund across Ankepally Tank Supply Channel ...
		Total ...
G.—TANKS.		
		Escape in the Sarvapully Main Reservoir ...
		Lengthening and Improving Sluices of Main Reservoir ...
		Converting Sarvapully Tank into Main Reservoir ...
		Total ...
I.—MISCELLANEOUS.		
		Contingencies ...
		Total, PENNAIR DELTA ...
Do.	20	Lengthening Pennair Anicut ...
Do.	21	Additional Escape for the Nellore Tank and for altering existing Calingulah ...
Do.	22	Minor New Works ...
Cuddapah	23	Do. do. ...
Kurnool	24	Do. do. ...
Bellary	25	Restoration of Gootloor Tank. { Original Estimate Supplemental do.
Do.	26	Diverting the flood-waters from the lands of Cullamuddy Village ...
Do.	27	Minor New Works ...
<i>Carried over...</i>		

OF MADRAS.
IRRIGATION DEPARTMENT FOR 1875-76.
(Continued.)
Irrigation, for the year 1875-76.

Amount of Estimate.	Computed Expenditure to 31st March 1875.	ESTIMATE, 1875-76.		No.	Class of Works.	Remarks or References.
		Extraordinary.	Ordinary.			
RS.	RS.	RS.	RS.			
...	...	4,62,200	65,800			
		18,500				
3,405	3,608	...				
2,200	872	...				
300	108	...				
300	169	...				
600	...	...				
200	...	...				
2,640	2,807	...				
2,200	93	...				
1,760	...	...				
13,805	7,657	...				
770	900	...				
4,500	3,879	...				
2,930	4,187	...				
550	...	...				
150	297	...				
8,900	9,263	...				
1,670	1,997	...				
3,500	3,891	...				
96,574	92,762	...				
101,744	98,650	...				
...	18,623	...				
4,20,060	4,01,502	18,500	...	19		
80,000	25,000	50,000	...	20		
...	...	...	5,000	21	A.	
...	...	...	8,300	22		
...	...	...	12,000	23		
...	...	...	5,000	24		
60,500	60,500	...	...	...		
25,000	19,773	...	...	...		
85,500	80,273	...	5,300	25	A.	
4,750	2,747	...	2,000	26	A.	
...	...	...	10,000	27		
...	...	5,30,700	1,13,400			

Sanctioned by the Government of India, Register No. 7 A.I. of 1868-69. G. O., Nos. 3,215, of 12th October, 1868, 12 and 972, of 5th January and 23rd March 1869. Item No. 13 of Budget of 1874-75.

Approximate Estimate revised in G. O., No. 198, of 23rd January 1875. Estimate awaited.

G. O., No. 55, of 8th January 1869. Do. 132, of 20th do. 1874.

Do. 256, of 27th do. 1873.

GOVERNMENT
BUDGET ESTIMATE OF THE IRRIGATION
Part III.

Detail of Estimate for Original Works.

Division.	No.	Detail of Work and Locality.
Chingleput	28	<p><i>Brought forward...</i></p> <p>* MADRAS WATER SUPPLY PROJECT.</p> <p>I.—ANICUTS AND HEAD WORKS (INCLUDING SLUICES).</p> <p>A. Preliminary</p> <p>B. Land</p> <p>C. Masonry Works</p> <p>F. Buildings</p> <p>Total, I...</p> <p>II.—SUPPLY CHANNEL.</p> <p>A. Preliminary</p> <p>B. Land</p> <p>C. Masonry Works</p> <p>D. Earth Works</p> <p>I.—Miscellaneous.</p> <p>1. Contribution by the Madras Government to the Delivery Channel</p> <p>2. Contingencies and Superintendence</p> <p>Total, I., II. MISCELLANEOUS...</p> <p>Total, II. MAIN CANAL AND BRANCHES...</p> <p>III.—RESERVOIRS.</p> <p>1.—CHOLAVARAM RESERVOIR.</p> <p>A. Preliminary</p> <p>B. Land</p> <p>C. Masonry Works</p> <p>D. Earth Works</p> <p>I. Miscellaneous</p> <p>Total 1, III.—(Cholaveram Reservoir)...</p> <p>2.—RED HILL RESERVOIR.</p> <p>A. Preliminary</p> <p>B. Land</p> <p>C. Masonry Works</p> <p>D. Earth Works</p> <p>I. Miscellaneous</p> <p>Total 2., III.—Red Hill Reservoir...</p> <p>Total, III.—Reservoir...</p> <p>Total I., II., and III.—MADRAS WATER SUPPLY PROJECT...</p> <p><i>Carried over...</i></p>

OF MADRAS.

IRRIGATION DEPARTMENT 1875-76.

(Continued.)

Irrigation for the year 1875-76.

Amount of Estimate.	Expenditure up to March 1875.	ESTIMATE, 1875-76.		No.	Class of Works.	Remarks or Reference.
		Extraordinary.	Ordinary.			
RS.	RS.	RS.	RS.			
		5,30,700	1,13,400			
500	496					
1,15,811	1,13,338					
4,580	6,353					
1,20,951	1,23,487					
87,709	77,114		7,000			
1,14,349	1,12,211		10,000			
2,33,141	1,99,377					
30,832	30,832		500			
47,745	47,094					
78,577	77,926					
5,13,776	4,66,628		17,500			
29,236	25,706		2,000			
29,161	27,142		2,500			
2,17,430	2,15,368					
2,75,827	2,68,216		4,500			
58,472	51,410		4,000			
84,308	80,366		4,000			
1,99,434	1,91,033					
3,42,214	3,22,809		8,000			
6,18,041	5,91,025					
12,52,768	11,81,140		30,000			
		5,30,700	1,43,400			

* Arranged experimentally in accordance with the proposals communicated in G.O., No. 2,567, dated 10th September 1874.

Original Estimate for Rs. 6,11,759 sanctioned by the Government of India, Register No. 7 of 1868-69. G.O., No. 3,215 of 12th October 1868. Revised Estimate for Rs. 12,25,558 submitted to the Government of India—vide G.O., No. 239 of 25th January 1872, Item No. 18 of Budget of 1874-75.

Executive Division.	No.	Detail of Work and Location.
Chingleput.-(Conold.)	25	Brought forward ...
* CHEMBRAMBAUKAM TANK PROJECT.		
I.—ANICUT AND HEAD WORKS—(General).		
A. Preliminary	...	...
B. Land	...	...
C. Masonry	...	...
F. Building	...	...
I. Miscellaneous (proportion of)	...	...
Total, I. Anicut and Head Works ...		
II.—SUPPLY CHANNELS.		
A. Preliminary	...	...
B. Land	...	...
C. Masonry	...	...
D.—EARTH WORKS.		
1. New Bungairu Supply Channel	...	...
2. Old do. do.	...	...
3. Sondrykal Channel...	...	...
4. Diversion of Trunk Road No. III.	...	...
Total, D. II. (EARTH WORKS) ...		
I. Miscellaneous (proportion of)	...	...
Total, II. MAIN CHANNELS AND BRANCHES ...		
III.—RESERVOIRS.		
A. Preliminary	...	...
B. Land	...	...
C. Masonry Works	...	...
D.—EARTH WORKS.		
1. Tank Bund	...	...
2. Surplus Channel to Tank	...	...
3. Irrigation Channel from Sluice	...	...
4. Branch Road from Tank	...	...
Total, D. III. (EARTH WORK AND RESERVOIRS) ...		
I. Miscellaneous (proportion of)	...	...
Total, III. RESERVOIRS ...		
Total, I., II., III. CHEMBRAMBAUKAM TANK PROJECT ...		
North Arcot	30	Minor New Works
Do.	31	Improving the Supply Channel to Seesamangalam Tank in the Arnee Jaghire
Do.	32	Restoring Palar Anicut
Do.	33	Do. Poiney do.
Do.	34	Minor New Works
Carried over ...		

OF MADRAS.

ION DEPARTMENT OF 1874-75

(Continued)

Irrigation

Amount of Estimate.	Capital Expenditure.	Revenue Expenditure.	Ordinary
RS.	RS.	RS.	
...	...	5,80,700	1,43,400
...	...	...	...
100	150	...	3,800
18,900	11,034	...	...
2,100	2,100	...	...
16,935	14,335	...	...
38,092	60,619	...	3,800
...	...	...	...
5,285	1,866	...	3,400
1,320	1,144	...	...
14,473	14,479	...	...
35,200	35,200	...	400
7,714	7,048	...	...
40,731	40,731	...	...
98,118	97,458	...	400
84,810	11,310	...	6,200
1,89,533	1,11,778	...	10,000
...	...	...	...
5,285	1,865	...	3,400
62,384	58,628	...	2,800
63,487	48,613	...	3,500
5,693	...	...	4,500
1,643	2,473	...	...
4,568	4,568	...	...
75,391	55,654	...	8,000
1,14,315	1,64,699	...	...
2,57,375	2,80,846	...	14,200
4,85,000	4,53,243	...	28,000
...	...	...	15,000
19,440	17,810	...	1,600
...	20,000	...	75,000
...	10,000	...	45,000
...	...	...	15,000
...	...	5,30,700	3,23,000

* Also arranged experimentally in accordance with the proposals communicated in G.O., No. 2,567, of 10th September 1874.

Sanctioned by the Government of India, Resolution No. 30-L, of 1874-75, G.O., No. 1,331, of 17th July 1875, and No. 19 of Budget of 1874-75.

* Inclusive of Establishment.

G.O., No. 700, dated 24th June Item No. 21 of Budget of 1874-75.

Estimates stated.

Detail of Estimate for Canal Works Irrigation, for the year 1875-76

Sanctioned by the Government of India, Regis-
tration No. 21-E, 1869-70. G. O., No. 691, of
3rd March 1870, and No. 171, of 19th January
1871. N. No. 23 of Budget of 1874-75.
Revised estimate awaited.
G. O. No. 844, of 18th March 1873. Revised
estimate awaited.
N. No. 44, of 13th April 1873.
Estimate awaited.

G. O., No. 127, of 15th January 1875.
Vide G. O., No. 170, of 20th January 1875.
Estimates avail.

* Also arranged experimentally in accordance with the proposals communicated in G. O. No. 2,567, of 10th September 1874.

No. 2,567, of 10th September 1874.
Sanctioned by the Government of India, Register No. 17-I. of 1868-69. G. O. Nos. 844, of 16th March 1869, and 1,220, of 21st June 1872. Revised estimate of Rs. 10,40,480 submitted to Government of India. G. O., No. 1,409, of 8th June 1874. See also G. O., No. 3,231, of 16th Nov. 1874. Item No. 31 of Budget of 1874-75.

GOVERNMENT
BUDGET ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.
Part III—

Detail of Estimate for Original Works.

Executive Division.	No.	Detail of Work and Locality
Tinnevely.—(Contd.)		
STREEVIGUNTUM ANICUT PROJECT.—(Continued.)		
III.—LEFT BANK DISTRIBUTION.		
A. Preliminary	...	...
B. Land	...	...
C. Masonry Works	...	...
D. Earth Works	...	...
F. Miscellaneous	...	...
Total, III. LEFT BANK DISTRIBUTION		
IV.—RESERVOIRS AND TANKS LEFT BANK.		
A. Preliminary	...	...
B. Land	...	...
C. Masonry Works	...	...
D. Earth Works	...	...
F. Miscellaneous	...	...
Total, RESERVOIRS AND TANKS LEFT BANK		
Total, LEFT BANK SYSTEM		
V.—RIGHT BANK MAIN CANAL AND BRANCHES.		
A. Preliminary	...	...
B. Land	...	...
C. Masonry Works	...	...
D. Earth Works	...	...
F. Miscellaneous	...	...
Total, RIGHT BANK MAIN CANAL		
VI.—RIGHT BANK DISTRIBUTION.		
A. Preliminary	...	...
B. Land	...	...
C. Masonry Works	...	...
D. Earth Works	...	...
F. Miscellaneous	...	...
Total, RIGHT BANK DISTRIBUTION		
VII.—RESERVOIRS RIGHT BANK.		
A. Preliminary	...	...
B. Land	...	...
C. Masonry Works	...	...
D. Earth Works	...	...
F. Miscellaneous	...	...
Total, RESERVOIRS RIGHT BANK		
Total, RIGHT BANK SYSTEM		
Total, STREEVIGUNTUM ANICUT PROJECT		
Carried over		

OF MADRAS

IRRIGATION DEPARTMENT FOR 1875-76.

(Continued.)

Irrigation, for the year 1875-76.

Amount of Estimate.	Committed Expenditure up to 31st March 1875.	ESTIMATE, 1875-76.		No.	Class of Works.	Remarks or References.
		Extraordinary.	Ordinary.			
Rs.	Rs.	Rs.	Rs.			
		5,50,700	4,27,900			
		240				ed by the
3,171	2,043					21-E.
15,511	15,027	500				used
28,612	28,612					N
7,714	8,457					
55,008	54,139	500				
10,420	2,854					
8,819	8,819					
1,30,220	52,120	35,000				
2,360	11,810					
1,80,819	75,603	35,000				
4,94,716	3,87,407	35,740				
11,240	7,112					
30,566	25,917	4,010				
1,25,863	1,25,910					
27,350	29,420					
1,95,019	1,88,359	4,010				
2,608	1,688					
19,057	18,975	250				
17,060	17,060					
6,315	6,984					
45,040	44,707	250				
2,101	1,364					
10,169	10,177					
18,764	18,764					
5,068	5,629					
36,102	35,934					
2,76,161	2,69,000	4,260				
10,40,480	9,26,883	40,000				
		5,90,700	4,27,900	52		

by the Government of India, Register No. 17, I. of 1868-69, G. O., No. 814, of 10th March 1870, and 1,520, of 21st June 1872. Revised Estimate of Rupees 10,40,480, submitted to the Government of India for sanction. G. O., No. 1,499, of 8th June 1874. G. O., No. 3,231, of 16th November 1874. Item No. 1 of Budget of 1875-76.

GOVERNMENT
BUDGET ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Detail of Estimate for Original Works.

Executive Division.	Detail of Work and Locality.	
Tinnevely. — (Concl'd)	53 Cannadian Head Sluice	...
Do. ...	54 Muddur Melakul do.	...
Do. ...	55 Kodagan Channel do.	...
Do. ...	56 Palem do. do.	...
Do. ...	57 Tinnevely do. do.	...
Do. ...	58 Nathiyun Channel Sluice	...
Do. ...	59 Minor New Works...	...
		Total, CAPITAL ...
ORDINARY AGRICULTURAL EXPENDITURE FOR WHICH NO CAPITAL OR REVENUE ACCOUNT IS KEPT—OR MISLANEOUS AGRICULTURAL, (G. O., No. 2,003, OF 24TH JULY 1874.)		
Godavery ...	60 Making certain experiments on concrete...	...
Do. ...	61 Constructing Protective Works round the Polaveram Island...	80,000
Do. ...	62 River Embankment on the Western Bank of the Godavery between Vigesweram and Polaram	30,000
		Deduct share of Local Funds ...
Do. ...	63 Do. on the Eastern bank of do. between Rajahmundry and Rahitapuram	47,330
		Deduct share of Local Funds ...
Do. ...	64 Do. on the Eastern Bank of Godavery between Rahitapuram and Purushottapatam	12,400
		Deduct share of Local Fund ...
Do. ...	65 Investigation and construction of Village Drainage Works ...	...
Tanjore ...	66 Minor New Works ...	...
Nellore ...	67 Raising Embankments on Right Bank of Pennair from Nersimaconda to Kaditapalem ...	...
		Total, MISCELLANEOUS ...

OF THE IRRIGATION DEPARTMENT FOR 1875-76.

(Concluded.)

Irrigation, for the year 1875-76.

Amount of Estimate.	Completed Expenditure up to 31st March 1875.	ESTIMATE, 1875-76.		No.	Class of Works.	Remarks or References.
		Extraordinary.	Ordinary.			
RS.	RS.	RS.	RS.			
6,600	6,000	5,90,700	4,27,900	53	A.	G. O., No. 1,763, of 1st July 1874.
10,500	5,000	...	600	54	A.	Do. do. do.
7,250	...	...	5,500	55	A.	Do. 3,193, of 11th November 1874.
7,850	...	...	5,000	56	A.	Do. do. do.
11,100	...	...	5,000	57	A.	Do. G. O., No. 256, of 29th January 1875.
...	...	...	5,000	58		
...	...	...	15,000	59		
...	...	5,90,700	4,69,000			
5,000	2,364	...	1,000	60	A.	Sanctioned in G. O., No. 1,036, of 22nd April 1872, Item No. 36 of Budget of 1874-75.
62,000	11,328	...	30,000	61	A.	Do. 477, dated 25th February 1874.
50,000	23,610	...	10,000	62	A.	Do. 1,251, dated 14th May 1872.
23,665	14,352	...	9,000	63	A.	Do. 1,286, dated 14th May 1872.
8,930	...	...	8,900	64	A.	Do. 2,133, " 7th September 1872.
...	...	...	30,000	65	A.	Do. 2,536, dated 21st August 1874.
...	...	...	5,000	66	A.	Do. 2,007B, dated 24th July 1874.
80,000	...	...	25,000	67	A.	Approximate Estimate reviewed in G. O., No. 198, of 23rd January 1875.
...	...	...	1,18,900			

		Works.	Class of Works.
		CAPITAL.	
Vizagapatam...	Kistamuzh Channel		A
Godavery	Eastern Delta Project		A
Do.	Western do. do.		
Do.	Village Ferry Boats		
Kistna...	Eastern Delta Pulleru Channel		A
Do.	Do. do. Ryves' Canal		A
Do.	Do. do. Masulipatam Canal		A
Do.	Shevagainga Drainage Channel		
Do.	Western Delta—Sootanagaram Canal		
Do.	Budam Project		
Do.	Western Delta—Main Canal		A
Do.	Do. do. —Nizampatam Canal		
Do.	Do. do. —Bank Canal		
Do.	Providing Village Ferry Boats		A
Nellore	Pennair Anicut—Survapully Channel		A
Do.	Lengthening Pennair Anicut		A
Do.	Additional Escape for the Nellore Tank		A
Belary	Goottoor Tank		A
Do.	Diverting the flood waters from the lands of Cullamady Village		A
Chingleput	Madras Water-supply Project		A
Do.	Chembrambakum Tank Project		A
North Arcot	Seesamangalam Tank		A
Do.	Restoring Palas Anicut		A
Do.	Do. Poiney do.		A
South Arcot	Palandurai Project		A
Do.	Channels from Pooniar River		A
Do.	Bahoor Tank Bund		A
Do.	Lengthening Pooniar Anicut		A
Trichinopoly	Surplus Sluice on the Coleroon North Bank		A
Coimbatore	Pullapalliem Head Sluice		A
Do.	Irgoor do. do.		A
Do.	Vellaloor do. do.		A
Do.	Singanellore do. do.		A
Do.	Pereacollam do. do.		A
Tinnevely	Streeviguntum Anicut Project		A
Do.	Cannadian Head Sluice		A
Do.	Murdur Melakul do.		A
Do.	Kodagan Channel do.		A
Do.	Paliem do. do.		A
Do.	Tinnevely do. do.		
Do.	Nathiyuni do. do.		
	Minor New Works		
		MISCELLANEOUS.	
Godavery	Experiments on Concrete		A
Do.	Protective Works round the Polaram Island		A
Do.	River Embankment on the Godavery Western Bank between Vizeswaram and Polaram		A
Do.	Do. do. Eastern Bank between Rajahmundry and Rahitapuram		A
Do.	Do. do. Eastern Bank between Rahitapuram and Parushotapatam		A
Do.	Village Drainage Works		
Nellore	Raising Embankments on the Pennair Right Bank from Narsimakondah to Kudita-		
	patam		
	Minor New Works		
Grand Total			

IMPERIAL.			Local Funds.	Contributions.	Grand Total.
In India.	In England.	Total.			
10,000		10,000			11,000
1,71,000		1,71,000			1,71,000
1,55,300		1,55,300			1,55,300
15,000		15,000			15,000
25,600		25,600			25,600
30,000		30,000			30,000
20,300		20,300			20,300
5,000		5,000			5,000
8,000		8,000			8,000
1,300		1,300			1,300
1,300		1,300			1,300
5,000		5,000			5,000
10,000		10,000			10,000
37,000		37,000			37,000
3,000		3,000			3,000
18,500		18,500			18,500
50,000		50,000			50,000
5,000		5,000			5,000
5,300		5,300			5,300
2,000		2,000			2,000
30,000		30,000			30,000
28,000		28,000			28,000
1,600		1,600			1,600
75,000		75,000			75,000
45,000		45,000			45,000
20,000		20,000			20,000
1,500		1,500			1,500
900		900			900
15,000		15,000			15,000
5,700		5,700			5,700
7,300		7,300			7,300
3,000		3,000			3,000
3,000		3,000			3,000
3,000		3,000			3,000
3,000		3,000			3,000
40,000		40,000			40,000
600		600			600
5,500		5,500			5,500
5,000		5,000			5,000
5,000		5,000			5,000
5,000		5,000			5,000
5,000		5,000			5,000
2,46,000		2,46,000			2,46,000
11,31,400		11,31,400			11,31,400
1,000		1,000			1,000
30,000		30,000			30,000
10,000		10,000			10,000
9,000		9,000			9,000
8,900		8,900			8,900
30,000		30,000			30,000
25,000		25,000			25,000
5,000		5,000			5,000
1,18,900		1,18,900			1,18,900
12,50,300		12,50,300			12,50,300

(Signed) G. W. WALKER, Colonel, R.E.,
Secretary to Government.

GOVERNMENT OF MADRAS.
BUDGET-ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part IV.

Detail Estimate for Repairs for 1875-76.

District.		ESTIMATE, 1875-76.		ESTIMATE, 1874-75.	
		Amount.	Total.	Amount.	Total.
		Rs.	Rs.	Rs.	Rs.
Ganjam	Revenues. Repairs to Irrigation channels, tanks, and drainages	30,000			
Do.	Miscellaneous. Dykes and protective works	10,000	40,000		30,000
Vizagapatam	Repairs to Irrigation channels, tanks, and dykes	17,500	17,500		17,500
Godavery	GODAVERY DELTA. General. Godavery Anicut Head and under sluices 3 Head Locks	18,500 3,700 1,000			
		23,200			
	EASTERN DELTA. Main Canal and Branches. Main Canal, 4 miles Cocanada Canal, 28 miles Bank do., 38 do. Coringa do., 22 do. Samulcottah do., 32 do. Mundapettah do., 14 do. Injeram do., 10 do.	1,000 3,000 3,000 2,000 3,000 1,000 500			
		13,500			
	Navigation. 4 Locks and Lock weirs, Cocanada Canal 3 Do. do. Bahk do. 3 Do. do. Coringa do. 2 Locks, Samulcottah do. 2 Locks, and Lock weirs, Mundapettah Canal 1 Lock and weir, Injeram do.	600 450 450 300 300 100			
		2,200			
	Distribution. Cocanada Canal Bank do. Coringa do. Mundapettah do. Injeram do.	3,000 1,000 2,000 2,000 1,000			
		9,000			
	Buildings	200			
	Carried over	24,900	57,500		47,500

GOVERNMENT OF MADRAS.
BUDGET-ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part IV.—(Continued)

Detail Estimate for Repairs for 1875-76.

District.		ESTIMATE, 1875-76.		ESTIMATE, 1874-75.	
		Amount.	Total.	Amount.	Total.
		Rs.	Rs.	Rs.	Rs.
Godavery— (Contd.)	Brought forward... EASTERN DELTA.—(Concluded.) Miscellaneous. Drainages, Main Do., Minor River Conservancy	24,900 1,000 2,500 14,000	57,500	...	47,500
		17,600			
	Total, EASTERN DELTA	2,400			
	CENTRAL DELTA. Main Canal and branches. Main Canal, 7 miles Bendamurlunka Canal Gunnaveram or West Bank Canal, 19 miles Nagaram Main Canal, 17 miles East Bank Canal, 40 miles Amlapur Main Canal	1,500 1,000 1,000 1,700 1,000 4,000			
		10,200			
	Navigation. 1 Lock and Lock weir, West Bank Canal 1 Do. do. Nagaram Main Canal 4 Do. do. Amlapur do.	150 150 500			
		800			
	Distribution. Bendamurlunka Canal West Bank Canal Nagaram Main Canal East Bank Canal Amlapur Main Canal	2,050 600 3,000 1,000 4,000			
		10,650			
	Miscellaneous. Drainages, Main Do., Minor River Conservancy	5,000 4,000 14,000			
		23,000			
	Total, CENTRAL DELTA	44,650			
	WESTERN DELTA. Main Canal and branches. Main Canal, 6 miles Ellore do., 40 do. Junction do., 4 do. Venkiah and Weyeru do., 31 do. Undi do., 16 do. Attali Canal, 16 do. Kakarapur do., 8 do.	300 3,000 300 1,000 1,000 500 500			
	Carried over...	6,600	57,500	...	47,500

GOVERNMENT OF MADRAS.

BUDGET-ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part IV.—Continued.

Estimate for Repairs for 1875-76.

District.	ESTIMATE, 1875-76.		ESTIMATE, 1874-75.	
	Amount.	Total.	Amount.	Total.
	Rs.	Rs.	Rs.	Rs.
Brought forward...	6,800	57,500	...	47,500
WESTERN DELTA.—(Concluded.)				
Minor Canals and branches.—(Concluded.)				
Nursapur Canal, 30 miles	2,000			
Bank do., 16 do.	500			
	9,100			
Navigation.				
Lock, Ellore Canal	100			
No. Junction do.	50			
3 Locks Venkiah and Weyera Canal	150			
1 Lock and Lock Weir, Nadi do.	50			
2 Do. Attili do.	100			
7 Do. Nursapur do.	500			
2 Do. Bank do.	50			
	1,000			
Distribution.				
Ellore Canal	2,000			
Venkiah and Weyera	3,000			
Canal	2,000			
Attili Canal	3,000			
Chapiiah Canal.				
Napaka do.				
Chinchinada Channel } Nursapur Canal	8,000			
Jugnur do.				
Gostanuddy and Velpur	1,500			
Bank Canal	2,000			
	21,500			
Buildings.				
Rest-houses	500			
Miscellaneous.				
Drainage	2,000			
River Conservancy	5,000			
	7,000			
Total, WESTERN DELTA	39,100			
Other Works, tanks, etc.	26,850			
Total, GODAVERY DISTRICT	...	1,76,200	...	1,65,350
REVENUE.				
GROUP I.—DELTA WORKS.				
A.—Maintenance of Works.				
I.—Extension and Improvements.				
Masulipatam Canal.				
1. Main Canal.				
Kistna ... Constructing cattle crossings	2,300			
Constructing a wooden bridge across calingulah channel near Kankipadu	450			
Carried over...	2,750	2,33,700	...	2,12,850

GOVERNMENT OF MADRAS.

BUDGET-ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part IV.—Continued.

Details of Estimate for Repairs for 1875-76.

District.	ESTIMATE, 1875-76.		ESTIMATE, 1874-75.	
	Amount.	Total.	Amount.	Total.
	Rs.	Rs.	Rs.	Rs.
Brought forward...	750	2,33,700	...	2,12,850
Distributaries.				
Kistna.—(Continued.)				
Excavating a channel from Western Side Channel to Maddipattu fields	750			
PULLAIR.				
1.—Main Canal.				
Erecting a box—D... Pullair at Kankipadu	425			
NIZAMPATAM CANAL.				
5.—Navigation.				
Constructing a tow-path bridge over calingulah at Tidal Lock	260			
COMMAMORE CHANNEL.				
2.—Distributaries.				
Constructing 2 new wing walls with retaining wall and flooring between them in rear of Appicutla Channel Head Sluice	255			
Do. do. in front of Ramanapah Channel Head Sluice	175			
Excavating Mutloor Irrigation Channel	560			
Do. Doppalapudy Irrigation Channel	432			
Constructing Head Sluice to the Isuka Channel	850			
Do. do. to Paraly Supply Channel	483			
Total, Minor New Works	7,000			
II.—MAINTENANCE AND REPAIRS.				
Kistna River.				
10. Anicut repairs (exclusive of locks)	10,000			
7. Buildings	500			
EASTERN DELTA MAIN CANAL.				
1.—Main Canal.				
Clearing silt	1,500			
5.—Navigation.				
Lock	500			
ELLORE CANAL.				
1.—Main Canal.				
Clearing silt and strengthening bunds	3,000			
Masonry works	1,500			
Budamair Canal.				
Earthwork	500			
Masonry	400			
Carried over...	17,900	2,33,700	...	2,12,850

GOVERNMENT OF MADRAS.

BUDGET-ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part IV.-(Continued.)

Detail of Estimate for Repairs for 1875-76.

District.		ESTIMATE, 1875-76.		ESTIMATE, 1874-75.	
		Amount.	Total.	Amount.	Total.
	<i>Brought forward.</i>				
		Rs.	Rs.		
		1,900	2,33,700		2,12,850
	<i>Distributaries.</i>				
	Earthwork ...	1,400			
	Masonry ...	300			
	4.—Tanks.				
	Earthwork ...	200			
	5.—Navigation.				
	Towing-path ...	1,300			
	Lock ...	400			
	7. Buildings ...	100			
	Miscellaneous ...	60			
	<i>RYVES' CANAL.</i>				
	1.—Main Canal.				
	Earthwork ...	1,000			
	Masonry works ...	150			
	<i>Gudivada branch Canal.</i>				
	Earthwork ...	1,500			
	Masonry ...	300			
	2.—Distributaries.				
	Earthwork ...	1,500			
	4.—Tanks.				
	Earthwork ...	100			
	<i>MASULIPATAM CANAL.</i>				
	1.—Main Canal.				
	Earthwork ...	5,000			
	Masonry works ...	2,100			
	<i>West side channel.</i>				
	Earthwork ...	100			
	Masonry works ...	200			
	2.—Distributaries.				
	Earthwork ...	1,500			
	Masonry works ...	200			
	3.—Drainages.				
	Earthwork ...	900			
	5.—Navigation.				
	Towing-path ...	1,500			
	Lock ...	3,000			
	7.—Buildings.				
	Lock and store sheds ...	200			
	Miscellaneous ...	20			
	Embankments ...	1,000			
	<i>Carried over...</i>	41,830	2,33,700		2,12,850

GOVERNMENT OF MADRAS.

BUDGET-ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part IV.-(Continued.)

Detail of Estimate for Repairs

District.		ESTIMATE, 1875-76.		ESTIMATE, 1874-75.	
		Amount.	Total.	Amount.	Total.
	<i>Brought forward.</i>				
		Rs.	Rs.		
		41,830	2,33,700		2,12,850
	<i>PULLAIR HANNEL.</i>				
	1.—Main Canal.				
	Earthwork—Pullairu ...	2,500			
	Polarazukodu ...	1,000			
	Bantimilly channel ...	1,000			
	Kalidindy branch ...	200			
	Butler Kodu ...	300			
	West side Channel ...	1,000			
	Masonry works ...	500			
	2.—Distributaries.				
	Earthwork ...	5,000			
	Masonry works ...	1,000			
	3.—Drainages.				
	Earthwork ...	700			
	4.—Tanks.				
	Earthwork ...	100			
	5.—Navigation.				
	Towing-path—Pullairu ...	500			
	Bantimilly channel ...	200			
	Polarazukodu ...	200			
	Locks ...	200			
	Miscellaneous ...	20			
	<i>WESTERN DELTA MAIN CANAL.</i>				
	1.—Main Canal.				
	Clearing silt and strengthening bunds ...	4,000			
	5.—Navigation.				
	Locks ...	500			
	<i>NIZAMPATAM CANAL.</i>				
	1.—Main Canal.				
	Nizampatam Canal. Clearing silt and strengthening bunds ...	5,000			
	West side channel do. do. ...	500			
	East do. do. ...	500			
	Masonry works ...	200			
	2.—Distributaries.				
	Earthwork ...	1,500			
	Masonry works ...	150			
	3.—Drainages.				
	Earthwork ...	450			
	5.—Navigation.				
	Towing-path ...	1,300			
	Locks ...	2,000			
	<i>Carried over...</i>	72,150	2,33,700		2,12,850

GOVERNMENT OF MADRAS.

BUDGET-ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part IV.—(Continued.)

Detail Estimate for Repairs for 1875-76.

District.		ESTIMATE, 1875-76.		ESTIMATE, 1874-75.	
		Amount.	Total.	Amount.	Total.
		Rs.	Rs.	Rs.	Rs.
	Brought forward...	72,150	2,33,700	...	2,12,850
	WESTERN BANK CHANNEL.				
	1.—Main Canal.				
Kistna.—(Continued.)	Main Canal. Clearing silt and strengthening bunds	700			
	Vellatoor branch do. do.	100			
	Iskapally channel do. do.	250			
	Masonry works	400			
	2.—Distributaries.				
	Earthwork	1,400			
	Masonry works	150			
	3.—Drainages.				
	Earthwork	1,000			
	4.—Tanks.				
	Earthwork	200			
	5.—Navigation.				
	Towing-path	700			
	Locks	150			
	7.—Buildings	200			
	COMMAMORE CHANNEL.				
	1.—Main Canal.				
	Clearing silt and strengthening bunds	3,000			
	Masonry works	400			
	2.—Distributaries.				
	Earthwork	4,000			
	Masonry works	500			
	3.—Drainages.				
	Earthwork	2,000			
	Masonry works	200			
	4.—Tanks.				
	Earthwork	1,000			
	5.—Navigation.				
	Towing-path	1,500			
	Locks	100			
	7.—Buildings	300			
	SEPARATE DRAINAGES IN KISTNA DELTA.				
	3.—Drainages.				
	Shervagunga drainage channel	1,500			
	Widening Guntoor Nullah	1,100			
	Total, Repairs...	93,000			
	Total, Group I...	1,00,000			
	Carried over...	1,00,000	2,33,700	...	2,12,850

GOVERNMENT OF MADRAS.

BUDGET-ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part IV.—(Continued.)

Detail of Estimate for Repairs for 1875-76.

District.		1875-76.		ESTIMATE, 1874-75.	
		Amount.	Total.	Amount.	Total.
		Rs.	Rs.	Rs.	Rs.
	Brought forward...	1,00,000	2,33,700	...	2,12,850
Kistna.—(Continued.)	GROUP II.—RIVER-FED TANKS.				
	A.—Maintenance of Works.				
	II.—MAINTENANCE AND REPAIRS.				
	4.—Tanks.				
	Tanks in Divy ...	5,000			
	GROUP III.—HILL STREAMS.				
	A.—Maintenance of Works.				
	II.—MAINTENANCE AND REPAIRS.				
	4.—Tanks.				
	Earthwork	500			
	Masonry works	200			
	Total, Group III...	700			
	GROUP IV.—RAIN-FED TANKS.				
	A.—Maintenance of Works.				
	II.—MAINTENANCE AND REPAIRS.				
	4.—Tanks.				
	Tanks in 3rd Range	2,000			
	Do. in 4th do.	3,000			
	Do. in 5th do.	5,300			
	Total, Group IV...	11,300			
	Miscellaneous.				
	River embankments	11,500			
	Do. conservancy	500			
	Main drainage	1,000			
	Total, Miscellaneous...	13,000			
	Total, Kistna District...	...	1,30,000	...	1,09,600
Nellore ...	SOUTHERN DIVISION.				
	MAINTENANCE OF WORKS.				
	Pennair Delta.				
	Extensions and Improvements	4,700			
	Repairs to Head Works	6,000			
	Clearing Silt, Main Canal	300			
		11,000			
	Carried over...	11,000	3,63,700	...	3,22,450

GOVERNMENT OF MADRAS.
BUDGET-ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part IV.—(Continued.)

Detail of Estimate for Repairs for 1875-76.

District.		ESTIMATE, 1875-76.		ESTIMATE, 1874-75.	
		Amount.	Total.	Amount.	Total.
		Rs.	Rs.	Rs.	Rs.
	Brought forward...	11,000	3,63,700	...	3,22,450
Nellore.—(Continued.)	<i>Sarvapally Canal.</i>				
	Clearing silt and repairing embankments ...	2,000			
	Repairs to regulating and surplus sluices and to aqueducts ...	300			
	<i>DISTRIBUTION CHANNELS.</i>				
	<i>Valluru Channel.</i>				
	Clearing silt and repairing embankments ...	600			
	Repairs to masonry works ...	400			
	<i>Idagati Channel.</i>				
	Clearing silt and repairing embankments ...	100			
	Repairs to masonry works ...	50			
	<i>Ippuru Branch Channel.</i>				
	Clearing silt and repairing embankments ...	50			
	Repairs to masonry works ...	100			
	<i>Pudiparty Branch Channel.</i>				
	Clearing silt and repairing embankments ...	50			
	Repairs to masonry works ...	100			
	<i>Kristnapatam Channel.</i>				
	Clearing silt and repairing embankments ...	800			
	Repairs to masonry works ...	200			
	<i>Mundipudy Channel.</i>				
	Clearing silt and repairing embankments ...	800			
	Repairs to masonry works ...	100			
	Total, <i>Sarvapally Canal</i> ...	5,650			
	<i>Jaffer Sahib's Canal.</i>				
	Clearing silt and repairing embankments ...	300			
	Repairs to masonry works ...	100			
	<i>DISTRIBUTION CHANNELS.</i>				
	<i>Idur Channel.</i>				
	Clearing silt and repairing embankments ...	200			
	Repairs to masonry works ...	100			
	<i>Macherlapalem Branch Channel.</i>				
	Clearing silt and repairing embankments ...	50			
	Repairs to masonry works ...	20			
	<i>Narukur Branch Channel.</i>				
	Clearing silt and repairing embankments ...	50			
	<i>Narigonda Branch Channel.</i>				
	Clearing silt and repairing embankments ...	50			
	Repairs to masonry works ...	20			
	<i>Totapally Guduvu Branch Channel.</i>				
	Clearing silt and repairing embankments ...	100			
		990			
	Carried over...	16,650	3,63,700	...	3,22,450

GOVERNMENT OF MADRAS.
BUDGET-ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part IV.—(Continued.)

Detail of Estimate for Repairs for 1875-76.

District.		1875-76.		ESTIMATE, 1874-75.	
		Amount.	Total.	Amount.	Total.
		Rs.	Rs.	Rs.	Rs.
	Brought forward...	16,650	3,63,700	...	3,22,450
Nellore.—(Continued.)	<i>Leburu Channel.</i>				
	Clearing silt and repairing embankments ...	990			
	Repairs to masonry works ...	400			
	<i>Nidimusali Branch Channel.</i>				
	Clearing silt and repairing embankments ...	100			
	Repairs to masonry works ...	300			
	<i>Gangapatam Branch Channel.</i>				
	Clearing silt and repairing embankments ...	100			
	Repairs to masonry works ...	200			
	<i>Mypaud Branch Channel.</i>				
	Clearing silt and repairing embankments ...	500			
	Repairs to masonry works ...	130			
	<i>Indukurpet Branch Channel.</i>				
	Clearing silt and repairing embankments ...	100			
	Repairs to masonry works ...	80			
	<i>Pottapudy Branch Channel.</i>				
	Clearing silt and repairing embankments ...	50			
	Total Jaffer Sahib's Canal ...	3,050			
	Total, Main Canals and Distribution Channels.	19,700			
	<i>Drainage Works.</i>				
	Main Drain ...	1,400			
	Singareddy Drainage Channel ...	250			
	Mutukur Drain ...	250			
	Clearing and improving drains between the Kristnapatam and Amaluru Irrigation Channels.	600			
	Clearing and improving drains between the Amaluru and Nidimusali Irrigation Channels.	500			
	Total ...	3,000			
	<i>Tanks.</i>				
	Repair of tanks in Southern Delta of Pennair.	7,000			
	Total, Pennair Delta Irrigation Works ...	29,700			
	<i>Other Works.</i>				
	Southern Range ...	13,000			
	Central do. ...	18,000			
	Northern do. ...	...			
	East Coast Canal Range ...	200			
	Total, Other Works...	500			
	<i>Miscellaneous.</i>				
	Southern Range ...	2,000			
	Grand Total...	...	71,700	...	65,000
	Carried over...	...	35,400	...	3,87,450

GOVERNMENT OF MADRAS.
BUDGET-ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part IV—(Continued.)

Detail Estimate for Repairs for 1875-76.

District.		ESTIMATE, 1875-76.		ESTIMATE, 1874-75.	
		Amount.	Total.	Amount.	Total.
		Rs.	Rs.	Rs.	Rs.
	<i>Brought forward...</i>	...	4,12,250	...	3,87,450
Cuddapah	Repairs to Irrigation channels, tanks, dykes, and drainages...	60,000	60,000		65,000
Kurnool	Do. do. do. do.	40,000	40,000		30,000
Bellary	Do. do. do. do.	36,300			
	Maintenance allowance of Toongabudra river channels	15,200	51,500		51,500
Presidency	Repairs to Irrigation channels, tanks, dykes, and drainages	3,000	3,000		3,000
Chingleput	Do. do. do. do.	2,000	1,10,000		1,10,000
North Arcot...	Repairs to Irrigation channels, tanks, dykes, and drainages	1,35,000	1,35,000		1,20,000
South Arcot...	<i>Lower Coleroon Anicut.</i>				
	Repairs to Main Canals and distributing channels	20,000			
	Repairs to Locks	1,000			
	<i>Pelandorat Anicut.</i>				
	Repairs to Main Canals and branches...	2,000			
	<i>Vettur Anicut.</i>				
	Repairs to channels and tanks	12,000			
	Do. to Anicut	4,000			
	<i>Manimuthanady Anicut.</i>				
	Repairs to channels and tanks	6,000			
	<i>Guddilum Anicut.</i>				
	Repairs to channels, etc.	3,000			
	<i>Poniar Anicut.</i>				
	Repairs to channels and tanks	10,000			
	<i>Vicravandy Anicut.</i>				
	Repairs to channels and tanks	1,000			
	Do. to spring channels	2,000			
	Do. to river and rain-fed tanks	59,000			
	Grand Total ...		1,20,000		1,20,000
Salem	Repairs to Irrigation channels, tanks, dykes, and drainages	60,000	60,000		53,000
Tanjore	<i>Cauvery Delta.</i>				
	Extensions and improvements	15,000			
	<i>No. 1 Range.</i>				
	Cauvery River	9,000			
	Codamoorthy do.	2,500			
	Vennaur do.	7,000			
	Vadavaur do.	400			
	Carried over...	18,900	10,14,900		9,39,950

GOVERNMENT OF MADRAS.
BUDGET-ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part IV—(Continued.)

Detail of Estimate for Repairs for 1875-76.

District.		ESTIMATE, 1875-76.		ESTIMATE, 1874-75.	
		Amount.	Total.	Amount.	Total.
		Rs.	Rs.	Rs.	Rs.
	<i>Brought forward...</i>	18,900	10,14,900		9,39,950
	<i>No. 1 Range.—(Continued.)</i>				
	Vettur River	4,000			
	Distributing channels	3,000			
	Drainage works	1,300			
		27,200			
	<i>No. 2 Range..</i>				
	Cauvery River	5,000			
	Codamoorthy do.	4,000			
	Thiroomulrajanaur do.	1,000			
	Moodicondanaur do.	300			
	Puttaur do.	2,000			
	Araselaar do.	1,000			
	Veerasholen do.	1,500			
	Vennaur do.	1,000			
	Vettur do.	200			
	Pamaniaur do.	100			
	Coriyaur do.	200			
	Pandanyaur do.	4,000			
	Distributing channels	1,500			
	Drainage works	200			
	Buildings		23,000		
	<i>No. 3 Range.</i>				
	Cauvery River	3,000			
	Thiroomulrajanaur do.	2,000			
	Moodicondanaur do.	1,500			
	Velapaur do.	400			
	Vikiramanaur do.	600			
	Puttaur do.	1,600			
	Araselaar do.	2,000			
	Veerasholen do.	1,800			
	Palanaur do.	700			
	Vennaur do.	2,000			
	Vettur do.	5,000			
	Odembogy do.	1,000			
	Pandanyaur do.	500			
	Vellyaur do.	200			
	Peranadyanaur do.	2,000			
	Distributing channels	9,000			
	Drainage works	2,000			
		35,200			
	<i>No. 4 Range.</i>				
	Codamoorthy River	200			
	Peranadyanaur do.	50			
	Vettur do.	1,000			
	Pamaniaur do.	500			
	Coryaur do.	50			
	Harichundranady do.	3,000			
	Carried over...	5,800	10,14,900		9,39,950

GOVERNMENT OF MADRAS.

BUDGET-ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part IV—(Continued.)

Detail of Estimate for Repairs for 1875-76.

District.	ESTIMATE, 1875-76.		ESTIMATE, 1874-75.	
	Amount.	Total.	Amount.	Total.
	Rs.	Rs.	Rs.	Rs.
Brought forward...	5,800	10,14,900		9,39,950
No. 1 Range.—(Continued.)				
Moollyaur River	100			
Adapaur do.	6,000			
Pandanyaur do.	200			
Vellyaur do.	500			
Distributing channels	3,000			
Drainage works	500			
	16,100			
No. 2 Range.				
Vellaur River	3,000			
Pamanyaur do.	2,000			
Coryaur do.	3,000			
Harichandranady do.	1,000			
Moollyaur do.	100			
Pandanyaur do.	500			
Vellyaur do.	200			
Distributing channels	1,000			
	10,800			
Total, CAUVERY DELTA...	1,27,400			
Others works	18,100			
Miscellaneous.				
Coleeroon River	23,000			
Grand Total		1,68,500		1,55,000
Trichinopoly ...				
Agundacauvery River.				
Repairs to the Agundacauvery river banks, 64 miles	3,500			
Defensive works including nanul planting	6,000			
Repairs to sluices, calingulah, etc.	1,000			
Maintenance of plantation, nanul and bank watchers	1,500			
	12,000			
Cauvery River.				
Repairs to the Cauvery River banks, 28 miles	12,000			
Defensive works including nanul planting	3,000			
Repairs to sluices, calingulah, etc.	1,000			
Maintenance of plantations, nanul and Bank Watchers	1,000			
	17,000			
Carried over...		11,83,400		10,94,950

GOVERNMENT OF MADRAS.

BUDGET-ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part IV—(Continued.)

Detail of Estimate for Repairs for 1875-76.

District.		ESTIMATE, 1875-76.		ESTIMATE, 1874-75.	
		Amount.	Total.	Amount.	Total.
		Rs.	Rs.	Rs.	Rs.
	Brought forward...	...	11,33,400	...	10,94,950
	Coleeroon River.				
Trichinopoly. (Concl'd.)	Repairs to Coleeroon River banks, 43 miles	12,000			
	Defensive works including nanul planting	5,000			
	Repairs to sluices, calingulah, etc.	1,000			
	Maintenance of plantations, nanul and Bank Watchers	2,000			
		20,000			
	Iyaur River.				
	Repairs to the Iyaur River banks	1,500			
	Defensive works including nanul planting	200			
	Repairs to sluices, calingulahs, etc.	200			
		1,500			
	Ooppaur River.				
	Repairs to the Ooppaur River banks	150			
	Defensive works including nanul planting	150			
	Repairs to sluices, calingulahs, etc.	1,200			
		1,500			
	Weycondam Channel.				
	Repairs to the Weycondam channel bank	3,000			
	Do. sluices and calingulahs, etc.	2,000			
	Clearance of beds	3,000			
		8,000			
	Peravally Channel.				
	Repairs to the Peravally channel bank	1,500			
	Do. sluices and calingulahs, etc.	1,000			
	Clearance of beds	500			
		3,000			
	Pudu Iyen North and South Channels.				
	Repairs to the Pudu Iyen North and South channel banks	1,000			
	Do. sluices and calingulahs, etc.	1,500			
	Clearance of beds	500			
		3,000			
	Ponneri Channel.				
	Repairs to the Ponneri channel bank	1,000			
	Do. sluices and calingulahs, etc.	500			
	Clearance of beds	1,000			
	Maintenance of plantations, etc.	250			
		2,750			
	Minor repairs to Tanks and Channels	21,250			
	Grand Total	...	90,000	...	81,000
	Carried over...	...	12,73,400	...	11,75,950

GOVERNMENT OF MADRAS.
BUDGET-ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part IV.—(Concluded.)

Detail of Estimate for Repairs for 1875-76.

District.		ESTIMATE, 1875-76.		ESTIMATE, 1874-75.	
		Amount.	Total.	Amount.	Total.
	Brought forward...	Rs. ...	Rs. 12,73,400	Rs. ...	Rs. 11,75,950
Coimbatore ...	Repairs to Irrigation channels, tanks, dykes, and drainages ...	70,000			
	Miscellaneous ...	5,000	75,000		60,000
Malabar ...	Repairs to Irrigation channels, tanks, dykes, and drainages ...	1,100	1,100		1,100
Madura ...	Do. do. do. ...	50,000	50,000		50,000
Tinnevely ...	SRI VIGNANTHAM ANICUT PROJECT.				
	I. Anicut and Head Works.				
	Anicut ...	1,000			
	Buildings ...	500			
	Miscellaneous ...	500			
	Total, I...	2,000			
	II. Main Canal, Left Bank.				
	Main channel ...	1,500			
	Tanks ...	4,000			
	Distributaries ...	1,500			
	Total, II...	7,000			
	III. Main Canal, Right Bank.				
	Main channel ...	1,000			
	Tanks ...	5,000			
	Distributaries ...	500			
	Total, III ..	6,500			
	Total, I., II., III., Repair Striviguntum Anicut Project ...	15,500			15,000
	Other Works.				
	Tanks and Channels ...	85,000			65,000
			1,00,500		
	Total, Repairs...		15,00,000		13,67,050

(Signed) G. W. WALKER, Colonel, R.E.,
Secretary to Government.

GOVERNMENT OF MADRAS.
BUDGET-ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part V.

BUDGET ESTIMATE OF IRRIGATION ESTABLISHMENT FOR 1875-76.

NUMBER.		Rate of Salary.	1875-76.			1874-75.	Remarks.
1874-75.	1875-76.		Per Mensem.	Per Annum.	Total.		
			Rs.	Rs.	Rs.	Rs.	
1	1	Chief Engineer, 2nd Class, and Joint Secretary to Government in the Irrigation Department ..	2,000	2,000	24,000		
		Pay Proper ...	243½	243½	2,922		
5	5	Clerks from 20 to 150 Rupees each.	300	300			
3	3	Draughtsmen and Estimators, 40, 50, and 75 Rupees each ...	165	165			
5	5	Office Servants ...	35	35			
				500	6,000		
1	1	Deputy Controller ...	550	550	6,600		
		Pay Proper ...	70	70	840		
		Presidency house-rent ...	45	45	540		
		Proportionate charges on account of Travelling Allowance ...			1,000		
		Do. Office Establishment ...		500	6,000		
		Survey Establishment ...			10,000		
		Proportionate charges on account of General Establishment ...			1,48,298		
						2,06,200	1,75,000
		ORDINARY.					
		Conservancy Establishment as per Appendix ...			1,11,601		
		Proportionate charges on account of General Establishment ...			5,37,399		
		Survey Establishment ...			15,000		
						6,64,000	5,00,000

(Signed) G. W. WALKER, Colonel, R.E.,
Secretary to Government.

GOVERNMENT OF MADRAS.
BUDGET-ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part VI.

Budget-Estimate of Tools and Plant of the Irrigation Department for 1875-76.

MISCELLANEOUS PLANT.															
Navigation.		Machinery for Mills.		Surveying and Mathematical Instruments.		Tools.		Office Furniture.		Camp Equipage.		Total.		Grand Total.	
1875-76.	1874-75.	1875-76.	1874-75.	1875-76.	1874-75.	1875-76.	1874-75.	1875-76.	1874-75.	1875-76.	1874-75.	1875-76.	1874-75.	1875-76.	1874-75.
CAPITAL OUTLAY.															
EXTRAORDINARY.															
Godavery	45,000	20,000	...	...	57	1,000	213	...	...	...	...	48,900	20,075	...	...
Kistna...	10,000	...	...	...	...	1,000	200	...	...	...	...	18,000	1,420	...	...
Nellore	...	...	...	...	...	3,400	980	...	...	...	...	200	...	...	...
South Arcot	...	...	...	...	...	200	191	...	...	...	...	400	...	...	...
At the disposal of Government	55,000	20,000	4,550	...	...	400	400	...	...	...	...	2,300	7,310	...	...
ORDINARY.															
Ganjam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vizagapatam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Godavery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kistna...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nellore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kurnool	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bellary	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chingleput	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Souk-Arcot	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Salem	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tanjore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Trichinopoly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Coimbatore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Madura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
At the disposal of Government	500	...	5,600	...	...	2,480	5,440	14,300	9,363	100	30	30,000	35,000	70,000	25,000

REVENUE.											
Repairs and Carriage from place to place.											
Godavery	44,180	8,000	100	50	200	2,760	2,620	60	50	50	66,000
Kistna	1,500	2,350	200	50	200	100	100	100	100	100	30,000
Nellore	2,150	2,500	200	50	200	100	100	100	100	100	30,000
Cuddapah	2,500	2,500	200	50	200	100	100	100	100	100	30,000
Kurnool	2,500	2,500	200	50	200	100	100	100	100	100	30,000
Chingleput	2,500	2,500	200	50	200	100	100	100	100	100	30,000
Bellary	2,500	2,500	200	50	200	100	100	100	100	100	30,000
South Arcot	2,500	2,500	200	50	200	100	100	100	100	100	30,000
Coimbatore	2,500	2,500	200	50	200	100	100	100	100	100	30,000
Tinnevely	2,500	2,500	200	50	200	100	100	100	100	100	30,000
General Superintendent, Public Works Stores	50,030	10,350	200	50	200	2,760	2,620	60	50	50	66,000
At the disposal of Government											30,000

(Signed) G. W. WALKER, Colonel, R.E.,

(Signed) G. W. WALKER, Colonel, R.E.,
Secretary to Government.

GOVERNMENT OF MADRAS.
BUDGET-ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part VII.

Estimate of the Irrigation Department for 1875-76.

	Budget-estimate.	Regular estimate.	Budget-estimate.	Actuals of
	1875-76.	1874-75.	1874-75.	1873-74.
	Rs.	Rs.	Rs.	Rs.
<i>Godavery Eastern Delta.</i>				
Receipts from Navigation	13,000	14,000	15,000	12,734
Sales of Canal Produce	10,000	15,000	10,000	14,312
Miscellaneous	2,000	4,000	1,000	6,685
	25,000	33,000	26,000	33,731
<i>Godavery Central Delta.</i>				
Receipts from Navigation	4,600	4,000	2,500	4,085
Sales of Canal Produce	4,000	3,000	6,000	3,509
Miscellaneous	100	500	...	119
	8,700	7,500	8,500	7,713
<i>Godavery Western Delta.</i>				
Receipts from Navigation	14,000	18,000	18,000	13,781
Sales of Canal Produce	2,000	2,000	3,000	1,294
Miscellaneous	100	1,000	100	1,070
	16,100	21,000	21,100	16,145
<i>Ellore Range.</i>				13
Miscellaneous	...	...	...	...
Total, Godavery	49,800	61,500	55,600	57,602
<i>Kistna Eastern Delta.</i>				
<i>(Bezurah Range.)</i>				
Receipts from Navigation	8,000	8,000	...	7,953
Sales of Canal Produce	300	500	...	27
Miscellaneous	600	600	...	583
	8,900	9,100	...	8,563
<i>(Masulipatam Range.)</i>				
Receipts from Navigation	900	1,000	...	710
Sales of Canal Produce	1,500	1,500	...	1,246
Miscellaneous	800	1,750	...	539
	3,200	4,250	...	2,495
<i>Kistna Western Delta.</i>				
<i>(Ropully Range.)</i>				
Miscellaneous	250	250	...	244
<i>(Baupetla Range.)</i>				
Miscellaneous	50	50	...	28
	12,400	13,650	13,364	11,330
Total, Kistna	62,200	75,150	68,964	68,932
Carried over				

GOVERNMENT OF MADRAS.
BUDGET-ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part VII.—(Continued.)

Estimate of Revenue of the Irrigation Department for 1875-76.

	1875-76.	Regular estimate.	Budget-estimate.	Actuals of
	Rs.	Rs.	Rs.	Rs.
<i>Brought forward ...</i>	62,200	75,150	68,964	68,932
<i>Pennair Anicut.</i>				
<i>(Jaffer Saib's Main Canal.)</i>			110	...
Sales of Canal Produce	...	...	...	...
<i>(Survapully Branch Canal.)</i>			190	...
Sales of Canal Produce	...	...	...	...
<i>(Southern Range.)</i>	50	50	...	5
Miscellaneous	...	...	...	...
Total, Nellore	50	50	300	5
<i>Cauvery Delta.</i>				
<i>(Rivers and Channels.)</i>	2,500	...	1,500	...
Sales of Canal Produce, Nanul Grass	...	...	...	81
<i>(Combaconum Range.)</i>	...	100	...	...
Miscellaneous	...	...	...	85
<i>(Tanjore Range.)</i>	...	100	...	...
Miscellaneous	...	...	...	509
<i>(Mayaveram Range.)</i>	...	500	...	...
Miscellaneous	...	...	...	1
<i>(Munnargudi Range.)</i>	...	...	...	...
Miscellaneous	...	...	...	676
Total, Tanjore	2,500	700	1,500	...
<i>Striviguntum Anicut.</i>				
<i>(Tinnevelly Range.)</i>	...	50	...	6
Miscellaneous	...	...	...	...
<i>(Shermadavy Range.)</i>	...	...	...	2
Miscellaneous	...	...	...	...
<i>(Main Channels.)</i>	500	...	...	...
Sales of Canal Produce, Nanul Grass	1,200	...	...	...
Water-supply to Tuticorin Municipality	...	...	...	...
Total, Tinnevelly	1,700	50	...	8
<i>Madras Water-supply.</i>				
Water-supply to Madras Municipality	10,000	...	10,000	...
Total, Chingleput	10,000	...	10,000	...
<i>Palar Anicut.</i>				
<i>(Wallajah Range.)</i>	50	50	...	25
Miscellaneous	...	...	...	...
Total, North Arcot	50	50	...	25
Carried over	76,500	76,000	80,764	69,646

GOVERNMENT OF MADRAS.

BUDGET-ESTIMATE OF THE IRRIGATION DEPARTMENT FOR 1875-76.

Part VII.—(Concluded.)

Estimate of Revenue of the Irrigation Department for 1875-76.

	Budget-estimate. 1875-76.	Regular estimate. 1874-75.	Budget-estimate. 1874-75.	Actuals of 1873-74.
Brought forward ...	Rs. 76,500	Rs. 76,000	Rs. 80,764	Rs. 69,646
Pelandorai Anicut.				
(Virdachellum Range.)				9
Miscellaneous ...	25	...	...	9
Total, South Arcot ...	25	...	...	1
(Musery Range.)				1
Miscellaneous ...	10	...	...	1
Total, Trichinopoly ...	10	...	...	8
(Berhampore Range.)				8
Miscellaneous ...	10	...	...	...
Total, Ganjam...	10	...	...	39,263
Total Receipts from Navigation ...	40,500	45,000	44,500	20,388
Sales of Canal Produce ...	20,800	22,000	23,800	10,013
Miscellaneous* ...	15,245	9,000	12,464	69,664
Grand Total ...	76,545	76,000	80,764	

* This item includes receipts on account of water-supply to Municipalities.

(Signed) T. MOSS,
Controller of P.W. Accounts.

MADRAS,
9th December 1874.

APPENDIX.

Detailed Statement of Conservancy Establishment, "Ordinary" being an Appendix to Part V. of the Budget Estimate of 1875-76.

NUMBER.	1874-75.	1875-76.	Rate of Salary.	Per Mensem.	Per Annum.
GANJAM DISTRICT.					
Neeranicum Establishment ...	...	...	Rs. ...	Rs. ...	Rs. 1,244
VIZAGAPATAM DISTRICT.					
Neeranicum Establishment ...	...	...	...	...	Rs. 1,527
GODAVERY DISTRICT.					
Anicut Establishment.					
1	1	1	Maistry ...	18	18
1	1	1	Do. ...	15	15
1	1	1	Do. ...	12	12
25	25	25	Lascars ...	6	150
15	15	15	Do. ...	5	75
1	1	1	Writer ...	15	15
1	1	1	Gumastah ...	15	15
1	1	1	Shroff ...	10	10
1	1	1	Anicut Superintendent ...	120	120
				430	5,10
IRRIGATION ESTABLISHMENT.					
No. I. or Eastern Delta.					
1	1	1	1st Class Delta Superintendent.	70	70
4	4	4	2nd „ do. do. ...	55	220
3	3	3	3rd „ do. do. ...	40	120
14	14	14	Lascars ...	5	70
2	2	2	Calingulah Lascars ...	6	12
1	1	1	Do. do. ...	5	5
				497	5,9
No. II. or Central Delta.					
2	2	2	1st Class Delta Superintendents.	70	140
1	1	1	2nd „ do. do. ...	55	55
2	2	2	3rd „ do. do. ...	40	80
11	11	11	Lascars... ..	5	55
				330	3,9
No. III. or Western Delta.					
2	2	2	1st Class Delta Superintendents.	70	140
5	5	5	2nd „ do. do. ...	55	275
7	7	7	3rd „ do. do. ...	40	280
23	23	23	Lascars ...	5	115
1	1	1	Channel Peon ...	6	6
2	2	2	Do. do. ...	5	10
1	1	1	Irrigation Writer ...	15	15
1	1	1	Calingulah Lascar ...	6	6
5	5	5	Do. do. ...	5	25
				872	10,
Nundamoor Surplus Weir.					
1	1	1	Superintendent ...	8	8
1	1	1	Lascar ...	6	6
				14	
Carried over...					
				...	25,

the Public Works Department on Department for 1875-76.

1874-75.	Remarks.
Rs. 1,244	G. O., No. 1,311, of 23rd Aug. 1870, Revenue Department, and No. 17 of 3rd Sept. 1870, Public Works Department.
Rs. 1,527	G. O., No. 3,581, of 19th Dec. 1874.
Rs. 5,10	G. O., No. 1,038, of 22nd April, and No. 2,537 of 7th September 1874.
Rs. 5,9	G. O., No. 1,587, of 15th June, and No. 2,537 of 7th September 1874.
Rs. 3,9	G. O., No. 1,038, of 22nd April, and No. 2,537, of 7th September 1874.
Rs. 10,	
Rs. 25,	
Rs. 2,771	1,872

Detailed Statement of Conserva

G. O., No. 1,038,
of 22nd April,
and No. 2,537,
of 7th September
1874.

O., No. 3,591,
of 21st Decem-
ber 1874.

G. O., No. 1,038,
of 22nd April,
and No. 2,537,
of 7th September 1874.

Statement of Conservancy Establishment, "Ordinary,"
etb.—(Continued.)

G. O., No. 1,038, of
22nd April, and
No. 2,537, of 17th
September 1874.

G. O., No. 3,591, of
21st Dec. 1874.

G. O., No. 1,038,
of 22nd April,
and No. 2,537,
of 17th Septem-
ber 1874.

ment, "Ordinary," under the Public Works Department,
etc.—(Continued)

Statement of Conservancy Establishment, "Ordinary," under the Public Works Department
etc.—(Continued.)

Detailed Statement of Conservancy Establishment, "Ordinary," under the Public Works Department, etc.—(Continued.)

NUMBER.			Rate of Salary.	1875-76.			1874-75.	Remarks.
1874-75.	1875-76.			Per Mensem.	Per Annum.	Total.		
			Rs.	Rs.	Rs.	Rs.	Rs.	
		<i>Brought over...</i>	...	...	19,383	53,035	50,886	
		<i>Aukunnerru Lock.</i>						
1	1	Gumastah ...	12	12				
6	6	Lascars ...	6	36				
				48	576			
		<i>Tidal Lock.</i>						
1	1	Gumastah ...	12	12				
6	6	Lascars ...	6	36				
				48	576			
		<i>BOODAMAIR CHANNEL.</i>						
		<i>Casarapully Lock.</i>						
1	1	Gumastah ...	10	10				
3	3	Lascars ...	5	15				
				25	300			
		<i>BUNTUMILLY CHANNEL.</i>						
		<i>Cowtram Lock.</i>						
1	1	Gumastah ...	10	10				
3	3	Lascars ...	5	15				
				25	300			
		<i>PULLERU CHANNEL.</i>						
		<i>Pannurru Lock.</i>						
1	1	Gumastah ...	10	10				
3	3	Lascars ...	5	15				
				25	300			
		<i>Western Delta.</i>						
1	1	Navigation Superintendent ...	50	50				
1	1	Lascar ...	5	5				
				55	660			
		<i>NIZAMPATAM CANAL.</i>						
		<i>Dugerala Lock.</i>						
1	1	Gumastah ...	15	15				
6	6	Lascars ...	5	30				
				45	540			
		<i>Kuchepudy Lock.</i>						
1	1	Gumastah ...	10	10				
4	4	Lascars ...	5	20				
				30	360			
		<i>Intur Lock.</i>						
1	1	Gumastah ...	10	10				
4	4	Lascars ...	5	20				
				30	360			
		<i>Carried over...</i>	...	...	23,355	53,035	50,886	

Detailed Statement of Conservancy Establishment, "Ordinary," under the Public Works Department, etc.—(Continued.)

NUMBER.			Rate of Salary.	1875-76.			1874-75.	Remarks.
1874-75.	1875-76.			Per Mensem.	Per Annum.	Total.		
			Rs.	Rs.	Rs.	Rs.	Rs.	
		<i>Brought over...</i>	...	...	23,355	53,035	50,886	
		<i>Nullavada Lock.</i>						
1	1	Gumastah ...	10	10				
4	4	Lascars ...	5	20				
				30	360			
		<i>Tidal Lock.</i>						
1	1	Gumastah ...	10	10				
4	4	Lascars ...	5	20				
				30	360			
		<i>Western Bank Channel.</i>						
1	1	Gumastah ...	15	15				
7	7	Lascars ...	6	42				
				57	684			
		<i>Commamore Channel.</i>						
1	1	Gumastah ...	12	12				
4	4	Lascars ...	6	24				
				36	432			
		<i>Jagerlamudy Lock.</i>						
1	1	Gumastah ...	12	12				
4	4	Lascars ...	6	24				
				36	432			
		<i>Travelling allowances</i>	...	...	240			
		<i>Total, Kistna District...</i>	...	...	...	25,863	25,983	
		<i>NELLORE DISTRICT.</i>						
		<i>WATER REGULATION.</i>						
		<i>Southern Delta of Pennair.</i>						
1	1	Delta Superintendent...	70	70				
1	1	Gumastah ...	15	15				
1	1	Lascar ...	6	6				
				91	1,092			
		<i>Ancient Superintendent</i>	60	60				
1	1	Gumastah ...	10	10				
1	1	Lascar ...	7	7				
15	15	Do. ...	6	90				
				167	2,004			
		<i>Survapully Branch Channel.</i>						
1	1	Head Lascar ...	6	6				
4	4	Lascars ...	5	20				
				26	312			
		<i>Gumastah for seven months ...</i>	10	10	70			
		<i>Carried over...</i>	...	...	3,478	78,898	76,869	

G. O., No. 3,401, of 13th November 1865, and G. O., No. 369, of 31st January 1866.

G. O., No. 3,114, of 1st October 1866.

G. O., No. 586, of 23rd February 1869.

G. O., No. 2,449, of 12th August 1867.

G. O., No. 2,688, of 16th August 1869, and No. 3,690 of 18th November 1869.

G. O., No. 2,482, of 28th Sept. 1871, and No. 34 of 8th January 1872.

*Detailed Statement of Conservancy Establishment, "Ordinary," under the Public Works Dept.
etc.—(Continued.)*

Detailed Statement of Conservancy Establishment, "Ordinance" Department, etc.—(Continued) under the Public Works

Detailed Statement of

Establishment, "Ordinary," under the Public Works Department, etc.—(Continued.)

NUMBER.		Rate of Salary.	1875-76.			1874-75.	Remarks.
1874-75.	1875-76.		Per Mensem.	Per Annum.	Total.		
		Rs.	Rs.	Rs.	Rs.	Rs.	
		...	...	1,521	86,728	84,699	
		<i>Brought over...</i>					
		<i>Mahendravady</i>					
1	1	Monigar	12	12			
3	3	Lascars	4½	13½			
				25½	306		
		<i>Govindavady Ch...</i>					
1	1	Monigar	12	12			
3	3	Lascars	4½	13½			
				25½	306		
		<i>Poinery Anicut and Channel</i>					
1	1	Lascar	5	5			
1	1	Do.	3¼	3¼			
				8¼	105		
		<i>Doosay Tank and Channel.</i>					
1	1	Monigar	15	15			
3	3	Lascars	4½	13½			
				28½	342		
		<i>Cheyaur Anicut.</i>					
1	1	Monigar	27	27			
1	1	Do.	20	20			
6	6	Lascars	5	30			
				77	924		
		<i>Alibad Dam and Channel.</i>					
1	1	Monigar	10	10			
5	5	Lascars	6	30			
				40	480		
		Total, North Arcot...			3,984	3,984	
		<i>SOUTH ARCOT DISTRICT.</i>					
		<i>Vellaur Anicut.</i>					
1	1	Superintendent	35	35			
6	6	Shuttermen	4	24			
				59	708		
		<i>Anicut across the Manemoothanady near Virdachellum.</i>					
4	4	Shuttermen	4	16	192		
		Carried over...			900	90,712	88,683

Statement of Conservancy Establishment, "Ordinary," etc.—(Continued.)

NUMBER.		Rate of Salary.	1875-76.			1874-75.	Remarks.
1874-75.	1875-76.		Per Mensem.	Per Annum.	Total.		
		Rs.	Rs.	Rs.	Rs.	Rs.	
		...	...	900	0,712	88,683	
		<i>Brought over...</i>					
1	1	Trivady Anicut across the Guddelum.	4	4	48		
		<i>Shutterman ...</i>					
1	1	Vanamadavy Anicut across the Guddelum.	4	4	48		
		<i>Shutterman ...</i>					
1	1	Trivendipooram Anicut across the Guddelum.	4	4	48		
		<i>Shutterman ...</i>					
1	1	Ponniar Anicut.	25	25			
6	6	Superintendent	4	24			
		<i>Shuttermen ...</i>					
				49	588		
2	2	Permal Tank.	4	8	96		
		<i>Tank Watchers ...</i>					
2	2	Wallajah Tank.	4	8	96		
		<i>Tank Watchers ...</i>					
4	4	Veeranum Tank.	4	16	192		
		<i>Tank Watchers ...</i>					
		<i>CHELLUMBRUM TALUQ, MARAMUT DUTIES.</i>					
4	4	Coleroon Bank.	4	16			
1	1	Bank Watchers	7	7			
		<i>Superintendent ...</i>					
				23	276		
		<i>Lalpet Lock.</i>					
1	1	Superintendent	14	14			
4	4	Lascars...	4	16			
				30	360		
		<i>Veeranatham Tank.</i>					
1	1	Superintendent	7	7			
3	3	Shuttermen	4	12			
				19	228		
		<i>Porto-Novo Lock.</i>					
1	1	Superintendent	10	10			
4	4	Shuttermen	4	16			
				26	312		
		Carried over...			3,192	90,712	88,683

G. O., No. 1,026 of 21st April, and No. 1,657 of 19th June 1874.

Detailed Statement of Conservancy Establishment, "Ordinary," under the Public Works Department, etc.—(Continued.)

NUMBER.		Rate of Salary.	1875-76.			1874-75.	Remarks.
1874-75.	1875-76.		Per Mensem.	Per Annum.	Total.		
		Rs.	Rs.	Rs.	Rs.	Rs.	
				3,192	90,712	88,683	
1	1	Superintendent	25	25			
3	3	Shuttermen	4	12			
				37	444		
1	1	Shutterman	4	4	48		
1	1	Shutterman	4	4	48		
1	1	Superintendent	30	30			
6	6	Shuttermen	4	24			
				54	648		
		Total, South Arcot District...			4,380	4,380	
		TANJORE DISTRICT.					
		No. 1 Range, Upper Anicut.					
1	1	Superintendent	15	15			
2	2	Lascars	6	12			
2	2	Do.	5	10			
8	8	Do.	4	32			
				69	828		
1	1	Superintendent	12	12	144		
1	1	Lascar	6	6			
1	1	Do.	5	5			
3	3	Do.	4	12			
				23	276		
1	1	Lascar	6	6			
3	3	Do.	4	12			
				18	216		
		Carried over...			1,464	95,092	93,063

Detailed Statement of Conservancy Establishment, "Ordinary," under the Public Works Department, etc.—(Continued.)

NUMBER.		Rate of Salary.	1875-76.			1874-75.	Remarks.
1874-75.	1875-76.		Per Mensem.	Per Annum.	Total.		
		Rs.	Rs.	Rs.	Rs.	Rs.	
				1,464	5,092	93,063	
		Brought over...					
		Cavilady Calingulah.					
1	1	Lascar	4	4			
1	1	Do.		9	108		
		Codamoorthy Head and Alamailpuram Anai.					
1	1	Superintendent	10	10			
4	4	Lascars	5	20			
3	3	Do.	4	12			
				42	504		
		Ponni and Kutchamangalum Anais.					
1	1	Superintendent	10	10			
1	1	Lascar	6	6			
1	1	Do.	5	5			
7	7	Do.	4	28			
				49	588		
		Vaduvagudi.					
1	1	Superintendent	8	8			
1	1	Lascar	5	5			
3	3	Do.	4	12			
				25	300		
		Vettaur Head new regulating works, Thenperambore Zembo Cauvery.					
1	1	Superintendent	17½	17½			
2	2	Lascars	6	12			
2	2	Do.	5	10			
14	14	Do.	4	56			
				95½	1,146		
		Vennaputhoor and Pullimpulem Anais.					
1	1	Superintendent	8	8			
1	1	Lascar	6	6			
1	1	Do.	5	5			
2	2	Do.	4	8			
				27	324		
		No. 2 Range, Munni Head.					
1	1	Superintendent	8	8			
1	1	Lascar	5	5			
4	4	Do.	4	16			
				29	348		
		Meratoor Anicut.					
1	1	Superintendent	8	8			
2	2	Lascars	4	8			
				16	192		
		Carried over...			4,974	95,092	93,063

G. O., No. 2,068 of 19th August, and No. 2,735 of 10th Nov. 1873.

G. O., No. 2,068
of 19th August
and No. 2,735 of
10th Nov. 1873.

NUMBER.				Rate of Salary.	1875-76.			1874-75.	Remarks.
					Per Mensm.	Per Annum.	Total.		
				Rs.	Rs.	Rs.	Rs.	Rs.	
Brought over...				...	...	...	1,04,794	1,02,765	
TRICHINOPOLY DISTRICT.									
No. I. Range									
Cauvery and Cole on Pudugay.									
1	1	Peishcar	...	7	7				G. O., No. 3,430 of 15th Nov. 1867.
1	1	Monigar	...	7	7				
4	4	Do	...	5	20				
13	13	Peons	...	4	52				G. O., No. 207 of 21st Jan. 1868.
					86	1,032			
No. II. Range									
Cauvery Pudugay									
1	1	Peishcar	...	7	7				Do. do.
1	1	Monigar	...	5	5				
4	4	Do	...	4	16				
					28	336			
Korumboo Establishment.									
2	2	Monigars	...	4	8				G. O., No. 2,277 of 13th Aug. 1863.
1	1	Do.	...	3	3				
					11	132			
No. III. Range									
Pennair Channel.									
1	1	Monigar to direct water to the head	...	10	10				G. O., No. 292 of 30th Jan. 1867.
4	4	Plankmen	...	4	16				
2	2	Do.	...	3	6				
1	1	Monigar to regulate water supply among branches.	...	15	15				G. O., No. 3,850, of 10th Dec. 1868.
1	1	Bank Watcher...	...	4	4				
					51	612			
No. IV. Range.									
Cauvery Pudugay.									
1	1	Monigar	...	5	5				G. O., No. 3,430 of 5th Nov. 1867.
3	3	Peons	...	4	12				
					17	204			G. O., No. 207 of 31st Jan. 1868.
Korumboo Establishment.									
1	1	Monigar	...	5	5				G. O., No. 2,297 of 13th Aug. 1863. Govt. of India, No. 3,324 of 28th Dec. 1869, Finl. Dept.
1	1	Do.	...	3	3				G. O., No. 15 E I of 11th Jan. 1870.
					8	96			
Carried over...				...	...	2,412	1,04,794	1,02,765	G. O., No. 535 of 16th Feb. 1870.

NUMBER.	Rate of Salary.	1875-76.			1874-75.	Remarks.
		Per Mensm.	Per Annum.	Total.		
		Rs.	Rs.	Rs.	Rs.	
		Brought over...				
		Nunthyaur Anicut.				
1	1	Monigar	12	12	...	G. O., No. 535 of 16th Feb. 1870.
1	1	Do.	10	10	...	
2	2	Shuttermen	5	10	...	
11	11		4	44	...	
			76	912	...	
		Total, Trichinopoly District ...				
		MALABAR DISTRICT.				
		Neeranikun Establishment ...				
			...	222	222	222
		MADURA DISTRICT.				
		Neeranikun Establishment ...				
			...	192	192	192
		TINNEVELLY DISTRICT.				
		Streeviguntum Anicut Channels.				
5	5	Monigars	7	35	...	G. O., No. 1,311 of 23rd Aug. 1870, Rev. Dept. G. O., No. 17 of 3rd Sept. 1870, P.W.D.
2	2	Do.	5	10	...	
26	26	Neeranikums	2	52	...	
			97	1,164	...	
		Total, Tinnevelly District ...				
			...	...	...	...
		Grand Total...				
			...	...	...	...

ABSTRACT.

	RS.
Ganjam	1,244
Vizagapatam	1,527
Godavery	50,264
Kistna	25,863
Nellore	4,698
Chingleput	3,132
North Arcot	3,984
South Arcot	4,380
Tanjore	9,702
Trichinopoly	3,324
Malabar	222
Madura	192
Tinnevelly	3,069
Total	1,11,601

Proceedings of the Madras Government, Public Works Department,
18th February 1875.

Read the following papers—

No. 454. Proceedings of the Government of India, Public Works Department,
(Account—Irrigation,) dated Fort William, 21st December 1874,
Nos. 370—79A—I.

Distribution of the Grant for Agricultural Works for 1875-76.

RESOLUTION.—The Government of India, having had under consideration the question of the grant to be allowed for Irrigation Works for 1875-76, have been pleased to decide that the following sums shall be provisionally assigned as compared with the demands made by Local Governments and Administrations and the grant for 1874-75:—

	Demand, 1875-76.	Grant, 1875-76.	Grant, 1874-75.
	RS.	RS.	RS.
Extraordinary	2,25,93,620	1,80,00,000	1,47,50,000
Ordinary	1,11,27,025	90,00,000	90,62,000
	3,37,20,645	2,70,00,000	2,38,12,000

2. Proceeding to details, the demands of the various Governments and Administrations, compared with the grants allowed, will be brought under review in the order of the heads mentioned:

EXTRAORDINARY.

3. The estimate submitted by the Government of Madras involves an outlay from Extraordinary Funds of

(including proportionate share of charges for Establishment and Tools and Plant) for improvements to the works of the Western Delta of the Kistna is disallowed for want of sanctioned estimate, thus leaving the net grant for Extraordinary Works for 1875-76 at

Of this amount, as noted in the margin, will be met from the refund from the Ordinary grant of the outlay incurred from Loan Funds on the Madras Water-supply and the Chembrumbaukum Tank Project, so that the sum to be provided

	RS.
Madras Water-supply	7,50,000
Chembrumbaukum Tank Project	1,00,000
	6,50,000
	1,50,000
	5,00,000

Proceedings of the Madras Government, Public Works Department,
18th February 1875.

from Extraordinary sources will be thus distributed:—

	Proposed Grants for 1875-76. RS.
Additions, extensions and improvements to the Godavari Delta Works	3,84,000
Ditto ditto ditto Kistna "	1,06,000
Ditto ditto ditto Pennai "	26,000
...	26,000
Amount across Vellam River	1,08,000
Streepiguntum Anicut	6,50,000
...	1,50,000
Net grant from Ordinary grant	5,00,000
Net grant under Extraordinary	...

SUMMARY OF EXTRAORDINARY GRANTS.

15. The following is an abstract of the grants allowed under Extraordinary compared with the demands brought forward and the grants for 1874-75:—

	Demand, 1875-76.	Grant, 1875-76.	Grant, 1874-75.
	RS.	RS.	RS.
Madras	7,50,000	5,00,000	7,00,000

ORDINARY.

16. The Ordinary Irrigation grant for 1874-75 amounts to Rs. 90,62,000, thus made up—

	RS.
Grant corresponding to that of 1873-74...	76,96,000
Special additional grant allowed for 1874-75	7,66,000
Special grant for Gunduck Embankment	3,00,000
For small Irrigation projects in Hooghly District	3,00,000
	90,62,000

17. The demand for 1875-76, compared with this grant and the outlay of 1873-74, is as follows:—

Madras.

	Demand, 1875-76.	Grant, 1874-75.	Outlay, 1873-74.
	RS.	RS.	RS.
Madras	30,16,000	22,50,000	23,30,340

18. Reviewing the demands by Provinces, and first—

Proceedings of the Madras Government, Public Works Department,
18th February 1875.

Madras.

19. The demand is as follows as compared with the grant for 1874-75 and the outlay of the two preceding years:—

	1875-76.	1874-75.	1873-74.
	RS.	RS.	RS.
Original Works	...	...	...
Repairs	7,51,000	950	3,20,040
Establishment	15,00,000	13,07,050	14,00,190
Plant	6,90,000	5,00,000	5,31,190
Increase to Stock	75,000	50,000	(a) 37,540
	...	...	41,380
	30,16,000	22,50,000	23,30,340

(a) Tools and Plant from Upper Godavery.

20. Of the demand under Works, the provision for the following seems questionable as a charge against the Ordinary grant for Irrigation Works:—

Navigation Canal, Nagaram

21. It is said that half the cost of the work will be defrayed from Local Funds, but inquiry seems necessary whether this is an isolated work of navigation having no connection with irrigation; for, if so, the liability of Provincial Funds to bear the charge would have to be considered, since the grant for "Other Services" included grants for such navigation works as the Chilk Lake Canal, and those, grants were transferred to Other Services.

22. Works of Embankment as follows:—

	RS.
Embankment road, west bank of Godavery—	...
Do. east "	10,000
Do. east bank, Rajahmundry to Rahitapuram	9,000
Do. Rahitapuram to Parushotapuram	9,000
Embankments, Polarum Island	20,000

23. The estimated cost of these four works is Rupees 2,01,000. Explanation should be called for whether these works form portion of the Godavery Irrigation Works; for, if so, the estimates will require the sanction of the Government of India, the estimated cost being over two lakhs. If the works do not form portion of the Godavery Scheme, then it should be explained why Imperial Funds should bear the charge, as, if used for road purposes, then Provincial Funds would seem liable. If Provincial Funds are not liable, then it should be stated what object is served by the works to justify an Ordinary Imperial grant.

24. For works without estimates the demand is as follows:—

	Probable Cost.	Sum required.
	RS.	RS.
Godavery Delta Village drainage	...	30,000
Filling quarry channel through Dowlaishweram Village	...	7,000
Restoring Kodunthory Tank	15,000	10,000
Surplus sluices, Coleroon	6,000	6,000
Streepurendem Tank surplus weir	6,000	6,000
Areapooram Channel	10,000	10,000
Pullapalliem "	3,000	3,000
		72,000

*Proceedings of the Madras Government, Public Works Department,
18th February 1874.*

25. About the Godavery Delta Village drainage channels, Rupees 30,000, information should be furnished as to whether it is intended to debit the outlay to the Capital Account of the Godavery Scheme; as, if so, a comprehensive estimate of the additional Capital outlay on the work would be required, since additions and extensions to the scheme are now being undertaken from Loan Funds, and it is desirable to watch the Capital outlay from Ordinary Funds.

26. For the Madras Water-supply Project, the provision is Rupees 1,30,000, of which, one lakh is for refund to the Loan grant, and Rupees 90,000 for the Chembrumbaukum Tank Project, of which, Rupees 50,000 is for refund to the same grant. It is understood that these sums are so set down to note the reduction which has really to be made in restricting grants elsewhere. It has to be noted that the revised estimate for the Madras Water-supply Project has still to be submitted to the Government of India.

27. For Minor New Works, the provision is ... *RS.* 2,89,000
The grant for 1873-74 is only ... 1,03,950
For next year, financial reasons render it necessary to limit the grant to Rupees 1,51,000.

28. For Repairs the demand is Rupees 15,00,000; the grant for 1874-75, Rupees 12,67,050 (to be increased to Rupees 15 lakhs); and the outlay of 1873-74, Rupees 14,33,120. The amount required is passed.

Under Tools and Plant, the provision has gone up to Rupees 75,000 from Rupees 45,000 in 1874-75, and Rupees 36,200 in 1873-74. It will suffice to pass Rupees 46,000 for next year.

On the whole, the grant passed for next year will be as follows:—

Repairs	15,00,000
Minor Works	1,51,000
Refund to Loan grant for outlay incurred on Madras Water-supply and Chembrumbaukum Tank Project	1,50,000
	18,01,000
Establishment, including Conservancy Establishment	5,00,000
Tools and Plant	56,000
New Major Works	1,27,000
	24,84,000

SUMMARY OF ORDINARY GRANTS.

63. According to the foregoing orders, the grants for next year under Ordinary will be as follows:—

	Grant, 1874-75.	Demand, 1875-76.	Grant, 1875-76.
	RS.	RS.	RS.
Madras	22,50,000	30,16,000	24,84,000

*Proceedings of the Madras Government, Public Works Department,
18th February 1875.*

64. Of the total grant for next year, the sum for Repairs is as follows, as compared with grant of 1874-75 and outlay of previous years:—

	Demand, 1875-76.	Grant, 1874-75.	Outlay, 1873-74.	Outlay, 1872-73.	Outlay, 1871-72.	Outlay, 1870-71.
	RS.	RS.	RS.	RS.	RS.	RS.
Madras	15,00,000	12,67,050	14,00,190	12,61,300	11,22,500	11,44,826
Bombay	7,00,000	6,58,950	6,58,800	5,79,270	6,34,448	5,17,450
Bengal	6,87,000	5,15,000	5,03,580	5,75,128	5,02,926	4,04,707
North-Western Provinces	5,30,300	5,30,000	4,68,320	4,94,240	4,55,853	4,16,165
Punjab	5,22,000	4,48,130	4,20,570	4,16,050	3,88,043	3,58,909
British Burmah	30,300	40,000	31,650	20,880	34,468	19,282
Rajpootana	31,000	20,000	36,750	24,900	30,542	20,574
Coorg	500	500	510	240	2,000	2,000
	40,01,100	35,79,630	35,20,370	33,63,008	31,70,780	28,83,913

Thus, as compared with 1874-75, the demand for next year is in excess by Rupees 4½ lakhs. Of this excess, Rupees 1½ lakhs is due to the admitted necessity of increasing the grant for the maintenance of Irrigation Works in Madras; Rupees ½ lakh for increase to the grant for Repairs in Bombay, chiefly for the Sindh Canals; and Rupees 80,000 for the Sone Irrigation Works, which are to be brought into operation next year. These items aggregate Rupees 2½ lakhs, leaving 1½ lakhs as normal increase, of which, Rupees 10,000 is due to the Agra Canal, while the remainder is divided about equally between Bengal and the Punjab. The cause of increase in Bengal, exclusive of Rupees 80,000 for Sone ... 92,000 the increases in these two Provinces Ditto in Punjab ... 74,000 requires explanation.

65. Under Establishment, the provision is as follows, as compared with the grant for 1874-75 and the charge of the two preceding years:—

	1875-76.		Grant, 1874-75.	Charge, 1873-74.	Charge, 1872-73.
	Demand.	Proposed to be fixed at			
	RS.	RS.	RS.	RS.	RS.
Madras	6,90,000	5,00,000	5,00,000	5,31,190	4,56,160
Bombay	3,00,000	4,00,000	4,03,050	4,08,680	4,25,480
Bengal	3,25,000	3,25,000	3,05,825	2,58,310	2,83,240
North-Western Provinces	6,81,525	6,81,525	8,03,500	8,30,030	8,24,580
Punjab	7,18,600	7,18,600	7,26,150	7,39,510	6,22,870
Central Provinces	15,000	10,000	10,000	4,840	17,200
British Burmah	49,200	49,200	50,600	52,680	49,020
Rajpootana	58,800	43,000	38,000	59,620	7,090
	28,38,125	27,27,325	28,37,124	28,84,860	*27,48,440

* Exclusive of refunds to Loan grant.

Thus, according to these orders, the demand for Establishment for next year will be about a lakh less than that of the current year, the decrease being due to the change in the North-Western Provinces of charging Loan Funds with 25, instead of 10 per cent. for Establishment for Extraordinary Works.

*Proceedings of the Madras Government, Public Works Department,
18th February 1875.*

66. For Tools and Plant the demand, as compared with the grant for 1874-75, is—

	1875-76.	1874-75.
	Rs.	Rs.
Madras	57,000	55,000
Bombay	26,500	23,000
Bengal	63,000	60,000
North-Western Provinces	39,400	40,500
Punjab	47,000	38,300
British Burmah	2,000	2,400
Rajpootana	10,200	5,000
	2,45,100	2,24,200

67. To summarize, a grant of 90 lakhs gives for—

	Rs.	Rs.
Repairs	40,01,100	35,79,630
Establishment	27,27,325	28,37,120
Plant	2,45,100	2,24,200
Total	69,73,525	66,40,950
Leaving for New Works	20,26,475	24,21,050
Grand Total	90,00,000	90,62,000

68. Of the amount of Rupees 22,26,475 set down for New Works, Rupees 1½ lakhs is for refund to the loan grant on account of the Madras Water-supply and the Chembrumbankum Tank Project, so that really the actual grant for outlay on New Irrigation Works will be
In 1862-63 the outlay on Ordinary Irrigation Works was
In 1866-67
In 1867-68

	Rs.
	18,76,475
	21,43,711
	20,31,396
	20,72,977

GENERAL SUMMARY.

69. The total grants allowed to each Province for next year, as compared with the grant for the current year, are shown in the following abstract:—

	EXTRAORDINARY.		ORDINARY.		TOTAL.	
	1874-75.	1875-76.	1874-75.	1875-76.	1874-75.	1875-76.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Madras	7,00,000	5,00,000	22,50,000	24,84,000	29,50,000	29,84,000
Bombay	11,68,000	7,50,000	17,00,000	18,00,000	28,68,000	25,50,000
Bengal	53,57,000	45,00,000	16,50,000	12,50,000	70,07,000	57,50,000
North-Western Provinces	48,00,000	45,00,000	16,75,000	16,75,000	64,75,000	61,75,000
Punjab	35,00,000	35,50,000	13,00,000	13,00,000	48,00,000	48,50,000
Central Provinces			10,000	15,000	10,000	15,000
British Burmah			3,00,000	3,00,000	3,00,000	3,00,000
Rajpootana	25,000		1,75,000	1,75,000	2,01,000	1,75,000
Coorg			1,000	1,000	1,000	1,000
	1,55,50,000	1,38,00,000	90,62,000	90,00,000	2,46,12,000	2,28,00,000
Less met from contributions by Native States for Sirhind Canal	8,00,000	8,00,000			8,00,000	8,00,000
Net grant from Imperial Funds	1,47,50,000	1,30,00,000	90,62,000	90,00,000	2,38,12,000	2,20,00,000

*Proceedings of the Madras Government, Public Works Department,
18th February 1875.*

70. The grants allowed under the heads Extraordinary and Ordinary include provision for charges for Establishment and Tools and Plant. Under Ordinary, the grant is intended to provide for all Agricultural Works as well for the repairs and maintenance of Irrigation Works generally. And in all cases the grant is intended to provide for expenditure in England on the works concerned. The Budget Estimate should be prepared accordingly.

71. In the preparation of the Budget Estimate of Irrigation Revenue, particular care should be taken to see that the amount shown is the amount that will be included in the regular Public Works Account as Irrigation Revenue. The amount included in the Civil Accounts as Land Revenue, and which may be considered as due to the several works, should be shown as a memorandum at the foot of the estimate, as directed in Public Works Department Circular No.

ORDER.—Ordered, that this Resolution be communicated to the Governments of Madras, Bombay, Bengal, North-Western Provinces, and Punjab. Chief Commissioners, Central Provinces, British Burmah, and Coorg. Governor-General's Agent, Rajpootana.

(Signed) C. H. DICKENS, Colonel, R.A.,
Secy. to the Govt. of India.

No. 129.

No. 445.

Note by the Chief Engineer for Irrigation.

It has not been found practicable to prepare the Budget Estimates of the Irrigation Department in exact conformity to the orders of the Government of India, communicated with their Resolution No. 370-A. I. of the 21st ultimo. The following explanations are, therefore, submitted for the information and orders of Government.

EXTRAORDINARY.

2. Certain entries in the rough estimate were disallowed by the Government of India for want of sanctioned estimates. Since that estimate was prepared certain estimates for the Western Delta, Kistna, have been reviewed, passed by Government, and submitted for the sanction of the Government of India. The total sum asked for in the Budget as prepared for Loan Fund Works of the Kistna Delta is Rupees 1,35,900, and unless the postponement of the improvement of the canals be considered of little moment, it will be desirable to go on steadily with such portions of the scheme as have been worked out completely. The Deltas have been divided into convenient and natural sub-sections, and there is, it is thought, no valid reason why these should not be taken in hand when the works required have been decided on. The general scheme for each main section of the Delta has been more than roughly determined, and the requirements of the areas involved have been far more fully enquired into than has been the case with any former project of the same kind. So far as the interests of Government and of the population are concerned, moreover, it will be advantageous that a commencement should be made with other sub-sections, especially that of Kykalore, in the Eastern Delta, so soon as the estimates have been passed. The estimates for this sub-section are

*Proceedings of the Madras Government, Public Works Department,
18th February 1875.*

ready, but they cannot be reviewed and disposed of for the next three months or so. Ryves' canal, which will supply this sub-section, among others, will be able to carry water probably in the season of 1876, and if nothing be done to provide for the utilization of this water one year will be thrown away. Nothing has been entered in the Budget for this part of the Delta, but the matter is here mentioned in order that the circumstances may be the better understood.

3. The total under Extraordinary allotted by the Government of India is Rupees 6,50,000, of which 1½ lakhs are to be met from the ordinary grant by refunds. The total of the Budget is Rupees 8,66,900, viz.:—

Works	Rs.
Establishment	5,90,700
Tools and Plant	2,06,200
	70,000

4. There are some differences, in the amount shown for the Godavery Delta Works, above the entry in the rough estimate; they are no more than was to be expected when the details of the works to be undertaken came to be settled.

5. In the Kistna the entries for works not yet sanctioned by the Government of India are—

Western Delta.

	Rs.
Main Canal	5,000
Nizampatam Canal	10,000
Bank Canal	37,000

6. In Nellore the extension of the Pennair anicut has to be provided for, a work the necessity for which had not arisen when the rough estimate was prepared. The Government of India have been asked to sanction the provision of Loan Funds for this work. Rupees 50,000 are entered as the probable expenditure in 1875-76. Should it be classed as ordinary a similar sum will be needed under that head.

7. In Tinnevely, for the Striviguntum Anicut, a smaller sum than that considered necessary when the rough estimate was prepared has been entered. This is due to the settlement of the contractor's claims in the present year, and to anticipated reduction of expenditure on some of the north tanks.

ORDINARY.

8. The provision made by the Government of India is altogether inadequate. Rupees 1,27,000 are put down for New Major Works. The statements, as prepared, show under:—

	Rs.
Capital	2,94,700
Miscellaneous	1,13,900
Total	4,08,600

9. The restoration of the damaged anicuts* of North Arcot and the extension of the Ponnair Anicut in South Arcot will absorb Rupees 1,35,000, or

* Palar and Poiny.

more than the total grant. These works are now being pushed forward, and they, at least, cannot be stopped unless at an immediate sacrifice of much more

*Proceedings of the Madras Government, Public Works Department,
18th February 1875.*

revenue than the total sum of probably 2½ lakhs of Rupees to be expended upon them.

9-A. In Vizagapatam Rupees 10,000 have been entered for the improvement of the Kristamraz channel. The importance of the proposed work has been fully recognized by Government; the approximate estimate was approved in the Proceedings as per margin; the regular estimates will be received some time since and will be disposed of as soon as possible.

G. O. 20th May 1874, No. 1,339, and 24th July 1874, No. 1,998.

Moreover, a considerable, if not the greater, part of the cost of the improvements will be met by contributions from proprietors of lands under the channel, and it would appear to be necessary that provision should be made for the payment of the Government share so soon as the amounts of the shares shall have been determined. It will be, moreover, observed that it is the only major work proposed for execution in the two Government taluqs of the district.

10. Then come the Madras Water Works, Rupees 30,000
Chembrumbaukam Tank, " 28,000

Most of the money originally allotted for 1874-75 had to be diverted in order to carry out the instructions of the Government of India with regard to incomplete works of 1873-74, and unless their completion is to be indefinitely postponed it would seem to be necessary to make some little progress next year.

11. In Nellore there is an entry of Rupees 5,000 for an additional surplus weir to the Nellore tank. The estimate has not yet been sanctioned, but the necessity for discharging a large part of the surplus direct into the river instead of into the Town and Delta has been so forcibly demonstrated by the flood of October last that the undersigned would not be justified in postponing the work without special and positive orders.

12. In Trichinopoly provision has been made for constructing a surplus sluice in the north or left embankment of the Coleroon. The matter has been under discussion for a long time, and the revised estimate ought long since to have been submitted. The embankment closed the natural drainage outfall and the not unnatural result has been the destruction of crops and the breaching of the flood bank. Materials have been prepared pending the sanction of the plan and estimate, and the work is one which cannot rightly be postponed.

13. In Coimbatore provision for five works has been made. The first is for a head sluice to the Pullapolliem channel, a work intended to exclude floods, and required in supersession of an inefficient sluice which has not answered its purpose, and which in the last flood was submerged and useless. The other four items are for head sluices to river channels affecting the safety of the railway. The estimates have not yet been received, but Government ordered a provision of 20,000 Rupees, subject to reduction to be made when the Budget came to be prepared, and a reduced sum of Rupees 12,000 for the four has been entered. It is, of course, quite true that such works ought to be foreseen, and that arrangements connected with them should be made in good time, but the omissions and errors of the past would not justify the postponement of the application of a remedy, especially after the recent injuries to the Madras Railway in all directions.

14. In Tinnevely all six entries are for head sluices to the Tambrapurny River channels. Two are under construction, for two more estimates have been sanctioned, and the entry of the other two was recently specially directed* to prevent, if possible, another repetition of the damage caused by the floods of 1869 and 1874. The injuries sustained in either year by Government works have far exceeded the total estimated cost of the head sluices.

* G. O., No. 256, of 29th January 1875.

15. The provision of Rupees 15,000 for ferry boats in the Godavery, and Rupees 3,000 in the Kistna, has been made in consequence of the inconvenience suffered by the villagers having been prominently brought to notice. That there has been inconvenience need not be doubted, and that the perfection of intercommunication is still a long way off may be admitted, but looking to the fact that there were no roads when the Delta works were commenced, that the country was then as impassable as it well could be, that the canals alone have given the Delta remarkably good communications, that the formation of numerous roads is a direct result of the wealth created by the Delta works, it would seem to be necessary to hesitate before saying that these works are to pay for bridges to put on the roads. Where would the Local Funds have been had the district been left as it was 30 or 35 years ago? There would have been little or no money to spend, and the people would have plunged about in the swamps after the manner of their fathers in well nigh entire ignorance of not only roads and bridges, but of canal boats too. Something should be done in the way of giving ferry boats, though in this respect, if the people were not allowed to become quite so helpless, it might be of considerable benefit to themselves; they know what canoes and sungadies are, and it would practically not be a hardship were they to be left to provide these simple means of crossing the canals. The other entries under Capital Ordinary are small items for works which are under execution. Their postponement is not likely to be contemplated.

MISCELLANEOUS.

16. This is the designation substituted for works for which no Capital or Revenue accounts are kept. The entries for Major Works are seven in number, and their total is Rupees 1,13,900. The first is an item of Rupees 1,000 for ~~concrete~~ experiments which are to be continued a little longer; the outlay has been insignificant* and much good has resulted from it. The next four items are referred to in paragraphs 22 and 23 of the Resolution of the Government of India, and as revised they now stand as follows:—

	RS.
Godavery West Bank	10,000
Do. East Bank both sections	17,900
Embankments, Polaram Island... ..	30,000

None of these works form a portion of the Godavery Delta Irrigation. The first two items are for embankments above the Anicut and beyond the Delta proper. There have been some inefficient embankments here from time immemorial, and these estimates provide for rendering them efficient. At the same time the Local Fund Board desired to carry roads along them, and it was arranged accordingly

Proceedings, Madras Government, No. 1,286,
dated 14th May 1872.
No. 173, dated 22nd February 1872.
No. 898, " 5th April 1872.
No. 1,251, " 14th May "

that the cost of widening the banks to this end, and of gravelling, etc., should be borne by them. Imperial Funds are to pay for the protection of Agricultural interests, and Local Funds for the facilities in the way of communication afforded. There is nothing in the circumstances which would make reasonable the appropriation of Provincial Funds. The Polaram Island is not irrigated by the Delta Canals. Its impoverished condition and the necessity for alleviating the distress and damage caused by frequent inundations led the Government to decide that the work of embanking it should be undertaken forthwith, and a commencement was at once made. Taking into account also that zemindary interests were to a considerable extent involved, it was determined that one-third of the cost of all necessary works should be borne by the proprietors and the rest by Government. The embankments are agricultural works, but they are unconnected with, and entirely isolated from, the Godavery scheme, though possibly some day a canal will be taken across to irrigate this island or group of islands.

17. The navigation canal, Nagarum Island, has been omitted from the Budget, as it will be entirely for navigation purposes, in connection with the observations of the Government of India in paragraphs 20 and 21.

18. The other entries under Miscellaneous are—

	RS.
Godavery Delta village drainage	30,000
Raising embankments on right bank of Pennair	25,000

The former is referred to in paragraphs 24 and 25 of the Resolution of the Government of India. It is not intended to debit the outlay on account of these drainage works to the Godavery scheme, except in particular cases in which the Delta works may have obstructed drainage; in that case the cost will be provided for under Revenue, Extensions and Improvements. The Delta villages are from the very nature of their position usually ill-drained: much mortality has prevailed, and Government, believing that a good deal of this is preventable, and that their duty to see what could be done to diminish the loss of life, among a population which contributes very largely to the revenue, is analogous to that which devolves upon them when loss of life from famine is imminent or actually occurring, directed* the subject to be taken up in earnest, and several groups of villages have, as a result, been examined, and the estimates for one group† submitted. It may be noticed

* Proceedings of Government, No. 980, dated 15th April, and No. 2,007-B, dated 24th July 1874.

† 12 Villages, Rupees 6,160.

that, in this group, the drainage of one village entirely, and of a small part of another village, was found to be interfered with by the canals; the condition of the other villages had not been in any way affected by the Delta works. Nothing was entered for the Pennair embankments in the rough estimate; the need of raising, strengthening, and improving them was shown by the October flood, and there has not yet been time, in the midst of the large amount of emergent work to

*Proceedings of the Madras Government, Public Works Department,
18th February 1875.*

be done, to make a regular estimate for them though an approximate one has been prepared and submitted to Government. The flood bank is to protect all agricultural interests alike, and is not for the benefit of irrigated lands and irrigation works only.

19. The provision for Minor New Works, as fixed by the Government of India, is Rupees 1,51,000, the demand made being 2.09 lakhs. The Government of India were not in possession of the views of the Madras Government on the subject of the absolute necessity for much larger grants, and these now having, after very full consideration, been transmitted, it has appeared to be desirable to add one lakh in the statements, and the entry will then amount to about half of the sum which Government consider should be spent annually on works of this class. The reasons for reduction mentioned in paragraph 27 of the Resolution of the Government of India are financial, but unless they be such as to make it needful to lose two rupees of revenue in order to reduce Public Works expenditure by one rupee, it would seem that the nature and objects of the contemplated outlay have not been fully understood. Whatever India may be able to afford to do, it is clear that she cannot afford to throw away not only most of the benefits of a good monsoon, but also to spend lakhs in closing breaches in tanks, canals, railways etc., which in nine cases out of ten, ought not to occur, but which must recur if the obvious precautions be not taken. But that it will take time to admit of large numbers of petty works being designed and estimated for, it would have been advisable to make the Minor New Works provision five lakhs; probably the Department will be in a position to spend that sum in 1876-77, and it should be given the moment it can be properly spent.

20. The sum allotted by the Government of India for repairs has been distributed to—

	Rs.
Revenue	13,99,500
Miscellaneous	1,00,500

Under the latter head, river conservancy works in the Godavery, and as regards the Coleroon in Tanjore, have been provided for; flood banks and drains also absorb about one-fourth. The classification has not always been very accurate, as for instance, in Ganjam, where the amount, Rupees 10,000, appears to be too large, but this being the first time that an attempt has been made to carry out the instructions contained in G.O., No. 2,003, dated 24th July 1874, to classify works under Capital, Revenue, or Miscellaneous, some inaccuracies were to be expected.

21. The provision for establishments has been thus arrived at—

- 1st.—25 per cent. on Works Allotments for General Executive Establishments.
- 2nd.—Establishment of the Chief Engineer for Irrigation.
- 3rd.—Do. of Deputy Controller for Irrigation.
- 4th.—Survey Establishment.
- 5th.—Conservancy Establishment, and the total has been divided rateably under the several heads, and amounts to 31 per cent. on works exclusive of tools and plant.

Proceedings of the Madras Government

Department

18th February 1875.

This arrangement is in accordance with the recent decision on the subject of distributing establishment charges.

TOOLS AND PLANT.

22. Under Extraordinary the provision is for the most part for steamers for the Godavery and Kistna already sanctioned, which will now probably be built at Calcutta, and for additions to the floating plant the need of which has been clearly demonstrated and noticed by the late Inspector-General of Irrigation among others. Under Ordinary the Government of India allot Rupees 56,000, but the sum required is Rupees 96,000, viz., 30,000 Capital and 66,000 Revenue. The Godavery floating plant will absorb considerably more than half this sum, and in applying to the Government of India for an additional and emergent grant for this purpose in the current year the circumstances have been explained.

23. The natural result of cutting down the ordinary grant in recent years is that instead of every one being required to keep works and plant in good order they have been obliged to let them deteriorate, or to shut their eyes to their inefficiency. This is at any rate not an economical plan, and it is to be hoped that the time for changing it completely is not far off.

FORT ST. GEORGE, (Signed) JOHN MULLINS, Lieut.-Colonel, R.E.,
30th January 1875. Chief Engineer for Irrigation.

No. 456.	From the District Engineer, Ganjam, dated 18th Sept. 1874, No. C/47.
No. 457.	Do. do. do. " 24th Sept. " " 8.
No. 458.	Do. do. Vizagapatam, " 2nd Aug. " " 836.
No. 459.	Do. do. do. " 30th Sept. " " 1,278.
No. 460.	Do. do. do. " 30th " " " 1,279.
No. 461.	Do. do. Godavery, " 24th Aug. " " 1,642.
No. 462.	Do. do. do. " 2nd Sept. " " 1,780.
No. 463.	Do. do. do. " 14th Oct. " " 2,209.
No. 464.	Do. do. do. " 19th Nov. " " 2,647.
No. 465.	Do. do. Kistna, " 6th Oct. " " 73.
No. 466.	Do. do. do. " 27th Nov. " " 119.
No. 467.	Do. do. do. " 8th Jan. 1875, " " 134.
No. 468.	Do. do. Nellore, " 11th Sept. 1874, " " 46.
No. 469.	Do. do. do. " 19th " " " 66.
No. 470.	Do. do. do. " 23rd " " " 50.
No. 471.	Do. do. Cuddapah, " 9th Oct. " " "
No. 472.	Do. do. Bellary, " 8th " " " "
No. 473.	Do. do. Kurnool, " 9th " " " "
No. 474.	Do. do. Chingleput, " 14th " " " "
No. 475.	Do. do. do. " 4th Dec. " " "
No. 476.	Do. do. North Arcot, " 22nd Sept. " " 1,781.
No. 477.	Do. do. South Arcot, " 18th " " " 130 C.
No. 478.	Do. do. Salem, " 19th " " " "

Proceedings of the Madras Government, Public Works Department,
18th February 1875.

No. 479.	From District Engineer, Tanjore,	dated 15th Oct. 1874, No. 1,477.	
No. 480.	Do. do. Trichinopoly,	" 13th Nov. " "	354.
No. 481.	Do. do. Coimbatore,	" 18th do. " "	
No. 482.	Do. do. Madura,	" 29th Sept. " "	2,759.
No. 483.	Do. do. Tinnevely,	" 23rd July " "	
No. 484.	Do. do. do.	" 17th Oct. " "	8,051.
No. 485.	Controller, Public Works Accounts,	" 9th Dec. " "	8,269.
No. 486.	Do. do. do.	" 16th Dec. " "	8,346.
No. 487.	Do. do. do.	" 18th do. " "	

No. 488.

IRRIGATION, No. 34.

Account.

ORDER THEREON, 18th February 1875, No. 482.

HIS EXCELLENCY the Governor in Council is of opinion that it is clearly impracticable to attempt to prepare the Budget of the Irrigation Department for 1875-76 within the grants allotted by the Government of India in their Resolution distributing funds for that year. This

Government of India in their Resolution distributing funds for that year. This Government have recently fully gone into the subject of the amount of money required under Ordinary, Agricultural, in this Presidency, and it has been shown, absolutely necessary if the administration of the Department is to be efficiently conducted, while, as a matter of finance, it is evident that nothing can well be more wasteful than the omission to provide for the safe and effective condition of existing works.

2. The Note by the Chief Engineer for Irrigation details the character and circumstances of all the principal Major Works included in the Budget Statement, and it has been explained that the restoration and extension of three anicuts, which suffered in the floods of 1874, will alone absorb more than the whole amount of the grant made by the Government of India. Many of the other Major Works are for the purpose of excluding flood-waters from irrigation channels, and the great evils which have resulted from the absence of head sluices having been very forcibly demonstrated, and the loss and damage by the floods of a single year being much in excess of the whole cost of providing an effective remedy, there can be no question of the necessity for immediate action. Neither would it be proper, it is considered, to exclude provision for works of this kind for which estimates have not been sanctioned. The Government have to deal with existing works in these cases, which were imperfectly constructed originally, and for the most part come into British possession with the country. During the many years which have since elapsed, there have been floods at intervals which did much damage, and this was made good without the application of those radical remedies which would have prevented its recurrence. It is not necessary here to discuss why the only proper course was not long ago followed; it is sufficient to say that now that what is necessary is better understood, the Government cannot any longer allow Irrigation Works to remain unsafe, and a cause of wide-spread damage to public and private interests and property without making every effort to get rid of all preventable causes of

Proceedings of the Madras Government
18th Feb

such loss. The task is a heavy one, and its accomplishment. To do it at all requires a liberal estimate of Major and Minor Works, most of which will only in cost.

3. The Budget Statements of this year

* 1875-76.

tion, in conformity with the orders which require a review of the circumstances of the work at that time, will be submitted to the Government.

(True)

To the District Engineers.

- .. Chief Engineer for Irrigation.
- .. Financial Department.
- .. Revenue Department.
- .. Board of Revenue.
- .. Accountant-General.
- .. Controller of Public Works Accounts.

Exd. A. Grubert.

20 Spare Copies

N. 054
Revenue Department
Govt. of [1875] Madras
PUBLIC WORKS.

THE DISTRICT ENGINEERS,
&c., &c.

dated February 18th.

d. *22*

Encl.

G. O., 18th February 1875, No. 482.

FEBRUARY.

Nos. 454-488

LODGED

Budget Estimate of the Irrigation
Department for 1875-76. — Orders on the
N. 359